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Alfonso Sousa-Poza
Editors

Population Dynamics in Muslim Countries

Assembling the Jigsaw

 Springer

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ISBN 978-3-642-27880-8 e-ISBN 978-3-642-27881-5

DOI 10.1007/978-3-642-27881-5

Springer Heidelberg Dordrecht London New York

Library of Congress Control Number: 2012935229

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Part I

Introduction and Overview

Chapter 1

Introduction

Hans Groth and Alfonso Sousa-Poza

Demographic change and unprecedented population dynamics are a global phenomenon affecting both the developed and the developing world. This inevitable change, however, does not simply involve the size of a given nation's population – it also entails a new relationship between generations, one that on a national level presents challenges related to the economy, wealth, health, political governance, and social structures. Such demographic change can also affect relations between individual nations and regions, creating new alliances and increasing the influence of some countries while decreasing the power of others. How then will the various actors respond? To answer this question, we first recognize that demographic development and planning for a country's future – both in economic and social terms – is characterized by one important feature: it focuses not merely on the future but on long-term outcomes over periods far beyond those usually considered.

At the time of writing, as is abundantly evident from the pervasive coverage in newspapers, journals, and electronic media, European countries are increasingly concerned about the ageing and shrinking of their continent's population. Westerners, however, tend to know considerably less about the unfolding demographics in other parts of the world, especially in Muslim countries. Yet if we want to grasp the global demographic challenges, we need to know as much as possible about all these changes in an increasingly globalized world.

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Table 1.1 Population overview

	2010 (Mio)	2030 (Mio)	Versus 2010 (%)
Global population (193 nations)	6,909	8,309	20.3
Organisation of the Islamic Conference (57 members)	1,588	2,150	35.4
EU-15, Norway, Switzerland	407	422	3.7

Source: <http://esa.un.org/unpp/> (medium variant projection)

We ourselves embarked on this ‘journey of knowledge’ about 3 years ago – long before the unfolding of the Arab Spring – driven partly by curiosity and a desire to learn more about a region quite unknown to us – the Muslim countries. Not only does this area encompass 50 countries whose populations are over 50% Muslim, but the number of Muslims in the world, which in 2010 already exceeded 1.5 billion, is expected to grow to well over 2 billion people by 2030 (see Table 1.1). Needless to say, such developments have important geopolitical implications.

Obviously, nobody could have predicted the ongoing turbulence in the Arab world that began quite unexpectedly on December 17, 2010 in Sidi Bouzid, Tunisia, following the self-immolation of Mohamed Bouazizi, a young university graduate forced by a lack of job opportunities to sell vegetables on the street. Nevertheless, demographers and other social scientists in the Muslim world have long been aware of the broad spectrum of demographic challenges facing many of these countries, all of which have the potential to generate social unrest.

Our first field trip took us to the Islamic Republic of Iran in February 2010, followed by several visits to the MENA and Gulf regions. These visits not only gave us in-depth knowledge about the Muslim region and about Islam but also helped us establish a network of leading local experts who encouraged and assisted us in the development of this book.

1.1 What You Can Expect

Part 1 of the book provides a concise overview by *Nicholas Eberstadt* and *Apoorva Shah* of the demographic changes taking place in Muslim countries, whose 2009 population totalled about 1.57 billion. Arguing that there exists a general misperception about the ability of Muslim countries to undergo the same demographic transformations experienced by most industrialized countries in recent decades, both authors describe some of these changes, examine their correlates and possible determinants, and finally speculate about their implications.

Part 2 of the book discusses several specific topics and issues that affect virtually all major Muslim countries. First, *Gavin Jones* analyses the potential for a demographic dividend in Muslim countries and argues that its realization, rather than being inevitable, requires a suitable expansion of education to prepare the large cohorts of young working-age people for employment and an expansion of job opportunities for young people entering the workforce. If either or both of these

requirements are not met, he emphasizes, the potential dividend opportunity could quickly turn into a disaster.

Mohammad Jalal Abbasi-Shavazi and *Fatemeh Torabi* discuss the value that Islam places on women's education and outline the trends in female education in Muslim-majority countries, including country-level differences and the gender gap in education and the reasons for such variations. They also examine fertility changes in Islamic countries and the pathways by which female education has had an impact on fertility. One important observation they make is that there is a need to reconsider the stereotypical assumptions, often encountered in the West that Muslim societies discriminate against women for religious reasons.

Abla Mehio Sibai explores trends in ageing and older-adult care in Arab societies in the context of significant recent changes in procreation and family formation and composition. Because improvements in life expectancy have preceded the decline in fertility, accelerated ageing of the population in the Arab region over the coming decades is imminent. One important conclusion of her essay is that governments should review their social and health policies and pay greater attention to the growing needs of their ageing populations while capitalizing on existing systems of cultural capital and social resources.

Part 3 of the book presents more detailed analyses of the following countries and regions: Pakistan, Islamic Republic of Iran, Turkey, Egypt, Jordan, Yemen, Gulf States, Indonesia, Nigeria, and the Maghreb countries.

Zeba Sathar, in an overview of anticipated population change in Pakistan up until 2030, emphasizes the dramatic population increase expected in the next two decades. Because of its magnitude, she argues, failure to achieve the potential of the demographic dividend would be more than a missed opportunity: a Pakistan that by the end of its demographic transition remains poor and underdeveloped will be drawn into a dangerous trap in which demography again plays a leading role – but one that is negative. It is important to note that this observation applies to many other countries examined in these chapters.

Intriguing insights from the Islamic Republic of Iran are provided by *Meimanat Hosseini-Chavoshi* and *Mohammad Jalal Abbasi-Shavazi*, who show that fertility rates fell from around 7.0 births per woman in the early 1980s to replacement levels in 2000 and to below replacement levels by the mid-2000s, one of the fastest fertility decline ever recorded. These fertility changes have resulted in a population with a very young age structure, which, in combination with an expansion in education, has created the so-called 'demographic window' for Iran. This 'golden opportunity', however, although it could potentially result in economic prosperity, could be hindered in the foreseeable future by the current economic and political situation. Most particularly, the dynamics of current population development, especially the further fertility decline projected for Iran, call for the revision of national population policies and plans.

In Turkey, the fertility decline has been underway since about 1960 but has recently increased in speed to bring the fertility rate almost to replacement level. *Banu Ergöçmen* highlights this population evolution from 14 million in 1927 to 74 million in 2011 and describes the remarkable demographic transition being

completed in the country, which is characterized by decreasing fertility and mortality, increasing life expectancy, and a significant change in age structure. After outlining the shift in population policy from a pro-natalist stance after the population was decimated by war to current schemes for family planning, she suggests that mortality has decreased because of broad access to better health care, and fertility, because of greater use of contraceptives and delayed marriage. She also discusses developments in education and urbanization, as well as changes in age structures, and provides further explanation for the ongoing positive momentum in literacy and educational attainment.

Zeinab Khadr draws a picture of an Egypt experiencing significant age structure changes that will have major implications for its socio-economic development. On the one hand, continuing declines in mortality, combined with recent rapid declines in fertility, offer the country the potential for a demographic dividend. On the other, the rapid pace of population ageing, combined with ongoing social and economic change, could erode some of the traditional sources of support needed for the welfare of these rapidly increasing ageing cohorts.

Ebba Augustin focuses on the demographic changes in Jordan and Yemen and links fertility trends and the 'youth bulge' to the current political developments and prevailing gender systems in these countries. Most particularly, she argues that prevailing patriarchal political systems prevent the development of the type of less-stratified and equitable gender system that is a prerequisite for a balanced demography. Moreover, even though Jordan and Yemen have significantly reduced their total fertility rate since the early 1970s from 7.9 to 3.6 and from 8.7 to a still high 5.1 respectively, Yemen, despite significant progress in key development indicators, still has a long way to go to balance its demography and provide basic services to its primarily rural population. Jordan, in contrast, although able to maintain good and gender-equitable health and education coverage for its city-based people, has, since 2002, seen the decline in its Total Fertility Rate stall at a high of 3.6.

Ghazy Mujahid reviews demographic changes over the past 40 years (1970–2010) in the countries of the Gulf Cooperation Council (GCC) and makes a projection for the next 40 years. Because of significant ongoing oil revenues, each GCC country has already been able to undertake massive development that has resulted in, among other things, improvements in health and education services. As girls' education has increased and modern contraception become available, fertility and population growth rates have declined. At the same time, however, because the local workforces were small and lacked needed skills, there have been increasing inflows of expatriate workers. As a result, during the next four decades (i.e., up until 2050), the GCC will face two main demographic challenges: population ageing and a slowing of the increase in national workforces. Hence, Mujahid argues, to achieve their target of reducing reliance on expatriate workers, GCC countries should focus on training nationals, encouraging female participation, and promoting the use of labour-saving technology.

Terence H. Hull addresses the challenges in Indonesia, whose Muslim population is the largest in the world; most particularly, the serious challenges to

governmental efforts at fertility reduction revealed by the 2010 population census. These census data show that since about 2005, there has been a reversal – a decline of almost 1 year – in the trend of increasing average age at marriage that had prevailed for over half a century. This reversal, in turn, has lowered the age at which women begin childbearing and raised the total fertility rate from 2.3 children per woman to 2.4 within 4 years. The author attributes such changes to the growing influence of fundamentalist Islamic teachings, as reflected in the popular media, which encourage young people to marry young and have children earlier than recent generations. Whether this shift will slow the rate of decline in population growth in the coming century is an open question, but it does appear to signal a major shift in Indonesia's socio-religious make-up.

Muhammad Ali Pate profiles Nigeria, Africa's population giant, whose population has grown continually for decades while its welfare stagnated. Now that birth rates are slowly coming down, a window of opportunity for the country is opening, but, as in other Muslim countries, benefiting from this demographic dividend is by no means automatic: it requires significant investment in human development and employment opportunities. Should Nigeria not live up to this challenge, then, according to the author, growing extremist tendencies in the country's north portend a bleak picture of things to come.

Rainer Muenz elaborates on the past and present in the Maghreb, a region that has experienced several waves of immigration and colonization. Although currently one of the most religiously homogenous regions in the world, with 97% of its domestic population being Sunni Muslims, because of proactive labour force recruitment in the twentieth century by Western European countries, the Maghreb has long been characterized by a reverse pattern of mass emigration – from immigration to emigration. Indeed, today, the Maghreb diaspora may well encompass eight million people. Yet, despite a negative migration balance and a spectacular decline in fertility from six to seven to slightly over two children per woman during the last decades, Maghreb's population has nearly quadrupled over the last 60 years. As a result, the country has a youthful growing population in which nearly 60 million people are currently of working age. Political priority will therefore have to be given to job creation that reduces unemployment and absorbs first-time entrants into the labour market, as well as to an education system that focuses on the skills required by the private sector rather than a public sector that now offers far too few jobs.

Nabil M. Kronfol examines the relationship between population change and economic growth in the MENA region, whose demographic transitions may open a window of opportunity for benefits from increased savings and investment. At the same time, the growth in the number of young people suffering from unemployment and social exclusion may lead to aspirations for change, sometimes by non-peaceful methods, which could lead to instability. Unfortunately, despite major improvements in health and education over recent decades, the political, social, and economic systems in the region have not evolved in a way that effectively meets the changing needs of this rapidly growing young population, most especially the need for employment. Hence, the extent to which this large group of young people

become productive members of their societies depends on how well governments and civil societies invest in social, economic, and political institutions that meet their current needs.

Part 4 of the book deals with various forms of governance or reforms thereof; most particularly, political development towards democracy, migration and integration into other cultures, and financial sector reforms that pave the way for sustainable economic growth.

Christian Blickenstorfer describes the 'People's Power' wave that has swept through the Middle East since late December 2010 and which has ousted some very long-serving autocrats. Not only is it clear, however, that there can be no easy borrowing of some off-the-shelf-solution for a democratic transition in the Arab world; it also remains questionable whether Western style democracy can be the solution to the challenges in this area. Rather, the Arab Spring movement is more likely to generate populist regimes that will make it easier for the new leaders to cater to the high expectations and wishes of the masses and assuage their social and economic frustrations. It is therefore likely that Turkey, not the European countries, will serve as a role model for some countries in this region.

Shada Islam addresses the demographic changes in Muslim communities in Europe, which is currently home to an estimated 44 million Muslims, who are expected to increase to over 58 million by 2030. This rise in the number of European Muslims, driven by fertility and immigration, is causing unease among European citizens, with an increasing number of European leaders arguing that multi-culturalism has failed and Europe's far-right parties winning votes by propagating anti-Islam and anti-foreigner sentiments. In such an environment, Muslims, if they espouse conservative values and customs in the public space, are viewed as foreigners who can never truly be integrated as fully fledged European citizens. Despite such negatives, however, the picture is not universally gloomy: European Muslims are now more active in demanding basic rights and organizing themselves into pressure groups. Moreover, if Europe wishes to climb out of its current and potentially future economic downturn, it needs to leverage the talents and abilities of all its citizens, including immigrants.

The final chapter, written by *Daniel Hofmann*, deals with labour market and financial sector developments. According to this author, in the years leading up to 2020, the MENA region will have to create something on the order of 55 to 70 million jobs just to keep pace and bring the level of overall unemployment down to a more palatable norm. His chapter therefore traces some of the reasons for the region's chronic unemployment and sketches a reform agenda based on the requirements associated with financial sector development. In doing so, it adopts an insurance perspective, because insurance, by providing mechanisms for risk transfer, expands the production possibility frontier of economies. Insurance, however, does not exist in a vacuum. Consequently, the chapter focuses on the prerequisites for creating an institutional environment that fosters macro-economic stability, which ultimately also lays a basis for financial market stability. A quick glance at the region reveals that most MENA countries fall short of the necessary prerequisites on almost all points.

1.2 Conclusions and Lessons Learned

This book is most probably one of the more comprehensive analyses of ongoing population dynamics in Muslim countries. At the outset of this project, we (incorrectly) believed that generalizations could be made of demographic challenges in the Muslim world. We soon realized, however, both through our own research and the contributions of other authors, that the picture painted in this book more resembles a jigsaw puzzle in which each region or country faces its own specific demographic challenges. In fact, this book provides solid demographic evidence that few stylised observations apply uniformly to Muslim countries, whose heterogeneity is enormous. Thus, although European policy makers often refer to the ‘Islamic countries’ when discussing their demographic development, there is in fact no common denominator that would justify such a classification. Even phenomena such as population explosion, youth bulge, demographic turbulence, well-below replacement rate fertility, demographic ageing, gender issues, different levels of literacy, and in- and out-migration, which are observable throughout the entire Islamic world, significantly differ across countries in both quantity and timing.

Nevertheless, we have learned a few general but very important lessons:¹

First, the relationship between Islam and demography is unclear and both pro- and anti-natalist policies are observable in Muslim countries. In many cases, economic, social, and political factors play more important roles than Islam in explaining current demographic patterns and their potential evolution, which makes it difficult to assess the level of correlation between religion and demography. Nevertheless, religious leaders in non-secular Islamic countries still exert a large influence on society and thus can play an important role in initiating policy changes that influence demographic outcomes. For example, the use of contraceptives in Iran only picked up significantly after religious leaders expressed their support.

Second, gender issues matter and the position of women in society plays a very important role – and most probably more so in Muslim countries than in other parts of the world. Female literacy, for example, shown to be one of the most important drivers of declining fertility globally, is also a major force in the Muslim world. In many Muslim countries, however, women still struggle with inequality and restrictive access to education and subsequent career opportunities. Yet many of these oppressive practices do not originate from Islam itself but are rather part of local cultural traditions integrated at some time into the religious rules of Muslim governments. Hence, although Islam gives women rights – some not even enjoyed by Western women until the 19th century – the religious rules in certain Muslim countries have led to a watering-down of those rights and consequently to female

¹ Some conclusions are drawn from a summary report of the WDA Forum’s Expert Symposium on ‘Upcoming Demographic Changes in Islamic Countries’, drafted by four students at the University of St. Gallen (Switzerland): Coskun Bedel, Anna Pirhofer, Simon Ullrich, and Odd Sverre Volle (see also Groth et al. 2011).

oppression. As a result, because of the religious rules applied and expanded over decades, women in Muslim countries today face more oppressive practices than women in other countries. Combating such injustices would thus seem to be a first important step in meeting the demographic challenges of the coming years.

Third, if Muslim countries are to reap the rewards of the demographic transition, there is an urgent need for job development: lower dependency ratios could lead to strong economic growth, but only if the economy manages to absorb and employ the additional workers. Such job creation to meet demand is most probably *the* most important challenge facing nearly all Muslim countries. Conversely, as several authors in this book point out, the negative impacts of a mishandled youth bulge could spill over to the whole region and possibly even beyond. Therefore, to overcome this obstacle, these countries must facilitate a climate that encourages business investment, which in turn leads to job creation.

Finally, rapid change is possible. Although the challenges identified here may seem immense, past achievements provide evidence that rapid change is possible, as exemplified by the accelerated decrease in crude birth rates in Iran and Tunisia. Likewise, the last two decades have shown that new industries can emerge almost overnight, creating immediate advantages of increased employment and other social benefits. At the same time, applying the right micro and macro level strategies, empowering and educating women, channelling religion to help promote these improvements, and creating opportunities for investment and education can all facilitate rapid change in the social, economic, political, and demographic structures of Muslim countries. Such changes will ultimately lead to improvements in welfare, health, development and stability by untapping the huge potential of both the young population and women. Such measures will not only help ensure the peaceful development of Muslim countries but could also provide the best solutions for countering radicalization, social unrest, and even terrorism. Any evolution, development, or change can reach its endogenous momentum only if begun with the right governance and policies designed to overtly address the critical factors listed above. As responsive citizens of this planet, it is our imperative to call for action now. The first step is to inform societies and initiate an open dialogue.

Such is the purpose of this book.

Acknowledgements This book would not have been possible without the very generous support received from a number of institutions and individuals. In particular, we are very grateful for the financial support received from Arthur Eugster, the Swiss Agency for Development and Cooperation (SDC), and the Qatar Foundation. We would also like to thank Matthias Bichweiler and Stefanie Koenig for their excellent support in getting this book published on time.

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Chapter 2

Fertility Decline in the Muslim World, c. 1975–c. 2005: A Veritable Sea-Change, Still Curiously Unnoticed

Nicholas Eberstadt and Apoorva Shah

Abstract There remains a widely perceived notion that “Muslim” societies are especially resistant to embarking upon the path of demographic and familial change that has transformed population profiles in Europe, North America, and other “more developed” areas. In reality, however, fertility levels are falling dramatically for countries and sub-national populations throughout the Ummah – and traditional marriage patterns and living arrangements are undergoing tremendous change. This brief chapter will highlight some of these changes, examine some of their correlates and possible determinants, and speculate about some of their implications.

2.1 Introduction

There remains a widely perceived notion – still commonly held within intellectual, academic, and policy circles in the West and elsewhere – that “Muslim” societies are especially resistant to embarking upon the path of demographic and familial change that has transformed population profiles in Europe, North America, and other “more developed” areas (UN terminology). But such notions speak to a bygone era; they are utterly uninformed by the important new demographic realities that reflect today’s life patterns within the Arab world, and the greater Islamic world as well.

Dr. Eberstadt holds the Henry Wendt Chair in the Political Economy Institute (AEI), where Mr. Shah also serves as Research Fellow. They would like to offer thanks to Ms. Kelly Matush of AEI for her assistance in the research for this paper, and also to Ms. Heesu Kim, Mr. Mark Seraydarian, and Ms. Daksha Shakya. The usual caveats obtain.

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Throughout *the Ummah*, fertility levels are falling dramatically for countries and sub-national populations – and traditional marriage patterns and living arrangements are undergoing tremendous change. This brief chapter will highlight some of these changes, examine some of their correlates and possible determinants, and speculate about some of their implications.

2.2 The Size and Distribution of the Global Muslim Population

There is some inescapable imprecision to any estimates of the size and distribution of the world's population of adherents to Islam (the *Ummah*) – an uncertainty that turns in part on questions about the current size of some Muslim majority areas (i.e. Afghanistan, where as one US reference source puts it, “no comprehensive census based upon systematically sound methods has ever been taken”¹), and in part on the intrinsic difficulties in determining the depth of a nominal believer's religious faith, but more centrally on the crucial fact that many government statistical authorities do not collect information on the religious profession of their national populations. For example: while the United States maintains one of the world's most extensive and developed national statistical systems, the American government expressly forbids the US Census Bureau from surveying the American public about religious affiliation; the same is true in much of the EU, in the Russian Federation, and in other parts of the “more developed regions” with otherwise advanced data-gathering capabilities.

Nevertheless, on the basis of local population census returns that do cover religion, demographic and health survey (DHS) reports where religious preference is included, and other allied data-sources, it is possible to piece together a reasonably accurate impression of the current size and distribution of the world's Muslim population.

Two separate efforts to estimate the size and spread of the *Ummah* result in reasonably consistent pictures of the current worldwide Muslim demography profile. The first, prepared by Dr. Todd M. Johnson of Gordon-Conwell Theological Seminary under the aegis of the World Christian Database,² comes up with an estimate of 1.42 billion Muslims worldwide for the year 2005; by that reckoning, Muslims would account for about 22% of the total world population. The second, prepared by a team of researchers for the Pew Forum on Religion and Public Life,³ placed the total global Muslim population circa 2009, a few years later, at roughly

¹ Peter R. Blood, ed. *Afghanistan: A Country Study*. Washington: GPO for the Library of Congress, 2001; available electronically at <http://countrystudies.us/afghanistan/36.htm>. Though this source dates from 2001, Afghanistan has not as yet been able to undertake a comprehensive and reliable national population count.

² World Christian Database, Available electronically at <http://www.worldchristiandatabase.org/>.

³ *Mapping The Global Muslim Population: A Report on the Size and Distribution of the World's Muslim Population, October 2009*, Washington, DC: Pew Center on Religion and Public Life, 2009, available electronically at <http://pewforum.org/Mapping-the-Global-Muslim-Population.aspx>.

1.57 billion, which would have been approximately 23% of the estimated human population at the time.

Although upwards of one fifth of the world's population today is thus estimated to be Muslim, a much smaller share of the population of the “more developed regions” adheres to Islam: perhaps just over 3% of that grouping (that is to say, around 40 million out of its total of 1.2 billion people). Thus the proportion of the world's Muslims living in the less developed regions is not only overwhelming, but disproportionate: well over one fourth of the population of the less developed regions – something close to 26–27% – would be Muslim to go by these numbers.

Most of the world's Muslim population inhabits a tropical and semitropical expanse that stretches across Africa and Asia from the Atlantic shores of Mauritania and Morocco to the Pacific archipelagos of Indonesia and the Philippines. The great preponderance of the world's Muslims live in Muslim-majority countries – 73% according to the World Christian Database, nearly 80% according to the Pew Forum study (which lists 49 countries and territories in Asia, Africa and Europe that it identifies as Muslim-majority). Another tenth of the *Ummah* (roughly 160 million people as of 2009) lives within India, where Muslims are a religious minority. In all, eight countries today account for over 60% of the world's Muslim population: Indonesia, Pakistan, India, Bangladesh, Egypt, Nigeria, Iran and Turkey. Note that only one of these eight is an Arab society in the Middle East.

2.3 Dimensions of Fertility Decline in Muslim-Majority Countries, c. 1975–c. 2005

Since the overwhelming majority of today's Muslims live in Muslim-majority countries, and since those same countries are typically overwhelmingly Muslim (by the Pew study's estimate, 43 of those 49 countries and places are over two-thirds Muslim, 40 of them over 90% Muslim), we can use national-level data on fertility for Muslim-majority countries as a fairly serviceable proxy for examining changes in fertility patterns for the Muslim world community. For our purposes, the advantage here is that a number of authoritative institutions – most importantly, the United Nations Population Division (UNPD)⁴ and the United States Census Bureau (USCB)⁵ – regularly estimate and project population trends for all the countries in the world.

The UNPD provides estimates and projections for period “total fertility rates” (births per woman per lifetime) for over 190 countries and territories across the planet for both the late 1970s and the 2005/2010 period. Using these data, we can

⁴ United Nations Population Division, *World Population Prospects: The 2010 Revision*, available electronically at http://esa.un.org/unpd/wpp/unpp/panel_population.htm.

⁵ United States Bureau of the Census, *International Data Base*, available electronically at <http://www.census.gov/population/international/data/idb/informationGateway.php>.

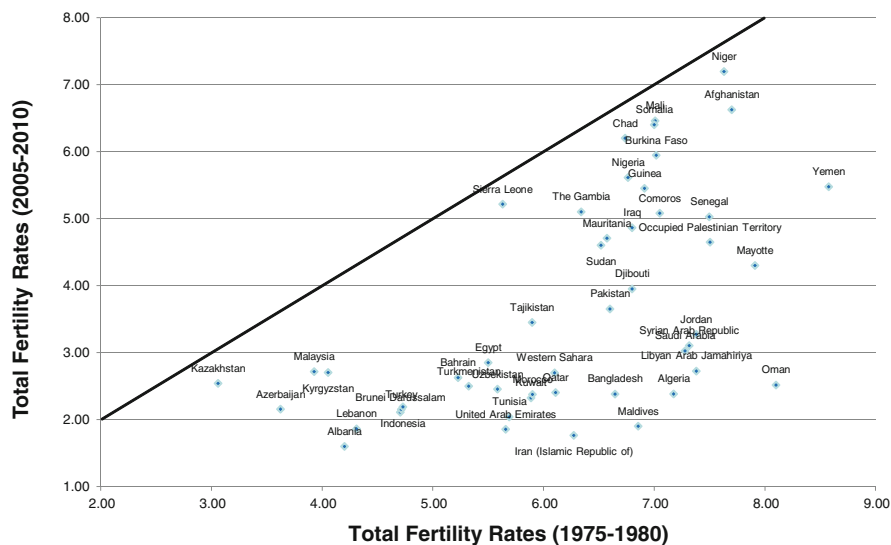


Fig. 2.1 Total fertility rates in the Muslim world, 1975–1980, vs. 2005–2010 (Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2010 revision, http://esa.un.org/unpd/wpp/unppp/panel_population.htm, November 16, 2011)

appraise the magnitude of fertility declines in 48 of the world's 49 identified Muslim-majority countries and territories.⁶

One way of considering the changes in fertility in these countries is to plot a 45-degree line across a chart and to compare fertility levels from three decades ago on one axis against recent fertility levels on the other axis – a country whose fertility level remains unchanged over time will remain exactly on this plotted line. If the fertility levels of the earlier time are plotted on the x-axis and the more current fertility levels on the y-axis, any country whose fertility level rises over time will be above the plotted line, whereas a country experiencing fertility decline will be located below the plotted line; the distance of these data points from the plotted line indicates the magnitude of a country's absolute drop in fertility over these decades.

The results from for this exposition of data are displayed in Fig. 2.1. As may be seen, according to UNPD estimates and projections, all 48 Muslim-majority

⁶ The UNPD does not offer estimates for Kosovo – and while the USCB does calculate current demographic trends for that country, its estimates do not extend back to the 1970s. Note that the UNPD calculates period TFRs rather than cohort TFRs – that is to say “snap-shot” or synthetic estimates of fertility as if a woman completed her childbearing on the schedules for women of all childbearing ages at that time, rather than actual completed childbearing patterns for women from given birth years or cohorts. While there can be important differences between period and cohort estimates of TFR, this matter will not detain us here.

countries and territories witnessed fertility decline over the three decades under consideration. To be sure: for some high- or extremely-high-fertility venues in sub-Saharan Africa, where TFRs in the 6–8 range prevailed in the late 1970s, declines are believed to have been marginal (think of Sierra Leone, Mali, Somalia and Niger). In some other places, where a fertility transition had already brought TFRs down around 3 by the late 1970s, subsequent absolute declines also appear to have been somewhat limited (think of Kazakhstan). In most of the rest of the Muslim-majority countries and territories, however, significant or dramatic reductions in fertility have been registered – and in many of these places, the drops in question have been truly extraordinary.

With respect to absolute changes in TFRs, the population-weighted average for the grouping as a whole amounted to a drop of 2.6 births per woman between 1975/1980 and 2005/2010 – a markedly larger absolute decline than for either the world as a whole (–1.3) or the less developed regions as a whole (–2.2) during those same years. Fully 18 of these Muslim-majority places saw TFRs fall by 3 or more over those 30 years – with 9 of them by 4 births per woman or more! In Oman, TFRs plummeted by an astonishing 5.6 births per woman during those 30 years: an average pace of nearly 1.9 births per woman every decade.

As for relative or proportional fertility declines: here again the record is striking. The population-weighted average for the Muslim-majority areas as a whole was –41% over these three decades: by any historical benchmark, an exceptionally rapid tempo of sustained fertility decline. In aggregate, the proportional decline in fertility for Muslim-majority areas was again greater than for the world as a whole over that same period (–33%) or for the less developed regions as whole (–34%). Fully 22 Muslim-majority countries and territories were estimated to have undergone fertility declines of 50% or more during those three decades – 10 of them by 60% or more. For both Iran and the Maldives, the declines in total fertility rates over those 30 years were estimated to exceed 70%.

Given the differences in timing for the onset of sustained fertility declines in different settings around the world, it is possible that these summary figures might present a biased picture. It is possible to imagine, for example, that dramatic fertility declines might have taken place in other regions at earlier dates, with fertility declines tapering off during these years when the declines in the Muslim-majority areas were so manifestly dynamic: if that were the case, we would end up exaggerating the robustness of these Islamic fertility declines in comparison to other parts of the world. Yet while this is a theoretical possibility, empirical results do not corroborate such a contingency.

Tables 2.1 and 2.2 make the point. These examine the UNPD's estimates and projections of fertility patterns available for all countries and territories for the entirety of the postwar era (1950–2010). It then isolates the “top ten” fertility declines, as measured by both absolute and proportional change in TFRs, registered over any 20-year period. This approach will eliminate any “timing bias” from our selection of 1975/1980–2005/2010 as the period for which to analyze fertility declines.

Table 2.1 The ten biggest declines in total fertility rates (births per woman) in the postwar era: most rapid 20-year Total Fertility Rate decline in absolute terms

Major area, region, country or area	Time period	Absolute decline
Oman	1985–1990 to 2005–2010	–5.33
Maldives	1985–1990 to 2005–2010	–4.91
Kuwait	1970–1975 to 1990–1995	–4.70
Iran (Islamic Republic of)	1980–1985 to 2000–2005	–4.57
Singapore	1955–1960 to 1975–1980	–4.50
Algeria	1975–1980 to 1995–2000	–4.29
Mongolia	1970–1975 to 1990–1995	–4.20
Libyan Arab Jamahiriya	1980–1985 to 2000–2005	–4.18
Vietnam	1970–1975 to 1990–1995	–3.92
Mauritius	1960–1965 to 1980–1985	–3.89

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. World population prospects: The 2010 revision. Available at http://esa.un.org/unpd/wpp/unpp/panel_population.htm. Accessed 16 Nov 2011.

Table 2.2 The 10 biggest declines in total fertility rates (births per woman) in the postwar era: most rapid 20-year Total Fertility Rate relative to the starting year

Major area, region, country or area	Time period	% change
China, Macao SAR	1955–1960 to 1975–1980	–0.72
Maldives	1985–1990 to 2005–2010	–0.72
Singapore	1955–1960 to 1975–1980	–0.71
Iran (Islamic Republic of)	1980–1985 to 2000–2005	–0.70
Kuwait	1970–1975 to 1990–1995	–0.68
Oman	1985–1990 to 2005–2010	–0.68
Republic of Korea	1965–1970 to 1985–1990	–0.66
Mongolia	1980–1985 to 2000–2005	–0.63
Vietnam	1975–1980 to 1995–2000	–0.63
Mauritius	1960–1965 to 1980–1985	–0.63

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. World population prospects: The 2010 revision. Available at http://esa.un.org/unpd/wpp/unpp/panel_population.htm. Accessed 16 Nov 2011.

As may be seen in Table 2.1, six of the ten largest absolute declines in fertility for a two-decade period yet recorded in the postwar era (and by extension, we may suppose, ever to take place under orderly conditions in human history) have occurred in Muslim-majority countries. The four very largest of these absolute declines, furthermore, all happened in Muslim-majority countries – each of these entailing a decline of over 4.5 births per woman in just 20 years. (The world record-breaker here, Oman, is estimated to have seen its TFR fall by over 5.3 births per woman over just the last two decades: a drop of over 2.6 births per woman per decade.) Notably, four of the ten greatest fertility declines ever recorded in a 20 year period took place in the Arab world (Algeria, Libya, Kuwait and Oman); adding in Iran, we see that five of these “top ten” unfolded in the greater Middle East. No other region of the world – not highly dynamic Southeast Asia, or even rapidly modernizing East Asia – comes close to this showing.

Table 2.2 offers a separate but largely congruent reading, ranking the “top ten” historical fertility declines during any 20 year period by country in terms of proportional rather than absolute drops in TFRs. By this metric, “only” four of the top ten fertility drops to date have occurred in Muslim-majority countries – and “only” two of the top four were Muslim-majority areas (Iran and the Maldives Islands). What may be especially noteworthy here, nonetheless, is that places like Kuwait, Oman, and Iran all effected fertility declines over two-thirds in just 20 years – and that this pace of change exceeded the tempo of fertility decline in almost all of the Pacific Rim societies; the BRIC economies; and the other non-Muslim emerging market economies.

2.4 Modern Muslim Fertility Patterns in a Western Mirror: Some Comparisons with the United States

Given the extraordinary – indeed, as we have just seen, often historically unprecedented – fertility declines that a number of Muslim-majority populations have sustained over the past generation, it is now the case that a substantial share of the *Ummah* is accounted for by countries and territories with childbearing patterns comparable to those contemporary affluent Western non-Muslim populations. The low fertility levels for the Muslim-majority societies in question, it should be noted, have generally been achieved on substantially lower levels of income, education, urbanization, modern contraception utilization, and the like than those that characterize the more developed regions with which their fertility levels currently correspond today.

We can highlight this point by comparing fertility in today’s Muslim-majority populations with that of the United States. America of course is not a “typical” OECD country in terms of its fertility level (quite the contrary, there is an unsettled argument among demographers today as to whether the US exhibits “demographic exceptionalism”⁷) – but as the leading developed society, comparisons with the United States can place Muslim-majority fertility patterns in a sort of “developmentalist” perspective.

Figure 2.6 underscores the similarity between contemporary fertility levels in so much of the *Ummah* and those of the United States. It contraposes UNPD estimates or projections of fertility for diverse Muslim-majority countries and territories for the 2005/2010 period against those of the US states and the District of Columbia for the year 2007. As may be seen, TFRs in a great many Muslim-majority populations

⁷ Cf. Ron J. Lesthaeghe and Lisa Neidert, “The Second Demographic Transition in the United States: Exception or Textbook Example?” *Population and Development Review* vol. 32, no. 3 (September 2006): 669–98; Nicholas Eberstadt, Born in the USA: America’s Demographic Exceptionalism”, *The American Interest* (May/June 2007), available electronically at <http://www.the-american-interest.com/article.cfm?piece=272>.

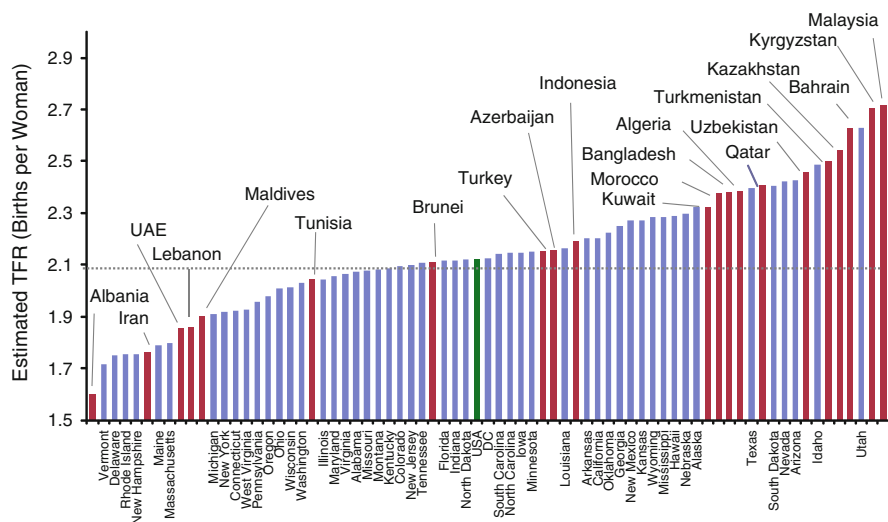


Fig. 2.2 Total fertility rates in United States and selected Muslim-majority countries, c. 2007. Note: Muslim-majority TFRs as reported by the UNPD for 2005–2010 period (Sources: US TFR source (2007 data): National Vital Statistics, Volume 58, Number 24, May 24, 2010, http://www.cdc.gov/nchs/data/nvsr/nvsr58_24.pdf; Muslim-majority country TFR source (2005–2010 data): Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2010 revision)

look quite “American” these days. To go by UNPD figures, for example, Algeria, Bangladesh and Morocco all have fertility levels corresponding to the state of Texas, while Indonesia’s is almost identical to Arkansas’. Turkey and Azerbaijan, for their part, are on par with Louisiana, while Tunisia’s TFR looks like Illinois’. Lebanon’s fertility level is lower than New York state’s. As for Iran, its fertility level today is comparable with those of the New England states, the region in America with the lowest fertility. No state in the contemporary USA, however, has a fertility level as low as Albania’s (Fig. 2.2).

All in all, according to these UNPD figures, 21 Muslim-majority populations would seem to have fertility levels these days that would be unexceptional for states in the USA (with the possible exception of Albania, whose fertility level might arguably look too *low* to be truly “American”.) As of 2009, these 21 countries and territories encompassed a total estimated population of almost 750 million persons: which is to say, very nearly half of the total population of the *Ummah*. These numbers, remember, exclude hundreds of millions of Muslims in countries where Islam is not the predominant religion. Taking this into account, it could be that a majority of the world’s Muslims already live in countries where their fertility levels would look entirely unexceptional in an American mirror.

To be sure – just as fertility varies among the 50 United States of America, so it differs by region in many predominantly Muslim societies. But such geographic differences further emphasize the extent to which fertility levels for a great portion

of the *Ummah* has come to correspond with levels taken for granted nowadays in more-developed, non-Islamic Western societies.

Let us take the example of Turkey. For the period 2000–2003, according to Turkey's most recent DHS, the country's overall TFR was 2.23. That average, however, was strongly influenced by the distinctively high fertility levels of eastern Turkey (a largely Kurdish region), where a TFR of 3.65 was recorded.⁸ In much of Turkey, TFRs of 1.9 or less prevailed. Istanbul's TFR, for instance, was less than 1.9 – which is to say, it would have been equivalent to the corresponding level for France in those same years. Placed in an American perspective, eastern Turkey's fertility levels are off the scale – but for Turkey as a whole, fertility levels are comparable to Hawaii, and even for comparatively fecund south Turkey, fertility levels are just about the same as in Nebraska. For their part, if north Turkey, west Turkey, central Turkey and Istanbul were part of the US, they would qualify as low-fertility states. Only 6 of America's 50 states, for example, had lower fertility than Istanbul.

Consider next the case of Iran. As we have seen, over the past generation Iran has registered one of the most rapid and pronounced fertility declines ever recorded in human history. By the year 2000, according to Iran's DHS of that same year, the TFR for the country as a whole had dropped to 2.0, below the national replacement level of 2.1.⁹ But there were also great regional variations within Iran, with some areas (such as the largely Baluchi province of Sistan and Baluchestan in the east and the largely Kurdish West Azarbaijan province in the west) well above replacement, and much of the rest of the country far below replacement. Note in particular that Tehran and Isfahan reported fertility levels lower than any state in the USA. With a TFR of 1.4, indeed, Tehran's fertility level in 2000 would have been below the average for the EU-27 for the year 2002 (TFR 1.45), well below year 2000 fertility in such places as Portugal (1.54) and Sweden (1.54), and only slightly higher than for such famously low-fertility European countries as Italy (1.26) and Germany (1.38).¹⁰

Admittedly, our use of the USA as a comparator for fertility levels in Muslim-majority areas perforce excludes the tremendous swath of the present-day *Ummah* where fertility levels are (at least for now) higher than in present-day America. The point of our selection, however, is to emphasize just how very much of the *Ummah* can be included in such a comparison nowadays. This is a very new development: 30 years earlier, barely any Muslim-majority country or territory would have

⁸ Sutay Yavuz, "Fertility Transition and The Progression to a Third Birth in Turkey," (Presentation, Institute of Population Studies, Hacettepe University). 2005; available at <http://www.demogr.mpg.de/papers/working/wp-2005-028.pdf>, accessed November 23, 2011.

⁹ Farzaneh Roudi-Fahimi, "Iran's Family Planning Program: Responding to a Nation's Needs," MENA Policy Brief, Population Reference Bureau, June 2002. Available at <http://www.prb.org/Publications/PolicyBriefs/IransFamilyPlanningProgram.aspx>, accessed November 23, 2011.

¹⁰ Eurostat, "Fertility Indicators" available electronically at http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_find&lang=en; accessed November 18, 2011.

registered fertility levels low enough to permit approximate comparison to corresponding fertility levels in *any* US state. As of 1977, period TFRs for Utah, always America's most fertile state, were just under 3.6, while according to UNPD estimates the very lowest TFRs in the late 1970s for any Muslim-majority populations would have been for Kazakhstan (3.1) and Azerbaijan (3.6).¹¹ Thus in just 30 years, the total population of Muslim-majority areas whose fertility levels could be reflected in a contemporaneous American mirror has thus risen from under 20 million to nearly three quarters of a billion. By any benchmark, this qualifies as a remarkable change.

Furthermore, indications suggest that the change has progressed still further since the 2005 period. Whereas the UNPD offers only 5-year-span estimates and projections for fertility levels, USCB provides annual figures. According to these numbers, the total fertility rate for Saudi Arabia in 2011 would be 2.31 – a lower level than recorded recently for such US states as South Dakota and Idaho. At projected TFRs of 2.96 and 2.97, respectively, Libya's and Egypt's fertility levels for 2011 would be roughly on par with fertility of America's large domestic Hispanic population with a TFR of 2.91 as of 2008¹²). Even places like Pakistan (USCB projected TFR for 2011: 3.17) and the West Bank of Palestine (3.05) would, in this assessment, appear to be rapidly approaching the day where their fertility levels could be comparable to levels displayed by geographic regions or broad national ethnic groups within the United States today. Put another way: unbeknownst of informed circles in the international community, and very often even in the countries in question, fertility levels for Muslim-majority populations around the world are coming to look more and more "American".

2.5 Socio-economic Trends and Fertility Changes in Muslim-Majority Societies: Correlates and Possible Determinants

How is the extraordinary demographic transformation described in the previous pages to be accounted for? Typically, demographers and other social scientists in our era attempt to explain fertility changes in terms of the socioeconomic trends that drive (or at least accompany) them. We can presume to examine some of the correspondences between socioeconomic trends and fertility change through

¹¹ Utah's 1977 TFR derived from Barry Nangle, Ph.D., *Utah's Vital Statistics Births and Deaths 1997*, Utah Department of Public Health, Office of Public Health Data, Technical Report no. 202, November 20, 1998; available electronically at http://health.utah.gov/vitalrecords/pub_vs/ia97/ibx97alc.pdf; Muslim-majority country TFR estimates from "World Population Prospects: The 2010 Revision", *loc. Cit.*

¹² *Statistical Abstract of the United States 2012*, Table 83, <http://www.census.gov/compendia/statab/2012/tables/12s0083.pdf>.

analysis at the national level for Muslim-majority states, given the wealth of national-level socioeconomic statistics that have been collected by government statistical authorities, the United Nations, the World Bank, and other agencies and institutions.

We know, of course, that the 49 Muslim-majority countries and territories for which the UNPD provides demographic estimates encompass a rich diversity of national histories, cultures, languages, and specific traditions. But if we analyze this collectivity as a single group – in other words, as if there were something distinctive about Muslim-majority countries per se – we can conduct a preliminary inventory of readily apparent broad socioeconomic associations with fertility change for this, the lion's share of the population of the contemporary *Ummah*.

A century of social science research has detailed the historical and international associations between fertility decline and socioeconomic modernization (as represented by increasing income levels, educational attainment, urbanization, public health conditions, and the like). Those associations, not surprisingly, are immediately evident in simple cross-country correlations between national fertility levels and these respective socioeconomic variables, using data for the all less developed regions *circa* 2005 (highlighting Muslim-majority countries and territories in these graphics).

For the less developed regions as a whole, fertility levels tend to decline across countries with greater urbanization, per capita income, female literacy, utilization of modern contraceptive methods, and infant survival prospects – with associations between this fertility change and those different socioeconomic variables lowest for urbanization and highest for infant mortality (simple r-squares from 0.33 to 0.75). For female literacy, modern contraceptive use, per capita income, and infant mortality, the simple coefficients of determination (r-squares) for fertility levels all exceed 60% for countries in the less developed regions.

Clearly, those are very robust associations, considering all the particularities and unique characteristics that necessarily distinguish any country from all others. But just as clearly, these broad associations between fertility change and material measures of modernization or socioeconomic development are not the whole story here. Over a decade and a half ago, a path-breaking study by Lant Pritchett made the persuasive case that *desired fertility levels* (as then expressed by women of childbearing age in DHS surveys) were the single best predictor for actual fertility levels in the less developed regions.¹³ Sure enough: as Fig. 2.3 demonstrates, DHS surveys conducted since that study reveal a 90% association between wanted fertility and actual fertility levels in the 56 less developed countries for which such recent data were available.

This finding still flies in the face of much received opinion in population policy circles. In particular, it seems to challenge the notion that family planning programs, by encouraging the prevalence of modern contraceptive use, may make

¹³ Lant H. Pritchett, "Desired Fertility and the Impact of Population Policies", *Population and Development Review*, vol. 20, no. 1 (March 1994), pp. 1–55.

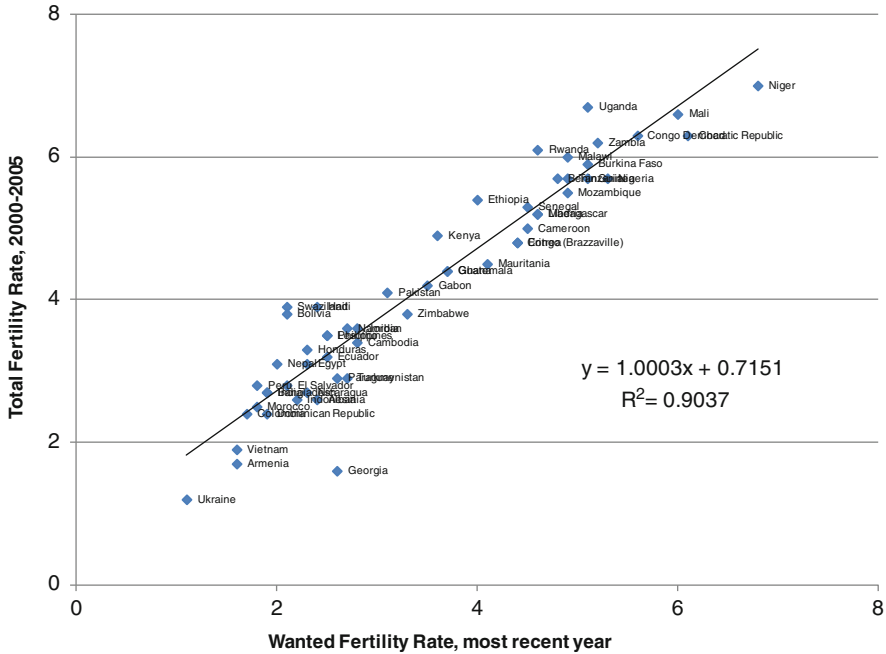


Fig. 2.3 Total fertility rates 2000/2005 vs. Wanted total fertility rates, c. 2000 (Sources: Wanted TFR: Macro International Inc, 2009. MEASURE DHS STATcompiler. <http://www.measuredhs.com>, March 30 2009; TFR: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2008 revision, <http://esa.un.org/unpp>, Tuesday, June 09, 2009; 1:53:51 PM)

an important independent contribution to reducing fertility levels in developing countries, especially by reducing what is called “excess fertility” or “unwanted fertility”. It has often been difficult to test that proposition in a methodologically sound and rigorous manner, as the aforementioned Pritchett study observed – and as Pritchett argued – methodologically sound investigations generally indicated that the *demographic* impact of family planning programs tended to be marginal. Preliminary analysis of more recent DHS surveys would seem to corroborate Pritchett’s findings. Figure 2.4, for example, shows the correspondence in recent DHS surveys between “excess fertility” (defined here as the difference between actual fertility levels and reported levels of wanted fertility) and the prevalence of modern contraceptive use. As may be seen, there is no observable correspondence whatever between these two factors here.

Socioeconomic factors, to be sure, may well affect the desired family sizes that women of childbearing age report in these DHS surveys – in fact they surely do. But the critical determinant of actual fertility levels in Muslim and non-Muslim societies alike at the end of the day would appear to be attitudinal and volitional, rather than material and mechanistic.

How do the various factors mentioned thus far interact in influencing fertility levels in Muslim-majority countries? We may get a sense of this complex interplay

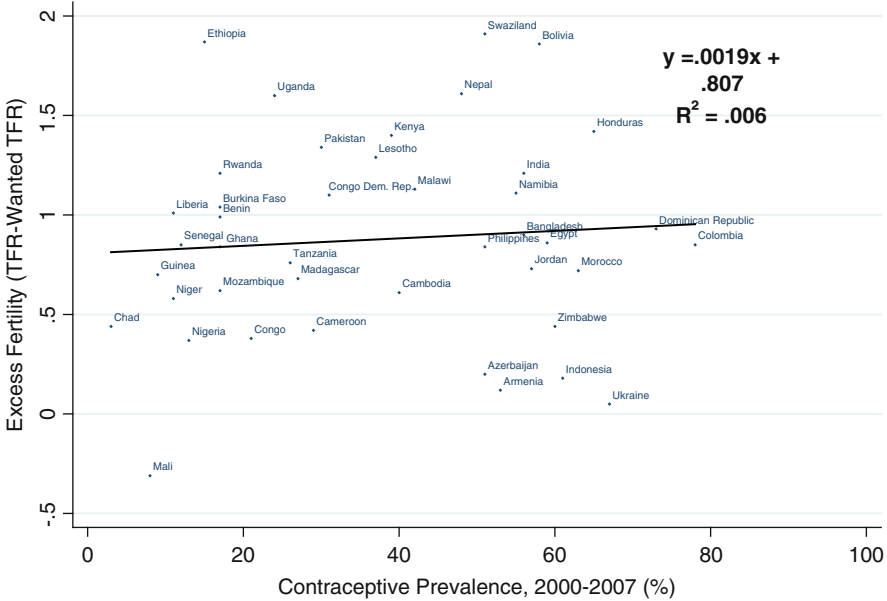


Fig. 2.4 Contraceptive prevalence and “Excess Fertility”, 2000/2007 (Sources: Contraceptive prevalence, 2000–2007: UNICEF “The State of the World’s Children 2009”; Wanted TFR: Macro International Inc, 2009. MEASURE DHS STATcompiler. <http://www.measuredhs.com>, March 30 2009; TFR: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2008 revision, <http://esa.un.org/unpp>, Tuesday, June 09, 2009; 1:53:51 PM)

from the hints offered by an initial multivariate analysis of international fertility difference reported in recent DHS surveys.

The first regression equation in Fig. 2.5 attempts to predict fertility levels in 41 Muslim and non-Muslim less developed countries on the basis of per capita income, literacy rates, prevalence of modern contraceptive use, and desired fertility. Taken together, changes in these four variables can be associated with over 90% of the differences in fertility levels in this sample of countries. However, only two of these variables emerge as statistically significant: desired fertility and per capita income. Interestingly enough, the literacy and contraceptive use variables in this regression were not only statistically insignificant, but each came out with calculated coefficient values not appreciably different from zero.

The second equation adds an additional factor to the regression for predicting fertility levels: a dummy variable for Muslim-majority population. Introducing this variable changes the results in an intriguing way: now per capita income loses its statistical significance (if barely), so that only desired fertility retains its statistical significance out of the original four independent variables from the first equation. But the dummy variable for Muslim-majority in this second equation is statistically

Dependent Variable: Total Fertility Rate		
Explanatory Variables		
Wanted Total Fertility Rates (most recent year)	.718** (6.01)	.773** (6.78)
Ln GDP PPP, 2005 (1990 Geary-Khamis International \$)	-.460* (-2.68)	-.300 (-1.74)
Contraceptive Use (%, married women 15-49)	-.003 (-0.33)	-.000 (-0.02)
Literacy Rate (female 15+, most recent year)	-.002 (-0.50)	-.007 (-1.64)
Muslim Country Dummy Variable		-.426* (-2.47)
R² (unadjusted)	.912	.923
Number of Observations	41	41

*=Significant at 5% **=Significant at 1%

Fig. 2.5 Determinants of total fertility rates: What the regressions equations suggest. Note: t-scores in parenthesis (Sources: Angus Maddison, "Per Capita GDP PPP (in 1990 Geary-Khamis dollars)," Historical statistics for the world economy: 1-2008, AD, Table 3, <http://www.ggdc.net/maddison/>, accessed November 21, 2011; MEASURE DHS STATcompiler. <http://www.measuredhs.com>, accessed March 30, 2009)

significant: and perhaps surprisingly, the value of this variable is *negative*. This is to suggest that, at any given level of per capita income, literacy, and contraceptive use, Muslim-majority societies today can be expected to have *fewer* children than their counterparts in non-Muslim societies nowadays!

Why should this be so? "Developmentalist" theories, with their emphasis on the primacy of material and structural transformations, cannot offer much insight into this mystery. Nor would it seem to be explained by what might be called the "contraceptivist" theories favored by those who see family planning policies as a major instrumental factor in eliciting fertility decline in less developed regions.

Figure 2.6 makes this point. Although Muslim-majority countries, as we have seen, apparently tend to have substantially lower fertility levels nowadays than non-Muslim comparators when holding income, literacy, contraceptive use, and desired fertility constant, Muslim-majority countries also tend to have significantly lower levels of modern contraception use than non-Muslim countries at the same income levels. Holding income constant, modern contraception usage was approximately 14 percentage points lower in Muslim than in non-Muslim majority societies in the 1980s, and remained 11 percentage points lower 20 years later. Despite the so much more limited use of modern contraception, the pervasive, dramatic, and in some

Dependent Variable: Contraceptive Prevalence (%)	1980s		2000s	
Explanatory Variables				
Muslim Country (dummy variable)	-15.974** (-2.94)	-13.872** (-2.99)	-10.95* (-2.53)	-10.956** (-3.20)
Log of GDP Per Capita (PPP 1990 International \$)		14.224** (6.02)	This brings in income into the equation. → 14.852** (9.03)	
R ² (unadjusted)	.086	.352	.051	.461
Number of Observations	94	93	120	113

*=Significant at 5% **=Significant at 1%

Explains how much "less" contraceptive prevalence Muslim countries have, on average.

Fig. 2.6 How “Conservative” are ‘Muslim Societies’? Explaining contraceptive prevalence in the world. Note: t-scores in parenthesis (Source: MEASURE DHS STATcompiler. <http://www.measuredhs.com>, March 30, 2009)

cases historically unprecedented declines in fertility, highlighted earlier in this chapter, took place nonetheless.

Much more research is warranted to glean a greater understanding of the social, economic and other factors involved in the ongoing transformation of fertility levels and family patterns within the *Ummah* today. What we would simply wish to emphasize at this point is the critical role human agency appears to have played in this transformation. “Developmentalist” perspectives cannot explain the great changes underway in many of these countries and territories – in fact, various metrics of socioeconomic modernization serve as much poorer predictors of fertility change for Muslim-majority populations than for non-Muslim populations. Not to put too fine a point on it: proponents of “developmentalism” are confronted by the awkward fact that fertility decline over the past generation has been more rapid in the Arab states than virtually anywhere else on earth – while well informed observers lament the exceptionally poor development record of the Arab countries over that very period.¹⁴

By the same token, contraceptive prevalence has only limited statistical power in explaining fertility differentials for Muslim-majority populations – and can do nothing to explain the highly inconvenient fact that use of modern contraceptives

¹⁴ Cf. United Nations Development Program and Arab Fund for Economic and Social Development, *Arab Human Development Report 2002*. New York: UNDP 2002. <http://www.arab-hdr.org/publications/other/ahdr/ahdr2002e.pdf>, and subsequent editions in this series.

remains much lower among Muslim-majority populations than among non-Muslim societies of similar income level, despite the tremendous fertility declines recorded in the former over the past generation.

Put another way: materialist theories would appear to come up short when pressed to account for the dimensions of fertility change registered in large parts of the *Ummah* over the past generation. An approach that focuses on parental attitudes and desires, their role in affecting behavior that results in achieved family size, and the manner in which attitudes about desired family size can change with or without marked socioeconomic change, may prove more fruitful here.

2.6 Some Implications of Today's Rapid Fertility Declines in the Islamic World

We have made the empirical case in this chapter that a sea-change in fertility levels, and by extension, in attendant patterns of family formation, is now underway in the Islamic world – even if this sea-change remains curiously un-recognized and un-discussed even in the societies it is so rapidly transforming. Why this should be the case is an important question, but one that will not detain us here. Instead, we shall conclude by touching a few of the more obvious implications of these big demographic changes for the years ahead.

1. *Downward Revision of Population Projections:* In its 2000 revisions of *World Population Prospects*, UNPD “medium variant” projections envisioned a population for Yemen of 102 million people; in its 2010 revisions, the 2050 “medium variant” projection for Yemen is 62 million. (USCB projections for Yemen for 2050 as of this writing are even lower: under 48 million.) Unanticipated but extremely rapid fertility declines would likewise militate for downward revisions in the trajectory of future demographic growth in other Muslim-majority areas.
2. *Coming Declines in Working-Age (15–64) Population:* If the current prospect for Muslim-majority countries and territories entails coping with the challenges of finding employment for continuing and even increasing increments of working-age manpower, in the foreseeable future an increasing number of Muslim-majority countries may face the prospect of coping with manpower declines. If current USCB projections prove accurate, Lebanon’s 15–64 cohort would peak in the year 2023 – 20 years from this writing – and would shrink more or less indefinitely thereafter. On the trajectories traced out by current USCB projections, another 13 Muslim-majority countries would also see their conventionally defined working-age populations peak, and begin to decline, before the year 2050.¹⁵ Over the past generation, we should remember,

¹⁵ The other countries would be Algeria, Azerbaijan, Indonesia, Iran, Kazakhstan, Maldives, Morocco, Qatar, Tunisia, Turkey, Turkmenistan, the United Arab Emirates, and Uzbekistan.

demographic authorities for the most part underestimated the pace and scale of fertility decline in Muslim regions – sometimes very seriously. If underestimation is still the characteristic error in fertility projections for these populations, this would mean that manpower declines would commence earlier than envisioned for the countries in question – and that additional countries and territories might experience workforce decline before 2050.

3. *A Wave of “Youthquakes”*: With rapidly declining fertility rates, the arithmetic of population composition makes for inescapable “youthquakes”: temporary, but sometimes very substantial, increases in the fraction of young people (say, aged 15–24 or 20–29) as a proportion of total population. Depending on the social, economic and political context, such “youthquakes” can facilitate rapid economic development – or can instead exacerbate social and political strains. Tunisia passed through such a youthquake some time ago, and Iran is experiencing the tail end of one today; Yemen and Palestine, among other Muslim-majority societies, have yet to deal with theirs.
4. *Rapid Population Aging on Relatively Low Income Levels*: The lower a country’s or territory’s fertility, the more powerful the demographic pressure for population aging over the subsequent generation. With extremely rapid fertility decline – and the descent into sub-replacement fertility – a number of Muslim-majority populations are already set on course for very rapid population aging. Under current USCB, ten Muslim-majority countries – including Indonesia, Iran, Algeria and Morocco – would have higher fractions of their national populations over the age of 65 by the year 2040 than the USA today. Today these same ten places enjoy only a fraction of US per capita income levels: Indonesia’s per capita GDP in 2008 was estimated to be less than a quarter of America’s; Iran’s just one seventh; and for both Morocco and Algeria barely one ninth. Even with highly optimistic assumptions about future economic growth, it is hard to envision how they might attain contemporary OECD income levels – much less contemporary OECD educational profiles or knowledge-generation capabilities – by the time they reach contemporary OECD aging profiles. How these societies will meet the needs of their graying populations on relatively low income levels may prove to be one of the more surprising, and unanticipated, challenges of the fertility revolution now underway in the *Ummah*.

Part II

Topics and Issues

Chapter 3

Where Are All the Jobs? Capturing the Demographic Dividend in Islamic Countries

Gavin W. Jones

Abstract The demographic dividend following sustained fertility decline is marked by rapid increase in the size of the working-age population, and the slower increase – or even decline – in the population of children. Most Muslim-majority countries are currently experiencing these trends. It is not inevitable that the dividend will be realized; this requires a suitable expansion of education to prepare the large cohorts of young working-age population for employment, and an expansion of job opportunities for the young people entering the workforce. If either or both of these requirements are not met, the dividend can quickly turn into a disaster. Islamic countries show a mixed record in educational improvement, provision of jobs (with the MENA region experiencing particularly high unemployment rates) and employment-to-population ratios. The next 10 years will be years of great challenge for many of these countries. Their working-age population will be continuing to grow rapidly, requiring job creation to be very rapid to prevent unemployment rates from rising. Their education systems will need to be modernized and fitted for the challenges of the globalized economy. The slowing of growth of the school-age population will assist in this endeavour.

3.1 Jobs, Stability and Development

There is nothing more wasteful of the potential for economic growth or more dangerous to political stability than large numbers of unemployed or under-employed young people (particularly young men) with high aspirations that they see little chance of fulfilling. In the modern world, with instant communication

The draft chapter for this book was edited by Hans Groth and Alfonso Souza-Poza. The author wishes to thank Cynthia Lai Uen Rue for research assistance.

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accessible to all, it is hard even for autocratic regimes to keep their populations unaware of what is going on in the world around, and unaware of what they may be missing. Hence, provision of education and of the opportunities to use this education to obtain satisfying employment is one of the key challenges for all governments.

Other chapters in this book examine demographic trends in Islamic countries, and they also bring up one key point: although fertility transition has lagged in most Muslim-majority countries, in the past two decades very substantial fertility declines have taken place in many. Figure 3.1 shows these trends in a number of the largest Muslim-majority countries, some of which (Indonesia, Turkey) are close to replacement level fertility, others of which (Iran) are below it. Of the countries in the figure, only Pakistan and Yemen still have high levels of fertility. Therefore, the earlier notion of the Muslim world being universally marked by high fertility no longer has currency.

Before any discussion of age structure changes in Muslim-majority countries, it must be stressed that most data presented in this chapter are for the largest Muslim-majority countries, a group that includes few Muslim “heartland” countries

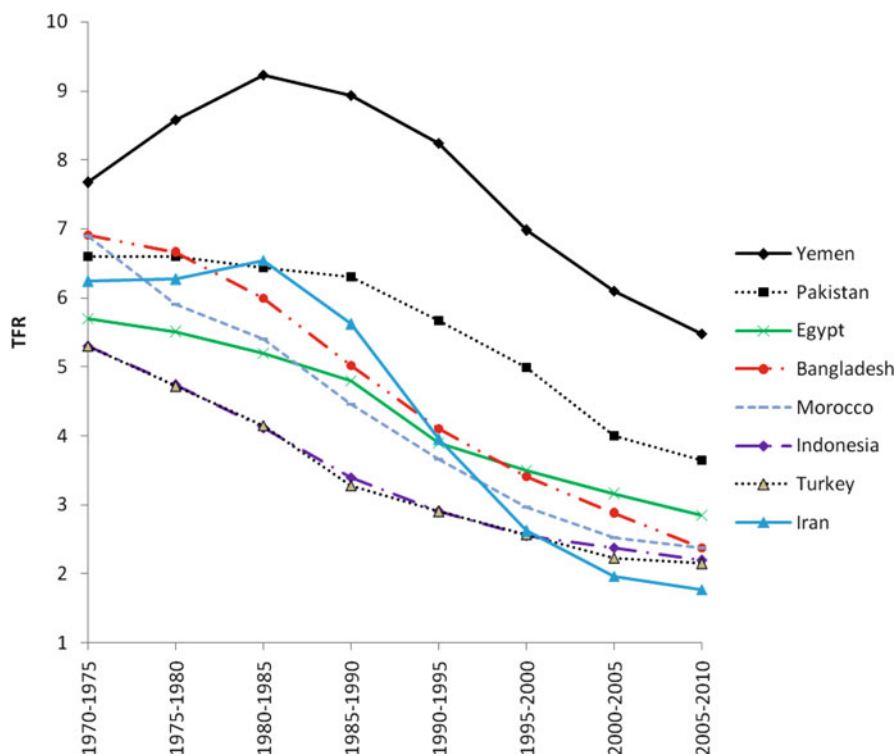


Fig. 3.1 Trends in total fertility rates in selected Muslim-majority countries, 1970–1975 to 2005–2010 (Source: United Nations Population Division 2010)

– the Arabic-speaking countries of the MENA (Middle East-North Africa) region. These latter, although they comprise a large number of nations, account for only slightly over one quarter of the population of the world’s Muslim-majority countries. I do however, include Egypt, Morocco and Yemen in most tables as representative of this region and also provide some discussion of the region as a whole because in terms of language at least, there is some degree of homogeneity among this group of countries.

3.2 The Demographic Dividend

Along with sustained fertility decline goes an extended period of lowered dependency ratios, generally referred to these days as the period of demographic dividend or demographic bonus, about which much has been written.¹ These terms “dividend” and “bonus” give the sense of an inevitable benefit, and indeed the *trend* in dependency ratios is certainly inevitable in that it flows from the progression up the demographic pyramid of the cohorts born at different stages of the fertility transition. The benefit itself, however, is certainly not inevitable, requiring as it does a suitable expansion of education to prepare the large cohorts of young working-age individuals for employment, and an expansion of job opportunities for the young people entering the workforce. If either or both of these two requirements are not met, the dividend can quickly turn into a disaster.

One key component of the demographic dividend is the rapid increase in the size of the working-age population; another is the relatively slow increase in the dependant groups – children and old people. That is, the numbers of children grow more slowly than those of working-age individuals because of fertility decline, while the numbers of old people, although they may grow somewhat more rapidly than the numbers of working-age individuals, do not increase enough to offset the very slow growth – or perhaps decline – in the number of children.

3.3 Growth of the Working-Age Population

As illustrated in Fig. 3.2, growth in the numbers of working-age individuals in Muslim-majority countries has been universally rapid, albeit with considerable variation. For example, the growth in Yemen has been remarkable – a doubling in the 15 years following 1990, which has been more than matched in Afghanistan (not shown). Iran and Pakistan have also shown very rapid increases, while the other major countries in the table have had increases of between 47% and 68%.

¹ Key writings include Williamson and Bloom (1998), Bloom et al. (2003).

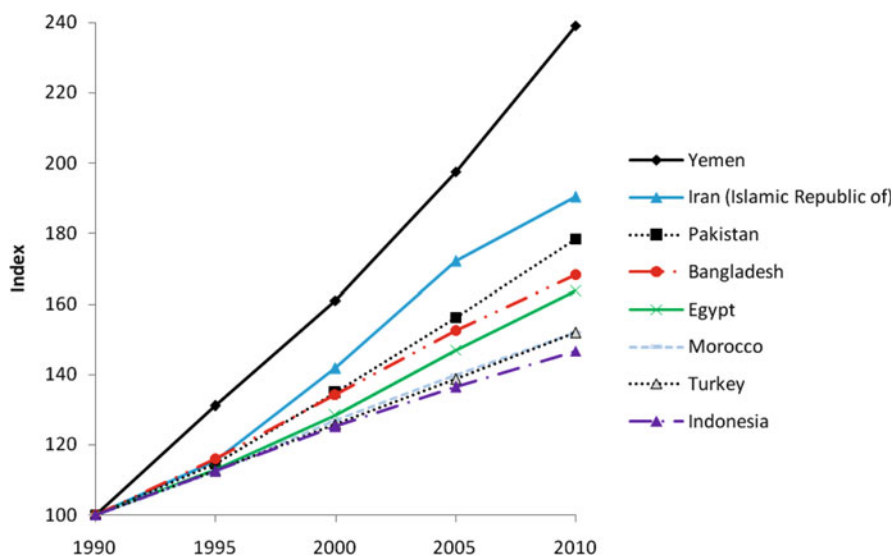


Fig. 3.2 Index of growth in the working-age population, 1990–2010 (1990 = 100)

Within the working-age population, the older segment (aged 30+) has in most cases been growing more rapidly than the younger segment (aged 15–29), whose growth has been slowed to some extent by earlier declines in fertility. However, in countries where fertility decline has been delayed or is non-existent, the numbers for this younger group, which is particularly politically volatile, have grown extremely rapidly, doubling in the 30 years before 2005 in Egypt, in the 23 years before 2008 in Pakistan, and in the remarkably short interval of 15 years before 2010 in Yemen. In countries such as Indonesia and Turkey, however, where fertility declines are of longer standing, the growth of this age group has only been modest.

As is apparent from a comparison of Figs. 3.2 and 3.3, because of the fertility declines that have set in, in most of the major Muslim countries, the projected growth over the next 20 years is considerably slower than in the past 20 years. Nevertheless, growth in some countries will remain extremely rapid. For instance, Yemen will be matched by Afghanistan and Iraq (neither shown in the table) in experiencing nearly a doubling of its working-age population over the next 20 years. In contrast, growth in most of the large Muslim countries will be much slower, ranging between 17% in Iran (and barely any higher in Indonesia, Morocco and Turkey) and 49% in Pakistan. Morocco is representative of the Maghreb countries in this slower rate of growth.

There is, however, projected to be a major discontinuity in the growth of the younger and older segments of the working-age population. The growth of the working-age population as a whole is largely the result of the rapid growth of the population aged over 30. The younger segment of the working-age population will grow more slowly than the 30–64 age group and indeed in some countries is

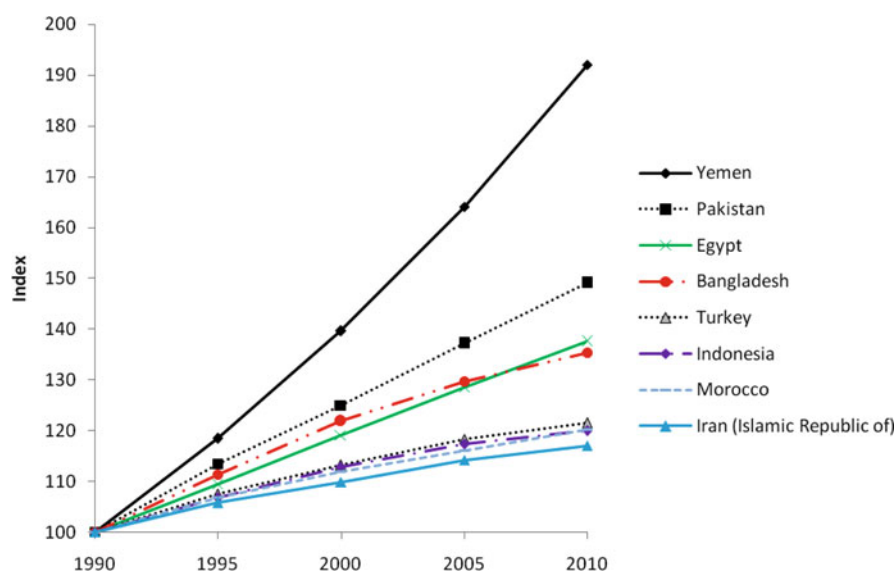


Fig. 3.3 Index of growth in the working-age population, 2010–2030 (2010 = 100)

actually declining in numbers. Figure 3.4 shows the trends projected for the same countries as in Fig. 3.3. Iran is expected to experience a spectacular decline in the numbers of younger working-age individuals as the ever-shrinking cohorts resulting from its sharp fertility decline reach working age. A much more modest decline is also projected for Morocco, Turkey and Indonesia. In the other countries listed in Fig. 3.4, the numbers are expected to increase but at a much slower rate than those of older working-age individuals. This differential growth in the younger and older segments of the working-age population will result in a pronounced “ageing” of the potential labour force, one that will be nearly universal in the major Muslim countries, resulting as it does from the declining fertility rates almost all are experiencing.

3.4 Dependency Ratios

Although dependency ratios can be measured in several ways, in this study they are defined as the population aged 0–19 plus the population aged 65+ divided by the population aged 20–64, times 100.² Despite an infinite variety of possible scenarios,

² In this chapter, youth dependants are considered to be those aged 0–19 rather than the frequently used 0–14, because with the extension of schooling, many in the 15–19 age group are still in school.

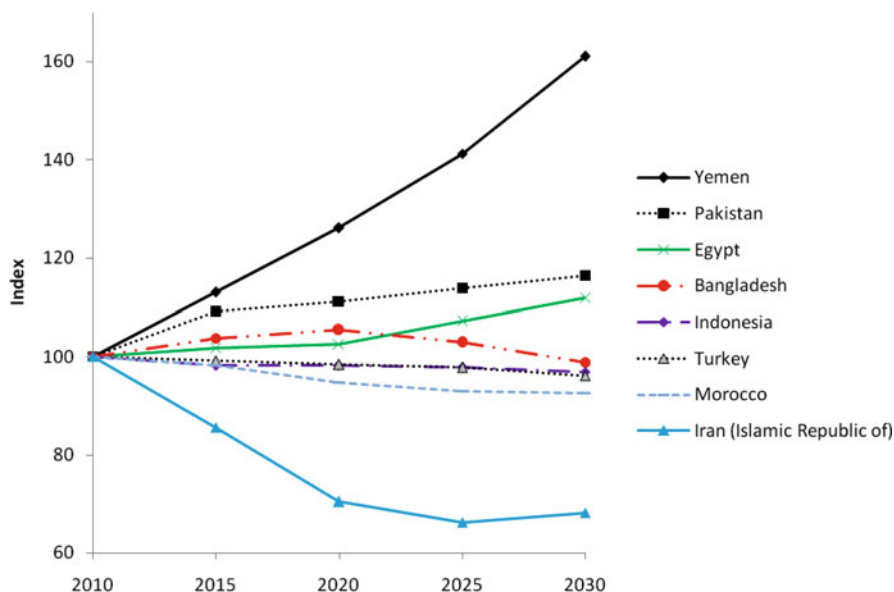


Fig. 3.4 Index of growth in the population aged 15–29, 2010–2030 (2010 = 100)

once dependency ratios have begun to fall as a result of the onset of sustained fertility decline, the period of demographic bonus tends to extend for a period of 40 or 50 years. During this period, the proportion of dependants (conventionally measured crudely as the age groups 0–14 or 0–19 and 65+) to potential producers can fall by 50% or even more. Figure 3.5 outlines the trends in dependency ratios for the major Muslim countries over the 1990–2030 period. As the figure shows, dependency ratios in Iran showed a remarkable 50% decline in the 17 years after 1990 as a result of fertility decline, one of the most rapid ever recorded. The data for Algeria and Bangladesh also indicate a decline of 50% in dependency ratios, over 23 and 30 years, respectively. In all the countries listed in Fig. 3.4, significant declines in dependency ratios have already occurred and are projected to continue until 2030. This highly significant change in demographic structure, as noted above, provides the potential, although not the guarantee, of faster economic growth. Dependency ratios in Yemen, Iraq and Afghanistan, in contrast, are projected to remain at very high levels as far ahead as 2030, underlining the difficult task these countries will face in dealing with their demographic situations.

Moreover, although Fig. 3.5 shows a favourable trend in dependency ratios, one that continues for decades into the future, it is important to stress that there is a downside to this picture: the improvement will continue well into the future only because delayed fertility declines in many of these countries delayed the onset of the demographic dividend compared with many other developing nations. For example, Thailand and Brazil have been experiencing the demographic dividend for much longer and are about to experience the beginnings of an increase in

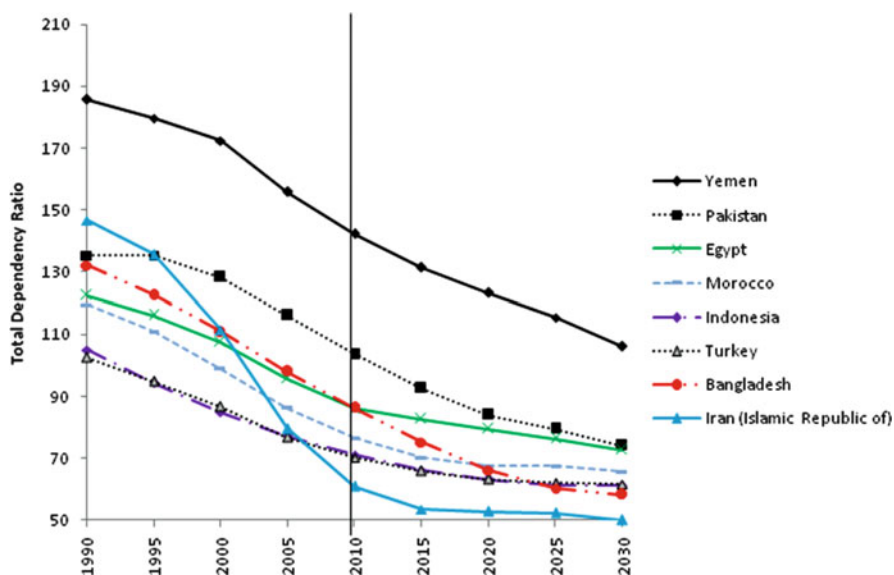


Fig. 3.5 Trends in dependency ratios, 1990–2030 (ratio of population aged 0–19 and 65+ per 100 aged 20–64)

dependency ratios. The delay in entering this favourable demographic phase in major Muslim countries has put a serious brake on economic development; for example, by slowing improvements in the average educational levels of the labour force. At least now, however, these countries are in a position in which they will continue to benefit from the demographic dividend for a number of decades.

3.5 Trends in Education: How Well Have Muslim Countries Been Doing?

High fertility provides a significant challenge to efforts to provide universal primary education and to expand provision of education at higher levels because the increasing numbers of school-age individuals makes it hard even to maintain school enrolment ratios, let alone increase them (Jones 1990). Much depends, of course, on the strength of the commitment to education provision and the proportion of budgets allocated to such provision, both by the government and by individuals and households. There are many examples of countries that have made good progress in raising school enrolment ratios even when the numbers of school-age children are increasing rapidly. Overall, however, not surprisingly, there has been an inverse correlation between the rate of growth of the school-age population and progress in raising school enrolment ratios.

Figure 3.4 also shows the trends in gross secondary school enrolment ratios over the period since 1990; however, the quality of the data is questionable in some

cases, meaning that caution is needed in interpreting these trends. The picture is mixed, with countries falling into two groups based on their most recent secondary school enrolment ratios. In the first group, which comprises Saudi Arabia, Algeria, Iran, Turkey, Indonesia and Egypt, the ratios lie above 65%, and except in the case of Egypt, the enrolment ratios have been rising over time. In the second group, which consists of Iraq, Morocco, Afghanistan, Bangladesh, Pakistan and Yemen, the ratios are below 50% and in many cases, improvements have been slow. In general, as exemplified by Pakistan, Afghanistan and Yemen, there seems to be a correlation between high fertility and poor progress in raising secondary school enrolment ratios. Moreover, in these countries, girls' education lags significantly behind that of boys, which is not the case in other major regions of the developing world, such as East and Southeast Asia and Latin America.

Another aspect of the educational problems facing Muslim countries is the low innovativeness and productivity of their higher education systems. Although tertiary education has expanded rapidly throughout the Muslim world, one study shows that between 1990 and 1994, the scientific output of all 46 Muslim-majority countries, as measured by publications in scholarly scientific journals, was only 1.17% of the total world output, less than that of either India or Spain (Hassan 2002, pp. 142–143). With regard to the Arab world, the UNDP's *Arab Human Development Report 2003* notes that only about 300 books are translated into Arabic each year, one fifth the number translated into Greek, and that official educational curricula breed submission, obedience, subordination and compliance rather than free critical thinking. It is, of course, impossible to identify the precise reasons for the low level of scientific output of Muslim majority countries; for example, the extent to which it results from the factors outlined above or the poor resources of many tertiary institutions and the recency of their establishment.

3.6 Under-Utilization of Labour

When fertility rates remain high, rapid growth of the school-age population holds back development because of high dependency ratios and at the same time requires very rapid growth in employment opportunities to absorb the rapidly growing numbers entering the working-age groups. It is therefore little wonder that in the countries with high levels of fertility, under-utilization of labour remains a major problem. Accurately measuring such under-utilization, however, is problematic: the usual measure – unemployment rates – is not necessarily very meaningful because unemployment is, in a sense, a luxury of the better-off. That is, the poor simply cannot afford to be without work, no matter how menial and poorly compensated. Unemployment is also largely an urban phenomenon, although as urbanization increases throughout the Muslim world, it does become more salient.

The available information on unemployment rates and youth unemployment rates are given in Tables 3.1 and 3.2, respectively, which clearly show that unemployment is a particular problem in the MENA region. In the Middle East, estimates for 2009 and 2010 show a steady rate of unemployment at 10.3%

Table 3.1

Country	2000	Latest year
Afghanistan	NA	8.5 ^a
Algeria	29.8	11.3
Bangladesh	3.3	4.3 ^a
Egypt	9.0	8.7
Indonesia	6.1	8.4
Iran (Islamic Republic of)	14.1	10.5
Iraq	28.1 ^b	15.3
Morocco	13.6	9.4
Pakistan	7.8	5.2
Saudi Arabia	4.6	5.1
Turkey	6.5	11.0
Yemen	11.5 ^c	15.0 ^d

Source: ILO LABORSTA data for 2008

^aLABORSTA data for 2005^bWorld Bank data for 2003^cWorld Bank data for 1999^dWorld Bank data for 2008**Table 3.2** Youth unemployment rate by region, 1998 and 2009

Region	1998	2009
Developed economies and the EU	14.0	17.7
Central and SE Europe and CIS	23.0	20.8
Middle East – North Africa	24.8	23.6
Sub-Saharan Africa	13.5	11.9
Latin America	15.6	16.1
Southeast Asia	12.2	14.7
South Asia	8.9	10.3
East Asia	9.1	8.9

Source: ILO (2010), Table A5

(ILO 2011, p. 48), which continues to be the highest regional rate in the world even though North Africa comes very close. In fact, the youth unemployment rate in the Middle East is almost four times the adult rate, and the MENA region shares the dubious distinction of having the highest youth unemployment rate in the world, above that of Central and Southeast Europe (non-EU) and the Commonwealth of Independent States. The youth unemployment challenge in the region, therefore, is enormous: the Arab states are characterized by one of the highest regional growth rates in working-age population and extreme volatility in economic growth and decline, largely related to fluctuating oil prices (UNDP 2009, p. 102). The non-oil exporting Arab countries, particularly, may have gained less from the third oil boom of 2000–2007 than from earlier booms, because population increases have offset many of the revenue flows from the oil states, worker remittances from the oil states have been hit by poorer job prospects in these states for Arab workers, and “non-oil countries are incurring higher energy costs through rising oil import bills and expensive fuel subsidies” (ibid., p. 107). Not only are youth unemployment rates above the world average in every Arab state except the UAE, but in five Arab states – Algeria, Iraq, Mauritania, Somalia and Sudan – the youth unemployment rate was above 40% in 2005/2006 (ibid., Figs. 3.5, 3.6).

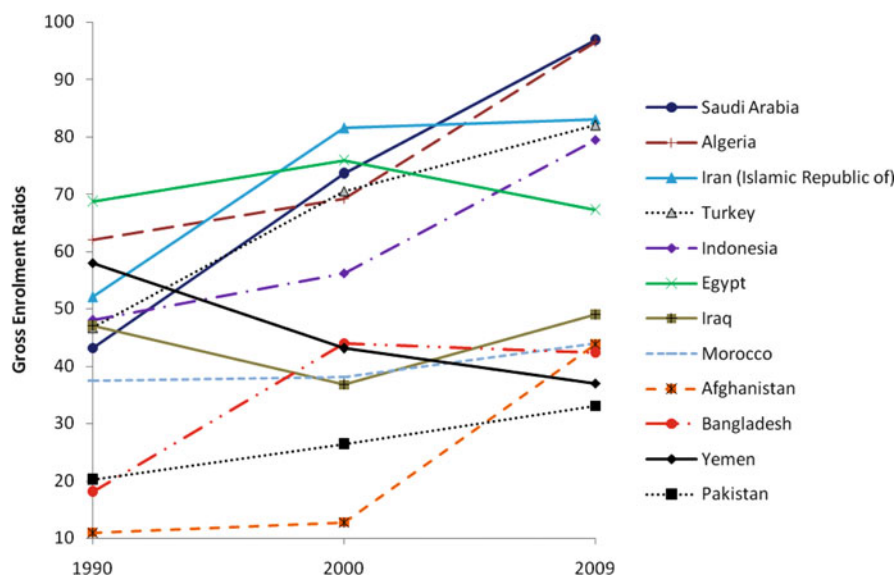


Fig. 3.6 Trends in gross secondary school enrolment ratios. 1990, 2000, 2009

For the other Muslim countries like Indonesia, Bangladesh and Pakistan, the interpretation of unemployment rates is complicated by the issue of disguised unemployment. What is clear, however, is that in many of these countries, a large number of young people are very dissatisfied with the economic prospects they face, which are all the more galling as these youth become more aware, through higher education and access to communication media, of the higher standard of living in many parts of the world.

This combination of a large youth cohort, high unemployment rates and job prospects incommensurate with expectations represents a volatile situation. The aspirations of youth in these countries are high, and when they are unfulfilled and perceived to be blocked by autocratic governments, the potential for unrest is also high, as demonstrated by the ongoing events that commenced with the “Arab spring” of 2011. The potential for outmigration is also high, as witnessed by the many young people from the Maghreb seeking new opportunities in Europe (Middle East Institute 2010).

3.7 Employment-to-Population Ratios

The Middle East has another problem shared by some but not all other Muslim countries: the low labour force participation rates of females. Combined with high unemployment rates, this low female participation rate results in one of the lowest employment-to-population ratios in the world:

The regional employment-to-population ratio stood at 45.4% in 2010, meaning that fewer than one out of two persons of working age actually work. This is due to the fact that only around one out of five women in the region works. The gap between male and female

employment-to-population ratios closed by 8.7 percentage points since the beginning of the 1990s, but at 47.2 percentage points, continues to be twice the global average. The large gap between male and female employment ratios, which is also evident in other labour market indicators, reflects the strong cultural, social and economic gender divisions in the Middle East. (ILO 2011, pp. 48–49)

Some other major Muslim countries share this problem with the Middle East, as illustrated by the employment-to-population ratios in Table 3.3. In most cases, these ratios are almost certainly affected more by the labour force participation rate for women than by the unemployment rate. Nor is this problem specific to Middle Eastern countries: Turkey, Iran and Morocco also have low employment-to-population ratios. However, some other Muslim populations, including those in Bangladesh and Indonesia and the Malay population of Malaysia, show even higher ratios – comparable with or even higher than those in many of the comparator countries. Clearly, wide cultural differences exist in the various parts of the Muslim world with regard to women's employment.

Table 3.3 Employment-to-population ratio for 2009 in major Muslim-majority countries (ILO estimates)

Country	Employment-to-population ratio
Afghanistan	54.2
Algeria	52.0
Bangladesh	67.9
Egypt	44.1
Indonesia	63.4
Iran	47.3
Iraq	34.0
Morocco	47.5
Pakistan	51.5
Saudi Arabia	50.9
Turkey	40.3
Yemen	39.9
Comparator countries	
United Kingdom	57.3
Germany	55.2
USA	58.8
Thailand	72.0
Philippines	59.1
Brazil	64.9

Source: *Key Indicators of the Labour Market*, 6th Edition, International Labour Organization, Geneva

Note: The employment-to-population ratio is defined as the proportion of a country's working-age population that is employed. A high ratio means that a large proportion of a country's population is employed, while a low ratio means that a large share of the population is not involved directly in market-related activities because they are either unemployed or (more likely) out of the labour force altogether. The ILO estimates are harmonized to account for differences in national data collection and tabulation methodologies, as well as for other country-specific factors such as military service requirements. The series includes both nationally reported and imputed data but only estimates that are national, meaning there are no geographic limitations in coverage

As the *Arab Human Development Report for 2009* states, “high unemployment rates for women reflect more than the general failure of Arab economies to generate sufficient jobs. They also indicate entrenched social biases against the employment of women”. Paradoxically, restrictions on women’s employment remain while educational opportunities for girls are improving. Therefore, effective utilization of the increasing number of young women receiving education needs to be an urgent priority because of the contribution it would make to both economic development and the well-being of the young women whose path to employment is currently a difficult one.

3.8 Conclusion

The next 10 years will be years of great challenge for many Muslim-majority countries. Their working-age populations will continue to grow rapidly, requiring very rapid job creation to prevent unemployment rates from rising. Their education systems will also need to be modernized and fitted for the challenges of the globalized economy, although this endeavour will be assisted somewhat by the slowing growth of the school-age population. Should these countries benefit from good planning and governance, their situations will be quite favourable because they will continue to benefit from the demographic bonus.

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Chapter 4

Women's Education and Fertility in Islamic Countries

Mohammad Jalal Abbasi-Shavazi and Fatemeh Torabi

Abstract Education is the main driving force of development, autonomy and demographic change. It provides women access to modern ways of thinking, confidence to engage with the modern world, reduces infant mortality, raises age at marriage and stimulates higher levels of gender equity within couple relationships. Schooling is also positively related with more favorable attitudes towards birth control, greater knowledge of contraception, and husband-wife communication. It also promotes female labour force participation in the cash economy hence raising the opportunity cost of having children. This chapter, first, discusses the value that Islam places on women's education, and presents the trend of female education in Muslim-majority countries. Second, country level differences as well as gender gap in education and the reasons for this diversity are reviewed. Third, fertility change in Islamic countries and the pathways by which female education has had impact on fertility is examined.

The result shows that the level of women's education has increased substantially in most of the Islamic world and women have higher access to formal schooling and acquire information through various means of communication. Thus, there is a need to reconsider many of the stereotypes indicating that Muslim societies for religious reason discriminate against women. As a consequence of educational

The authors contributed to the paper equally and share first authorship. This chapter is based on an earlier presentation at the symposium on "Upcoming Demographic Changes in Islamic Countries", 1–3 November 2010, at the Swiss Re Centre for Global Dialogue in Ruschlikon, Switzerland. Assistance from Rasoul Sadeghi and comments from Arland Thornton and Ehsan Abbasi-Shavazi are gratefully acknowledged.

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achievements, the traditional values and norms have been weakened, although in many cases there is strong resistance to these influences. Considerable fertility decline occurred in these countries can be explained by the improvements in female education that has strongly affected the supply and the demand for children as well as fertility regulations.

4.1 Introduction

Education, the main driving force behind development, autonomy, and demographic change, provides women access to modern ways of thinking and the confidence to engage with the modern world, and reduces infant mortality, raises age at marriage, and stimulates higher levels of gender equity within couple relationships. Schooling is not only positively related with more favourable attitudes towards birth control, greater knowledge of contraception, and better husband-wife communication, it also promotes female labour force participation in a cash economy, thereby raising the opportunity cost of having children.

The chapter therefore begins by discussing the value that Islam places on women's education and outlining the trends of female education in Muslim-majority countries. It then reviews country level differences and the gender gap in education, as well as the reasons for this disparity. Finally, it examines fertility change in Islamic countries and the pathways through which it has been impacted by female education (i.e., the 'supply' and 'demand' for children and 'fertility regulation').

The data used in the chapter are drawn from published figures – particularly those from the United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Development Programme (UNDP) and Population Reference Bureau (PRB) – so the analysis is limited to those countries for which data are available. It is worth noting, however, that correlation analyses based on cross-sectional data are of limited usefulness in understanding demographic change, so it is important to consider trends over time. Nevertheless, the analysis presented in this chapter demonstrates the general pattern of the inter-relationship between education and fertility in Islamic countries.

Most particularly, the chapter reiterates the emphasis that Islam places on education for all. It also shows that the level of women's education has increased substantially in most of the Islamic world, and women now have higher access to formal schooling and acquire information through various means of communication. There is thus a need to reconsider many of the stereotypical claims that Muslim societies discriminate against women for religious reasons. In fact, as a consequence of educational achievements, traditional values and norms have been weakened, even though in many cases, there is strong resistance to these influences. Nevertheless, fertility has declined in most Islamic countries, and there is a strong relationship between the level of female education and fertility in these nations.

Not surprisingly, therefore, we find regional diversity in women's education and fertility, and the ways in which education has affected fertility in the Muslim world.

4.2 Female Education in Islam

That Islam values education for all human beings is evident in several Quranic verses, as well as in the words and acts of Prophet Muhammad. According to the Quran (Chap. 2, verses 30–33), Allah made Adam superior to all creatures because of his knowledge. In his first revelation to the Prophet, Allah speaks about the value of knowledge: “Read in the name of your Lord who created. He created man from a clot. Read and your Lord is most Honourable. Who taught with pen. Taught man what he knew not” (Chap. 96, verses 1–5). Likewise, in Chap. 20 (verse 114), when Allah asks the Prophet to pray, his prayer is “O my Lord! Increase my knowledge,” and in Chap. 39 (verse 9) the superiority is given to those with knowledge: “... are those who know and those who do not know alike? Only those with understanding are mindful.”

Several important sayings are also attributed to Prophet Muhammad (*hadith*) that emphasise the importance of education. For example, the prophet said “seek knowledge from the cradle to the grave”, “acquire knowledge even if you have to travel to China”, and “a drop of sweat of the brow of a thinker is better than the thousand blood drops of the martyr” (Jafri 2011). Although none of these sayings seemingly refers to one particular gender, the well-established *hadith*, “seeking knowledge is obligatory upon every Muslim” (Al-Kulainy n.d.) makes it clear that, in the eyes of Prophet Muhammad, the attainment of education does involve both men and women. This viewpoint is indeed reflected in the acts of the Prophet: women, along with men, were present in the Mosque of Prophet to receive his teachings (Ad-Darsh 2011).

The knowledge and social roles of the Prophet's wife, Khadijah and his daughter Fatima, as Muslim female role models, can also be considered an inspiration and motivation for Muslim women to be involved in education. Khadijah was an affluent businesswoman and the first female who converted to Islam. Fatima's vast knowledge is evident from several of her sermons in which she expressed firm arguments about monotheism and religious laws. In fact, because of her immense knowledge, some Muslims in Medina turned to her to answer their questions on religious problems (Dashti 2006).

Evidence of the involvement of Muslim women in the foundation of many educational institutions and in their own acquisition of education can be found throughout Islamic history. Over the Ayyubid dynasty (twelfth and thirteenth centuries), 26 of the 160 mosques and schools (*madrasahs*) founded in Damascus were founded by women (Lindsay 2005). Likewise, Goharshad, of the renowned Timurid royalty (fourteenth to sixteenth centuries), built mosques, monasteries, and schools in Harat and Mashad as part of her and her husband, King Shah Rukh's, generous support of artists, poets, and philosophers (Rajabi 1995). Nashat and Beck

(2003) and Lindsay (2005) also provide evidence for the existence of several opportunities for female education in Islamic history, including the acquisition of academic qualifications as scholars and teachers. They also show that, although education was most accessible to elite women, especially royalty and those from educated families, girls from other social groups also had access, primarily through informal religious education (i.e., studying at home with family members and attending public sessions at mosques and madrasahs).

4.3 Trends in Female Education in Islamic Countries

Historically, the spread of Islam began shortly after the death of the Prophet Muhammad in 632 AD. Muslim dynasties were soon established, and the Islamic world became composed of numerous sophisticated centres of culture and science in various countries and settings. The spread of Islam encompassed people with different languages, customs, and religions, as well as a variety of legal systems (Makhlouf Obermeyer 1992, p. 42), so Muslim countries are characterised by different mixtures of culture and religion. It is therefore perhaps not surprising that despite Islam's emphasis on education and the historical evidence that female education was not unknown in the Islamic world, the attainment of education by women in some countries has until recently been low. Nevertheless, Nashat and Beck (2003) argued strongly that the number of educated and elite Muslim women may well have been under-represented in history because, whereas males needed records of their education to establish social and occupational status, females, whose social status was mainly dependent on male kin, had no reason to chronicle their educational experiences. It might also be argued that the low access to education among Muslim women can be partly attributed to the patriarchal system (subordination of young to old and of women to men) in societies that strongly circumscribe women's roles as domestic, not social, economic, or political (see Makhlouf Obermeyer 1992, p. 47). Indeed, Taheri (2007) noted that the absence of Muslim women in Sufi texts relates specifically to the patriarchal nature of these societies, in which women have been kept hidden from the public.

In recent decades, however, during a process of modernization, Islamic countries have experienced rapid social and economic changes that have weakened many traditional values, customs, and beliefs. Most particularly, Islamic societies have experienced rapid urbanisation, departures from agrarian and family-based modes of production, and advances in means of communication, all of which have made inroads into the patriarchal system and weakened traditional gender roles (Tabutin and Schoumaker 2005). As Rashed et al. (2005) and Roudi-Fahimi and Kent (2007) have pointed out, legal reforms aimed at improving gender equality in the family and society have also contributed to changes in the status of Muslim women. All these factors may have contributed to the substantial increases in female education

in Islamic countries during recent decades as these countries underwent profound changes in their social, economic, and institutional settings.

Table 4.1 clearly illustrates the considerable educational improvements over recent years in Muslim-majority countries, which we, like Abbasi-Shavazi and Jones (2005), define as those nations in which Muslims constitute more than half the population. Columns 2–5 of the table show increases in the percentage of literate women aged 15 or higher in all Muslim-majority countries between 1980 and 2009, although the magnitude of change and the overall achievement vary across different geographic regions and within each region. Asian countries seem to have done better in providing access to education for women than African countries, although Pakistan and Yemen (with 2009 female literacy rates of 40.1% and 44.7%, respectively) are far behind other Asian countries. West African countries are also lagging behind, displaying very low levels of access to education, with literate women constituting only 22–50% of all women even as late as 2009.

Although a higher number of women in Muslim-majority countries have become literate over time, considerable gender differences still exist in access to education. As Columns 6 and 7 of Table 4.1 show, except for a few Central Asian countries (Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) in which young men and women (aged 15–24) gained equal access to education in 2009, the proportion of literate men is higher than that of literate women. These gender differences are generally higher in West Africa where literacy is around 1.4–2.8 times greater among young men than young women.

The educational gender gap in Islamic countries has been attributed to stratified gender roles that are still in effect in these societies (see Makhoul Obermeyer 1992; Roudi-Fahimi and Moghadam 2003). Other contributing factors include cultural sensitivities to girls' school attendance and a lack of access to, or difficulties accessing, educational institutions in rural or remote areas. Lack of attention to religious sensitivities in development planning has also been a major obstacle for women's education. For example, during the 54 years (1925–1979) of Pahlavi rule, Iran not only experienced major social and economic changes (not least in the area of family life) but one of Reza Shah's major initiatives was the 1935 decree banning women's public use of the veil (Vatandoost 1985, pp. 107–114; Makhoul Obermeyer 1994, pp. 46–47). This initiative was made with little attention to religious sensitivities, and received criticism and resistance within the society, especially from and by religious leaders. Introduction of mixed schools (boys and girls) was another initiative that met similar social resistance, particularly in rural areas, and resulted in a tendency to discourage girls' education. These issues in Iran's educational system were resolved after the 1979 Islamic revolution (Abbasi-Shavazi and McDonald 2007; Abbasi-Shavazi et al. 2009, pp. 35–37) when religious and cultural sensitivities to girls' school attendance were accommodated by the segregation of primary, secondary, and high schools by sex and the appointing of female staff to girls' schools and male staff to post-primary boys' schools.

The higher percentage of population living in rural areas and lack of access to educational facilities has also contributed to low female literacy in Islamic

Table 4.1 Literacy indicators for Muslim-majority countries, 1980–2009

	Adult (15+) literacy rate (%), female				Youth (15–24) literacy rate (%), male	Youth (15–24) literacy rate (%), female
	1980	1990	2000	2009	2009	2009
East Africa						
Comoros	40.3	–	63.5	68.7	79.7	68.7
Djibouti	–	–	–	–	–	–
Somalia	–	–	–	–	–	–
North Africa						
Algeria	–	35.8	60.1	63.9	94.4	63.9
Egypt	22.4	31.4	43.6	57.8	87.9	57.8
Libya	42.3	64.9	78.2	82.0	99.9	82.0
Morocco	17.5	28.7	39.6	43.9	86.7	43.9
Sudan	–	–	52.1	60.8	89.1	60.8
Tunisia	35.8	48.1	65.3	71.0	98.1	71.0
Western Sahara						
West Africa						
Burkina Faso	–	8.2	15.2	21.6	36.7	21.6
Chad	–	4.6	12.8	23.1	44.5	23.1
Gambia	–	–	25.1	35.8	57.6	35.8
Guinea	–	–	18.2	28.1	50.8	28.1
Mali	5.7	–	11.9	18.2	34.9	18.2
Mauritania	–	–	43.4	50.3	70.9	50.3
Niger	–	–	9.4	–	42.9	15.1
Senegal	–	17.9	29.2	38.7	61.8	38.7
Sierra Leone	–	–	24.2	30.1	52.7	30.1
South/Central Asia						
Afghanistan ^a	5.0	–	–	–	–	–
Bangladesh	18.0	25.8	40.8	–	60.7	51.0
Iran	24.4	56.2	70.4	80.7	89.3	80.7
Kyrgyzstan	–	–	98.1	99.0	99.5	99.0
Maldives	82.2	96.1	96.4	98.4	98.4	98.4
Pakistan	14.8	–	29.0	40.1	68.9	40.
Tajikistan	–	96.6	99.2	99.2	99.8	99.6
Turkmenistan	–	–	–	99.4	99.7	99.4
Uzbekistan	–	–	98.1	99.1	99.6	99.1
Southeast Asia						
Brunei	69.0	82.5	90.2	93.7	96.8	93.7
Indonesia	57.7	75.3	86.8	89.1	95.4	89.1
Malaysia	61.2	77.3	85.4	90.3	94.6	90.3
West Asia						
Azerbaijan	–	–	98.2	99.2	99.8	99.2
Bahrain	58.6	76.9	83.6	90.2	100.0	90.2
Iraq	–	–	64.2	69.9	84.8	69.9
Jordan	52.1	–	84.7	88.9	99.0	88.9
Kuwait	59.1	–	–	91.8	98.6	91.8
Lebanon	–	–	–	86.0	98.4	86.0

(continued)

Table 4.1 (continued)

	Adult (15+) literacy rate (%), female				Youth (15–24) literacy rate (%), male	Youth (15–24) literacy rate (%), female
	1980	1990	2000	2009	2009	2009
Oman	–	–	73.5	80.9	97.6	80.9
Palestine	–	–	79.7	91.7	99.2	91.7
Qatar	–	72.5	80.9	92.9	97.7	92.9
Saudi Arabia	–	57.3	69.3	81.1	98.7	81.1
Syria	37.1	–	74.2	78.0	95.8	78.0
Turkey	49.8	68.5	76.9	85.3	96.4	85.3
U.A.E.	–	–	–	91.5	93.6	91.5
Yemen	–	17.1	35.3	44.7	95.6	44.7
Europe						
Albania	–	–	98.3	94.7	98.5	94.7

Source: UNESCO (2011).

Note: For those countries for which indicators were not available for the years shown in the table, the indicators relate to the closest year (within a maximum of 5 years)

^aThe literacy rate for women aged 15–24 in Afghanistan in 1979 was 11.2%; no data are available for recent years.

countries, although in most, rapid urbanization has now given women better educational access. An increased level of development in the majority of rural areas in the Islamic world (i.e., other than in Africa) has also broadened access to education. For example, in Iran, the post-revolutionary state's commitment to the spread of health and educational services throughout the country and particularly in remote areas and deprived regions has diminished difficulties in girls' access to schools. In the latest Iranian census in 2006, 80.3% of females (aged 6 or higher) were literate (85.5% in urban and 69.0% in rural areas) compared with 88.7% of males in the same age range (92.2% in urban and 81.2% in rural areas) (Statistical Centre of Iran 2011). A lower age at marriage for girls may be another reason that, historically, females had lower levels of education than males in Islamic countries. In recent years, however, the increasing levels of women's education have led to profound social and demographic changes in Islamic countries, changes that are examined in the next section.

4.4 Fertility Trends in Islamic Countries

The rise in female access to education has been accompanied by declines in the number of children in Islamic countries, which are represented in Table 4.2 by the changes in total fertility rate (TFR) in Muslim-majority countries between the early 1970s and late 2000s. At the beginning of this period (1970–1975), more than two-thirds of these countries (32 out of 46) had TFRs over six children per woman. By 2009, the TFR had reached below 3 in nearly half of these countries (21/46), with

Table 4.2 Total fertility rates for Muslim-majority countries, 1970–1975 to 2009

	1970–1975	1990–1995	2000–2005	2009
East Africa				
Comoros	7.0	5.1	4.9	4.2
Djibouti	6.7	5.9	4.5	4.2
Somalia	–	6.5	–	6.7
North Africa				
Algeria	7.4	4.1	2.5	2.3
Egypt	5.5	3.9	3.2	3.0
Libya	7.6	4.1	3.0	2.7
Morocco	6.9	3.7	2.5	2.4
Sudan	6.7	5.8	4.8	4.5
Tunisia	6.2	3.1	2.0	2.0
Western Sahara	–	–	–	3.0
West Africa				
Burkina Faso	7.8	6.7	6.4	6.0
Chad	6.7	6.6	6.5	6.3
Gambia	6.5	6.0	5.2	5.6
Guinea	7.0	6.6	5.8	5.7
Mali	7.0	6.3	6.7	6.0
Mauritania	6.5	5.7	4.8	5.1
Niger	8.1	7.8	7.4	7.4
Senegal	7.0	6.5	5.2	5.0
Sierra Leone	6.5	5.5	6.5	5.2
South/Central Asia				
Afghanistan	6.9	8.0	7.5	5.7
Bangladesh	6.4	4.0	3.2	2.5
Iran	6.4	4.0	2.1	2.0
Kyrgyzstan	4.7	3.6	2.5	2.8
Maldives	7.0	5.3	2.8	2.3
Pakistan	6.3	5.7	4.0	4.0
Tajikistan	6.8	4.9	3.8	3.4
Turkmenistan	6.2	4.0	2.8	2.5
Uzbekistan	6.3	3.9	2.7	2.6
Southeast Asia				
Brunei	5.4	3.1	2.5	1.7
Indonesia	5.2	2.9	2.4	2.5
Malaysia	5.2	3.5	2.9	2.6
West Asia				
Azerbaijan	4.3	2.9	1.7	2.3
Bahrain	5.9	3.4	2.5	2.0
Iraq	–	5.8	4.9	4.4
Jordan	7.8	5.1	3.5	3.6
Kuwait	6.9	3.2	2.3	2.2
Lebanon	4.9	3.0	2.3	2.4
Oman	7.2	6.3	3.7	3.4
Palestine	7.7	6.5	5.6	4.6
Qatar	6.8	4.1	2.9	2.4

(continued)

Table 4.2 (continued)

	1970–1975	1990–1995	2000–2005	2009
Saudi Arabia	7.3	5.4	3.8	3.9
Syria	7.7	4.9	3.5	3.3
Turkey	5.2	2.9	2.2	2.1
U.A.E.	6.4	3.9	2.5	2.0
Yemen	7.6	7.7	6.0	5.5
Europe				
Albania	4.7	2.8	2.2	1.3

Source: UNDP (2002, 2007–2008, 2010); PRB (2009).

six countries (Tunisia, Iran, Brunei, Bahrain, United Arab Emirates, and Albania) reaching below replacement-level fertility (i.e., a TFR less than 2.1). Although this fertility decline has taken place across Muslim-majority countries, the magnitude of change has been relatively small in West African countries, where the TFR remains above five children per women.

4.4.1 Effects of Education on Fertility

The negative impact of women's education on their fertility, well documented in developing countries (see, e.g., Cleland and Rodriguez 1988; Martin 1995), is also observable in Muslim-majority countries. For example, the data for 2009, shown in column 5 of Tables 4.1 and 4.2, indicate a very strong negative correlation (-0.806) between the female adult literacy rate and the total fertility rate. According to Easterlin's framework (Easterlin 1978; Easterlin and Crimmins 1985), social and economic factors, including improvements in women's education, influence fertility through three pathways: (1) the supply of children, or the number of surviving children that couples would bear in the absence of deliberate fertility limitation; (2) the demand for children, or the number of surviving children they would like to have; and (3) fertility regulation, or the psychic, social, and monetary costs involved in deliberate fertility control. As Jejeebhoy (1995) pointed out, this framework has two specific advantages for studying the education-fertility relationship: (1) it allows for the examination of various biological, attitudinal, and behavioural mechanisms through which education influences childbearing and (2) it explains a variety of relationships between education and fertility and the strength of these relationships, based on the cultural and socio-economic contexts. In the following sub-sections, we employ this framework to examine possible ways in which women's education may influence fertility in Muslim-majority countries.

4.4.1.1 Education and the Supply of Children

Here, 'supply' refers to the number of children that couples would have if they made no intentional attempt to limit their fertility. Education affects this supply by

changing the length of exposure to pregnancy and birth intervals. The former is usually determined by entry into marriage, particularly in Muslim countries where childbearing occurs mainly within marriage, and the latter by the duration of post-partum insusceptibility resulting from breastfeeding and post-partum abstinence. Education level also influences child mortality, thereby also affecting the supply of children. To gain more insight into the effect of female education on this supply, we introduce each component of the supply of children, examine its association with education, and then test its association with fertility in the context of Muslim-majority countries.

Female age at first marriage: Mason (1987) argued that women's education has a positive impact on their age at marriage in developing countries because of (1) its positive association with the size of the dowry, which increases the time needed to accumulate it, (2) its negative association with arranged marriage, which increases the time needed to find a suitable spouse, (3) its positive association with women's desire or ability to work, and (4) its positive association with parental desires to prolong a daughter's employment. In Muslim-majority countries, higher female access to education is associated with higher age at marriage, which is in turn associated with lower fertility. As Fig. 4.1 shows, countries with low levels of female adult literacy rate at the time of their latest Demographic and Health Survey (DHS) (mainly West African countries and Yemen) were generally characterised by earlier marriage (Panel A) and higher fertility (Panel B). On the other hand, countries with high levels of literacy (most South/Central Asian countries, as well as Albania, Indonesia, and Turkey) were characterised by later marriage (Panel A) and lower fertility (Panel B).

There are, however, some variations in these relationships, and each cluster shown in Panels A and B of Fig. 4.1 (low, medium, and high education and low, medium, and high age at marriage, respectively) represents a range of experiences. For example, among countries with a medium level of education, Pakistan and Morocco have identical literacy levels (39.6%) but quite distinct marriage timings (19.1 and 21.4 years, respectively). Among countries with later marriage, Egypt and Senegal have similar marriage timings (20.6 and 20.8 years) but divergent fertility levels (3.0 and 4.9 children per woman, respectively). In general, however, in the Muslim-majority countries for which the data are available, we find a strong positive correlation between female adult literacy rate and median age at first marriage (0.644) and a strong negative correlation between median age at marriage and fertility (-0.643).

Post-partum insusceptibility: Female education reduces the duration of post-partum insusceptibility because of (1) the erosion of traditional practices, such as prolonged breastfeeding and abstinences, (2) the increased awareness of alternatives to these practices, (3) the increased intimacy between couples, and (4) the increased female decision-making power over personal aspects of life (Jejeebhoy 1995). Nevertheless, although a shorter period of post-partum insusceptibility can be associated with shorter birth intervals and accelerated childbearing, its overall effect on fertility is often small because its fertility-enhancing effect is usually offset by the fertility-reducing effect of contraceptive use among educated women (Mason 1987).

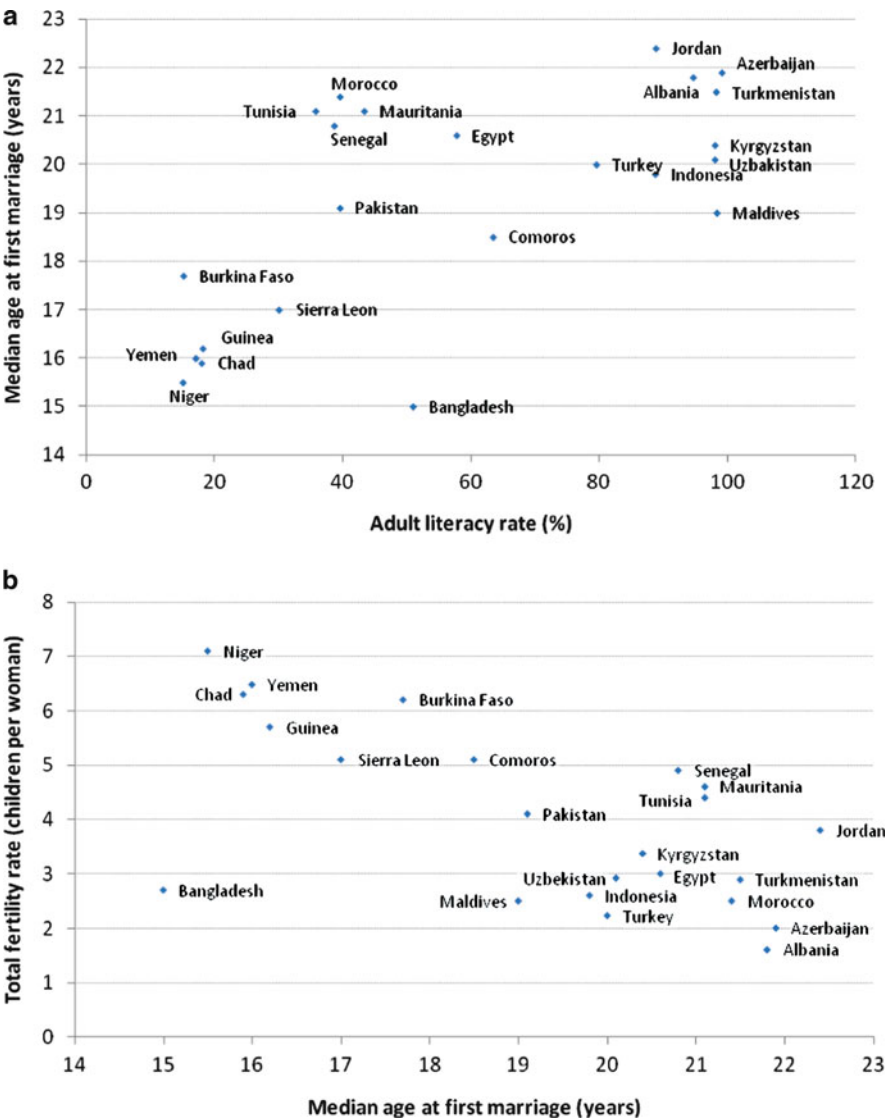


Fig. 4.1 (a) Female adult literacy rate and median age at first marriage and (b) median age at first marriage and total fertility rate, Muslim-majority countries. Note: The DHS data used here include those collected in 1988 in Tunisia, 1989–1990 in Sudan, 1996 in Comoros, 1997 in Kyrgyzstan and Yemen, 2000 in Iran and Turkmenistan, 2002 in Uzbekistan, 2003 in Burkina Faso and Turkey, 2003–2004 in Morocco and Mauritania, 2004 in Chad, 2005 in Guinea, 2006 in Niger, 2006–2007 in Pakistan, 2007 in Bangladesh and Indonesia, 2008 in Azerbaijan, Egypt, and Sierra Leone, 2008–2009 in Albania and Senegal, and 2009 in Jordan and the Maldives (Source: The data for median age at first marriage and total fertility rate were adapted from the latest published results of the Demographic and Health Survey (DHS) (for those countries with available data); those for adult literacy were adapted from UNESCO (2011) (for the year closest to the year in which the DHS was conducted))

As expected, the duration of post-partum insusceptibility is negatively associated with female access to education: in Panel A of Fig. 4.2, countries with low levels of female adult literacy rate at the time of the DHS (mainly West African countries) are generally characterised by longer periods of post-partum insusceptibility and vice versa. Contrary to our expectation, however, the duration of post-partum insusceptibility (see Panel B of Fig. 4.2) is positively associated with fertility. In other words, countries with lower female education and a higher duration of post-partum insusceptibility have a higher total fertility rate. This finding suggests that the fertility-enhancing effect of a shorter period of post-partum insusceptibility has been little in effect in the countries examined here.

In terms of the education–post-partum insusceptibility and post-partum insusceptibility–fertility relationships, countries with similar levels of education (e.g., Yemen and Guinea in Panel A) are characterised by quite different post-partum experiences, while countries with comparable post-partum experiences (e.g., Albania and Pakistan in Panel B) have diverse fertility levels. Nevertheless, in general, in the Muslim-majority countries for which data are available, there are strong correlations between female adult literacy rate and median post-partum insusceptibility (-0.688) and between median post-partum insusceptibility and fertility (0.754).

Child mortality: Jejeebhoy (1995) suggested three reasons for the well-established inverse relationship between women's education and infant and child mortality: a greater propensity of educated women to (1) care for their children, (2) use modern health facilities, and (3) adopt modern health practices. Reduced child mortality can, in turn, reduce fertility through both biological and behavioural mechanisms (Preston 1987). The former operates through termination of breastfeeding after the death of an infant, while the latter operates through *replacement* (the parents respond to the death of their child by giving birth to another child) and *insurance* (general parental perceptions on child survival in the society, which influence their fertility decisions). Nevertheless, although the behavioural mechanism can influence the demand for children, Jejeebhoy (1995) argued that of the different effects of child mortality, reduced breastfeeding and shorter subsequent birth interval are the stronger, so child mortality can be studied as a factor that primarily influences the supply of children.

Interestingly, however, although many Muslim-majority countries were enjoying high levels of female education and low infant mortality in 2009, in some Central Asian countries (Tajikistan, Turkmenistan, and Uzbekistan), the universal access of women to education had not translated into low levels of infant mortality. This failure may be the result of different health systems or perhaps of geographic differences in access to health facilities in these countries. Overall, however, as with other aspects of the supply of children studied so far, we find very strong correlations between female adult literacy rate and infant mortality rate (-0.790) and between infant mortality and fertility (0.847) in Muslim-majority countries (Fig. 4.3).

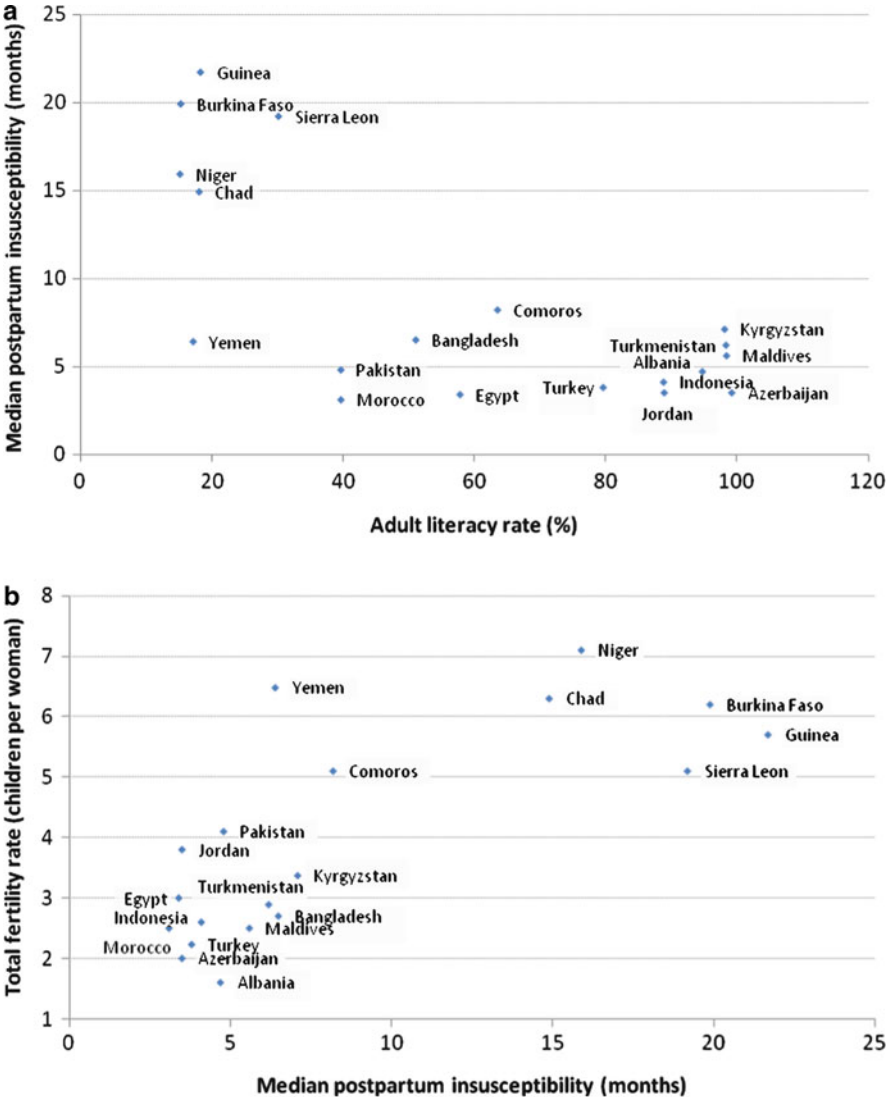


Fig. 4.2 (a) Female adult literacy rate and median post-partum insusceptibility and (b) median post-partum insusceptibility and total fertility rate, Muslim-majority countries. Note: For more information about the date of the DHS results used in this figure, see the note to Fig. 4.1 (Source: The data for median post-partum insusceptibility and total fertility rate were adapted from the published results of the Demographic and Health Survey (DHS) (for those countries with available data); those for adult literacy rate were adapted from UNESCO (2011) (for the year closest to the year in which the DHS was conducted)



Fig. 4.3 (a) Female adult literacy rate and infant mortality rate and (b) infant mortality rate and total fertility rate, Muslim-majority countries, 2009 (Source: The data for infant mortality rate and total fertility rate were adapted from PRB (2009); those for adult literacy rate were adapted from UNESCO (2011))

4.4.1.2 Education and the Demand for Children

The ‘demand for children’ refers to the desired number of children or the number of surviving children that parents would like to have. This desire is influenced by gender preferences, the value attached to children, and the costs involved in

childbearing and rearing (Mason 1987). Education reduces the demand for children by (1) improving women's social standing and changing the perceived value of girls versus boys, (2) reducing women's reliance on children as insurance against divorce, securers of their position in the family, and sources of economic gain, (3) raising aspirations related to children and increasing the time and opportunity costs of children, and (4) improving child survival and reducing the number of additional children needed to ensure the desired family size (Mason 1987; Jejeebhoy 1995). A lower desired number of children can, in turn, be expected to translate into a lower number of children.

Although in Muslim-majority countries, higher female access to education is generally associated with a lower mean desired number of children, there are some variations in this relationship (see Fig. 4.4, Panel A). For instance, countries whose literacy rates are as diverse as those of Pakistan and Jordan (39.6% and 88.9%, respectively) are characterised by similar fertility desires (3 children). Despite these variations, however, we find a strong negative correlation between female literacy rate and the mean ideal number of children (-0.641). Further Panel B of Fig. 4.4 shows a clear association between a lower fertility desire and lower fertility. Nevertheless, although the correlation between fertility desire and actual fertility (0.867) is very strong, the variation in this relationship suggests that fertility preferences cannot fully explain the observed fertility differentials.

4.4.1.3 Education and Fertility Regulation

To the extent that the supply of children exceeds the demand for them, couples are motivated to deliberately control their fertility. Fertility regulation, however, involves monetary and time costs, as well as psychic and social costs like guilt over using contraception or fear of being observed while going to a family planning clinic. Women's education, in contrast, promotes the practice of contraception because educated women (1) desire a smaller family size and have a stronger motivation to control their fertility, (2) are more prone to engage in innovative and new patterns of behaviour, (3) have more control over their reproductive choices, (4) have greater knowledge about contraceptive methods and sources,, and (5) are more likely to use contraception effectively (Martin 1995). Contraceptive use is, in turn, expected to reduce fertility.

In Muslim-majority countries, higher female access to education is associated with higher contraceptive use and higher contraceptive use is in turn associated with lower fertility (see Fig. 4.5). Again however, there are some variations and exceptions in these relationships: countries with similar levels of education (e.g., Iran and Saudi Arabia in Panel A) are characterised by quite different contraceptive practices, whereas countries with comparable contraceptive use (e.g., Azerbaijan and Iraq in Panel B) are characterised by diverse fertility levels. In general, however, there are strong correlations between female literacy and contraceptive use (0.721) and between contraceptive use and fertility (-0.866).

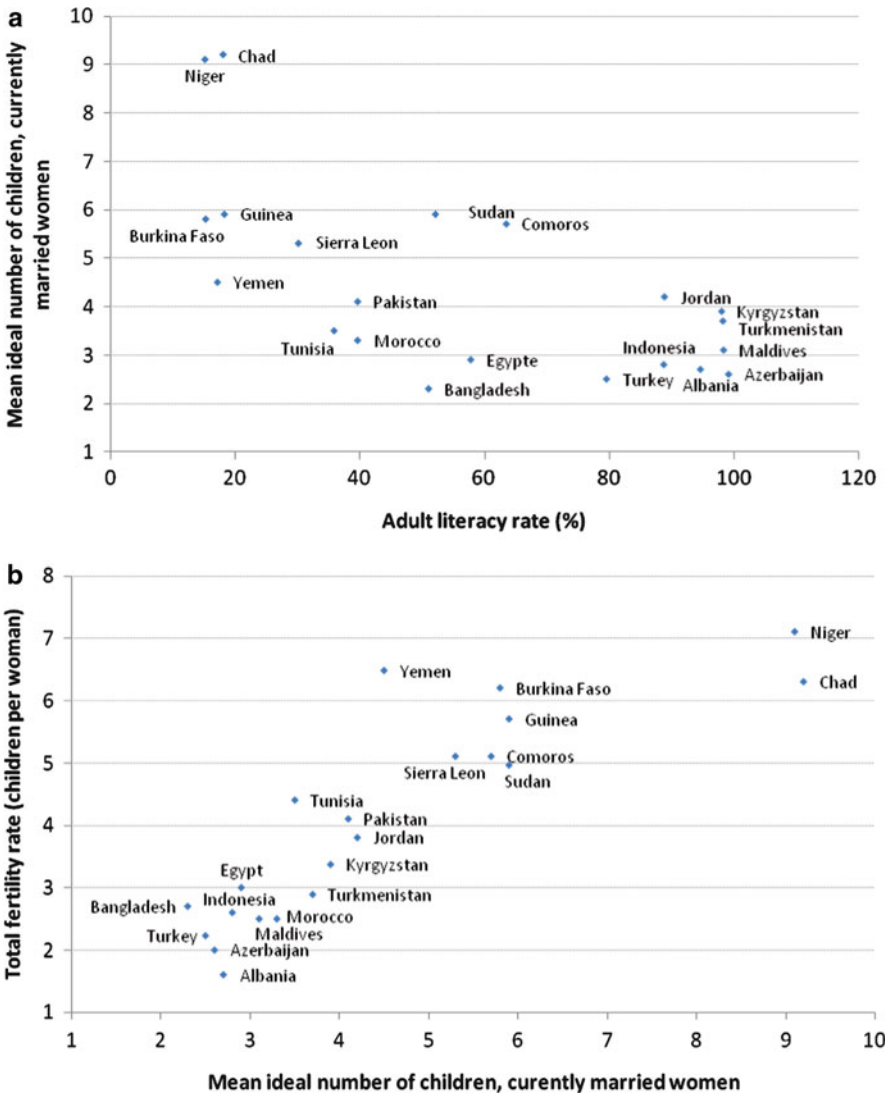


Fig. 4.4 (a) Female adult literacy rate and mean ideal number of children, and (b) mean ideal number of children and total fertility rate, Muslim-majority countries. Note: For more information about the dates of the DHS results used in this figure, see the note to Fig. 4.1 (Source: The data for median post-partum insusceptibility and total fertility rate were adapted from the published results of the Demographic and Health Survey (DHS) (for those countries with available data); those for adult literacy rate were adapted from UNESCO (2011) (for the year closest to the year in which the DHS was conducted))

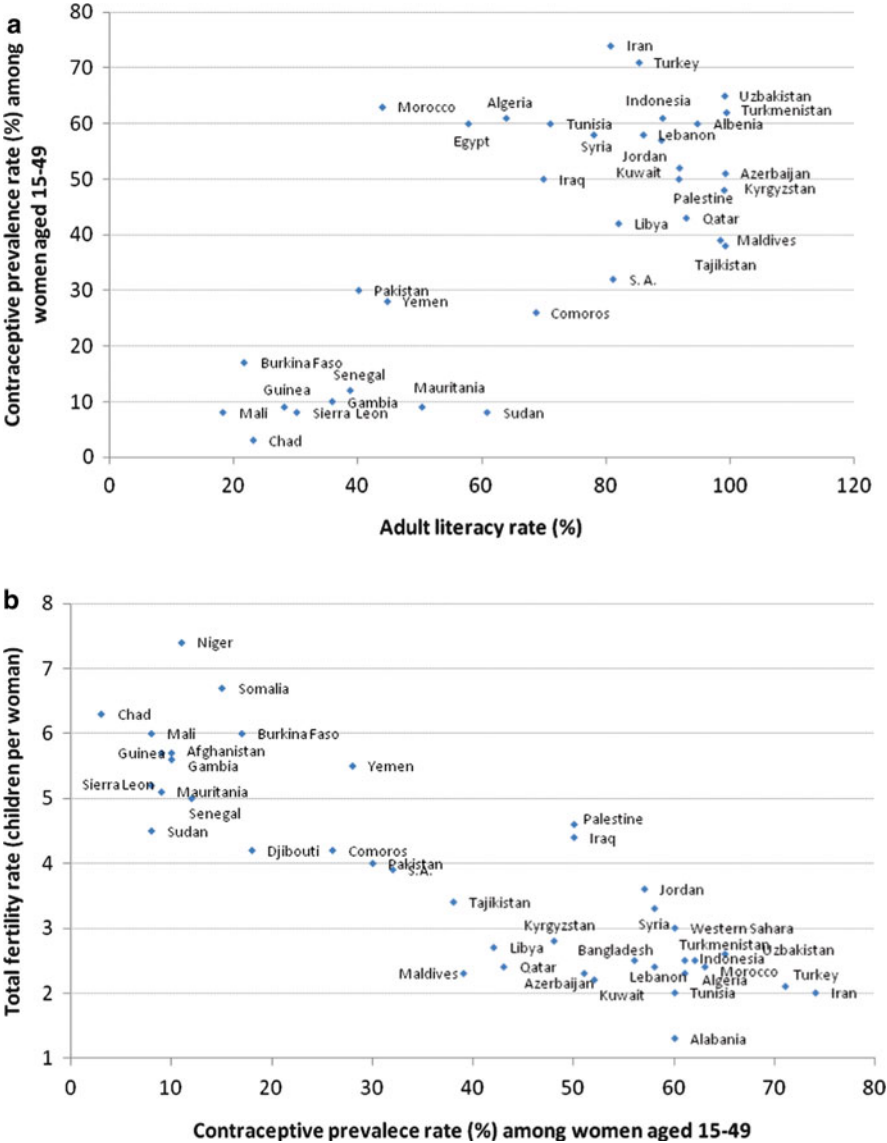


Fig. 4.5 (a) Female adult literacy rate and contraceptive prevalence rate and (b) contraceptive prevalence rate and total fertility rate, Muslim-majority countries, 2009 (Source: The data for contraceptive prevalence rate and total fertility rate were adapted from PRB (2009); those for adult literacy rate were adapted from UNESCO (2011))

4.5 Conclusion

Over the past few decades, female access to education has increased substantially in Islamic countries, where mass education and the development of mass communication, particularly, have made profound changes in women's lives. There is thus a need to reconsider many of the stereotypical claims that Muslim societies discriminate against women for religious reason. Rather, educational improvement has been accompanied by profound changes in the social, economic, and institutional settings of Islamic countries that have weakened the patriarchal system and undermined traditional gender roles. Nevertheless, there continue to be considerable gender and geographical differences in female access to education, differences that can be explained by both the level of socio-economic development and culturally defined gender roles. Most particularly, the preceding analysis revealed a strong negative effect of female education on the number of children borne by women in Islamic countries, which implies that the considerable fertility decline in these countries can be attributed to improvements in female education. Overall, higher education rates reduced the number of children by strongly affecting the supply of children, the demand for children, and fertility regulation.

The increase in female access to education, together with reductions in the number of children, is likely to bring about further changes in the status of women in Islamic countries within both the family and society. For example, female participation in the labour force is likely to increase, which will in turn lead to greater female visibility in social and political activities (see Lutz et al. 2010). Informal education and exposure to the new technology and media may also enhance women's status, particularly in contexts where socio-economic and cultural factors curtail access to formal education. Nevertheless, given the diversity of the female experience in different countries, there will be exceptions to this generalization, and the increasing level of female education may not translate into higher female economic participation in some Islamic countries (see, e.g., Jones, in this volume). As a result, in such settings, fertility may remain high or decline only slowly.

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Chapter 5

Family-Based Old-Age Care in Arab Countries: Between Tradition and Modernity

Abla Mehio Sibai and Rouham Yamout

Abstract One primary feature of Arab countries is a social culture based on Islamic values and principles, shaping a well-defined intergenerational support system. Prescribed by the Islamic code of conduct, promoted by stakeholders and the law and internalized by the individuals, the family continues to be the cornerstone for the support of older people. Yet, family cohesion cannot be assumed as secure in face of new demographic, social and economic realities as well as emerging health needs, undermining its efficacy and efficiency.

This chapter explores trends in ageing and older-adult care in Arab societies in the context of significant recent changes in procreation and family formation and composition. Because improvements in life expectancy have preceded the decline in fertility, accelerated ageing of the population in the Arab region over the coming decades is imminent. Governments should therefore review their social and health policies and pay greater attention to the growing needs of their ageing populations while capitalizing on existing systems of cultural capital and social resources.

5.1 Introduction

The Arab Region lies at the crossroads of Europe, Africa, and Asia and includes the 22 countries of the Arab League and a population of around 360 million.¹ It is also the ‘heartland’ of the Muslim world, from which Islam has spread to other parts of

¹ Egypt, with the largest population (over 84 million), tops the list, followed by Sudan (43 million), Algeria (35 million), Morocco and Iraq (each with around 32 million), Saudi Arabia (26 million), Yemen (24 million), and Syria (22 million). The population of each of the remaining countries (Bahrain, Comoros, Djibouti, Jordan, Kuwait, Lebanon, Libya, Mauritania, Palestine, Oman, Qatar, Somalia, Tunisia, and the United Arab Emirates) does not exceed 10 million.

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Africa and to South and Southeast Asia (Abbasi-Shavazi and Jones 2001). Owing to a number of similarities – including a long rich history spanning thousands of years, a common language, and notably strong cultural traditions based on Islamic values and principles – Arabs are often referred to as the sole *ummah* (the one community). Islam, however, is more than a religion and has more than a spiritual value in Muslims' lives. Islam is above all a social order, one in which faith is reflected in the way a believer follows Islamic codes of conduct. Societal and family relations, including the rights and responsibilities of parents and children and old-age care, have largely benefited from the Holy Qur'ān's commandments. Islam is also at the core of family legislation, inspiring most of the social policies implemented by Arab governments and guiding social activism devoted to old-age care.

Nevertheless, tremendous diversity exists across the individual countries, a variety that reflects differences in political regimes, in natural resources and economic systems,² in demographic and socio-political priorities, and more recently, in the geo-political implications of the revolutionary waves of the 2011 Arab Spring.³ Such differences have triggered various levels and forms of alienation from the traditional family configuration, resulting in fundamental changes in the pattern of old-age care. These changes continue to occur within a framework of three overriding characteristics of the Arab region:

1. Islamic beliefs and cultural ideals, affecting significant pillars of society, notably marriage, childbearing, childrearing, and co-residence;
2. Modernization and socio-economic advances with the resulting consequences of social change and increased longevity but also more disabling chronic diseases, modulating the same significant social pillars but in different, and possibly divergent, ways; and
3. Wars, conflicts, and chronic political unrest in most countries of the region, triggering selective pro-natalist policies in some settings and pushing youth to emigrate in others.

To aid a deeper understanding of the demographic, socio-political, and cultural forces underlying the transitions in family-based old-age care in Arab societies, this chapter explores opportunities and vulnerabilities that are embedded between the profound traditions of Islamic codes of conduct and the challenges of the modern world.

² Some countries in the region, such as Saudi Arabia, Oman, Qatar, Kuwait, and the United Arab Emirates, have vast oil reserves and oil-dependent economies; others, such as Djibouti, Somalia, and Sudan, have much poorer economies and rely heavily on agriculture and young industries.

³ For example, the rebellions, demonstrations, and protests of the revolutions in Tunisia and Egypt, the internal war in Libya, and the civil uprisings in Bahrain, Yemen, and Syria.

5.2 Islam and Family-Based Old-Age Care

5.2.1 *The Spiritual Attributes of Old-Age Care in Islam*

Islam preaches affection and responsibility between members of the Muslim family (El-Ashi 2007), defined here as a “structure whose relatedness is of such a nature as to entail mutual expectations that are prescribed by religion, reinforced by law, and internalized by the individuals” (Abdalati 1995, p. 19). Family ties in Islam are based on clear stratifications of the rights and duties of every individual family member and are designed to shrink injustice and encourage compassion and charity to the powerless. More specifically, the religious commandments engage believers in a clear child–parent code of behaviour by emphasizing the duty of children to obey their parents, and to support and shelter them in old age (Akhtar 2010).⁴ Because of the hardship of giving birth and raising children, both the Qur’ān⁵ and the *hadith*⁶ (sayings) of the Prophet hold mothers in particularly high regard (Athar 2011).

5.2.2 *The Social Tradition of Intergenerational Support*

Islamic teachings emphasize affection, honour, and respect for parents and older members of the family, comparing respect for elders to the honour offered to God (Mehdizadeh 2002). Because this moral code has impregnated the social culture and influenced the patterns of old-age care, Arab people, by and large, age in their homes, surrounded and supported by their offspring, and co-residence is a primary means by which Arab families meet the needs of older adults. In most traditional Arab societies, the elderly live in extended, multi-generational households and rely on their adult children, their spouses, and other family members for material needs and personal care. It is estimated that less than 10% of older persons in Arab

⁴“Thy Lord hath decreed that ye worship none but Him, and that ye be kind to parents. Whether one or more attain old age in thy life, say not to them a word of contempt, nor repel them, but address them in terms of honor. And out of kindness, lower to them the wing of humility, and say, my Lord! Bestow on them Thy Mercy, even as they cherished me in childhood” (Qur’ān 17, pp. 23–24).

⁵“In pain did his mother bear him, and in pain did she give him birth”. (Qur’ān 46, p. 15).

⁶ A young man once consulted the Prophet Muhammad about taking part in a military campaign. The Prophet asked the man if his mother was still living. When told that she was, the Prophet said: “Then stay with her and serve her, for Paradise is at her feet” (Al-Tirmidhi).

A man once asked the Prophet Muhammad, “To whom should we show kindness first?” He answered, “Your mother”. Then he was asked again, “And after that, then whom?” Muhammad again replied, “Your mother”. He was asked yet again, and he gave the same reply again: “Your mother”. Only after that, when he was asked one more time, did he answer, “Then, your father” (Sunan of Abu-Dawood).

countries live alone, in contrast to some 26% in Europe and Northern America (UNDESA and ESCWA 2006; UNDP 2011). In the initial years of such co-residence, and as long as the older parents remain in good health and status, they contribute to household finances, assist in household chores, disseminate cultural values to grandchildren, reaffirm traditional identities that are threatened by modernization, and often contribute to childcare. When the health and economic status of the older parent decline and the need for assistance with activities of daily living increases, however, the direction of care is naturally reversed. Yet the arrangement is still viewed as mutually beneficial by both sides: caring for a disabled parent is not regarded as a burden but as a natural extension of family life. In fact, caregivers often reap a personal sense of reward and satisfaction from fulfilling familial and religious obligations towards the aged and see the opportunity to attend to the needs of parents in their latter years as a gift from God. These family norms that dominate in the Arab culture explain the low rates of institutionalized older persons in the region (Boggatz and Dassen 2005), in which nursing homes and old-age institutions remain the last resource for poorer families (Margolis and Reed 2001).

Data on material exchanges (financial and instrumental) between the young and the old are available from the national Pan Arab Project for Family Health (PAPFAM) studies conducted in Algeria, Lebanon and Palestine and from the recent Survey of Health, Ageing and Retirement (SHARE) in Saudi Arabia, as well as from a number of specialized small-scale studies in Egypt. According to the PAPFAM for Lebanon, most of the financial support for older men and women derives from children (54.1% and 68.6%, respectively), and this percentage increases consistently with age, approaching 72% for those aged 80 years and over. In Lebanon, the 'helping' role of older people even extends to domestic labour and financial support to others (Table 5.1).

Table 5.1 Older adults as recipients of support and as a resource to family members: 2004 (PAPFAM statistics for Lebanon)

	Men	Women	Total
Older adults' sources of income ^a			
Children	54.1	68.6	61.4
Pension	23.6	13.7	18.7
Family properties	19.3	15.2	17.2
Work	18.2	3.3	10.7
NGOs and governmental agencies	2.6	2.9	2.8
Contribution to household finances			
Provider to others	39.0	17.1	28.0
Dependent on others	38.1	66.7	52.4
Financially independent	22.9	16.2	19.5
Contribution to domestic labour			
Child care	2.7	9.0	5.8
Household chores	9.2	41.2	25.2
Shopping	24.8	17.5	21.1
Other	15.7	5.0	10.3

^aBecause income is derived from various sources, totals do not necessarily add up to 100%

5.3 Challenges Undermining the Viability of Family-Based Old-Age Care

5.3.1 *Population Ageing and Dependency Ratios*

A number of studies concur that, although the timing and pace of population change varies across the countries of the Arab region, the demographic transition in many of these nations began in the 1960s (Rashad 2000; Abbasi-Shavazi and Jones 2001; Yount and Sibai 2009; Tabutin and Schoumaker 2011). This transition is marked particularly by a considerable decrease in fertility rates, an over 50% reduction in under-five mortality rates, and an increase in life expectancy at birth from 55 in 1975 to 68.5 in 2010 (Table 5.2). In tandem with these changes, Arab countries have therefore experienced profound changes in the age structure of their populations, changes that are characterized by an unprecedented increase in the number of youth aged 15–24 years, a high number of individuals of working age, and recent increases in the number and proportions of older persons (UNDP 2011). Currently, the percentage of adults aged 60 and older in the Arab region is estimated to be 6%, with projections showing an increase to 17% by 2050 (UNDP 2011). Lebanon and Tunisia have by far the highest percentage of persons aged 60 years and older (10% and 9%, respectively), followed by Morocco, Egypt, and Algeria (at around 7%). Owing to high fertility rates in earlier periods, population ageing is expected to increase more rapidly in the coming decades, with the number of older people more than quadrupling by 2050 (from 22 to 103 million) and the percentage of older persons exceeding 15% in over 13 of the 22 Arab region countries (Yount and Sibai 2009).

Moreover, although the Arab region currently has one of the lowest old age dependency ratios (an estimated 5%) compared to the world average, this ratio is expected to rise to 8% by 2025 and to 13% by 2050. This increase will affect the total dependency rate (young and old) in the region as the responsibility of the workforce shifts increasingly from the support of children to the simultaneous support of children and older persons (Saxena 2008).⁷ Even with slow population ageing, the large numbers of older people expected in the next few years in such Arab countries as Egypt, Saudi Arabia, Sudan, and Iraq will pose new challenges for the health and social care systems, as well as family care.

⁷ In his recent paper on age structure transitions from 2000 to 2050, Saxena (2008), using a number of ageing indices (old-age dependency, oldest-old age dependency, and an index of ageing), classifies the Arab countries into three groups: 'fast', 'medium', and 'slow'. The 'fast' group includes the United Arab Emirates, Tunisia, Kuwait, Bahrain, Qatar, Lebanon, Algeria, Libya, and Morocco; the 'medium' group constitutes Syria, Jordan, Saudi Arabia, Egypt, and Oman; and the remaining eight countries, Djibouti, Mauritania, Iraq, Sudan, Comoros, Palestine, Somalia, and Yemen, are classified as the 'slow' ageing group.

Table 5.2 Demographic changes in Arab countries

	Population			60 years and older			Estimated and projected total fertility			Estimated and projected infant mortality rate		
	2010	2010	2050	2010	2050	2050	1970-1975	2005-2010	2045-2050	1970-1975	2005-2010	2045-2050
World	6,908,688	11	22			4.3	2.6	2.0	2.0	91	47	23
Developing countries	5,671,460	9	20			5.2	2.7	2.1	2.1	102	52	25
Arab Region	359,273	6	17			6.8	3.6	2.1	2.1	137	44	17
Algeria	35,423	7	24			7.4	2.4	1.9	1.9	131	31	11
Bahrain	807	4	24			5.6	2.5	1.9	1.9	50	10	6
Comoros	691	3	14			7.1	4.0	2.2	2.2	127	48	13
Djibouti	879	4	13			7.2	4.0	2.1	2.1	154	85	29
Egypt	84,474	7	19			5.7	2.9	1.9	1.9	138	35	11
Iraq	31,467	5	13			7.2	4.1	2.2	2.2	74	33	12
Jordan	6,472	6	19			7.8	3.1	1.9	1.9	82	19	8
Kuwait	3,051	4	25			6.9	2.2	1.9	1.9	41	9	6
Lebanon	4,255	10	26			4.8	1.9	1.9	1.9	47	22	9
Libya	6,546	7	23			7.6	2.7	1.9	1.9	105	16	9
Mauritania	3,366	4	12			6.8	4.5	2.3	2.3	148	73	42
Morocco	32,381	8	23			6.9	2.4	1.9	1.9	123	31	10
Palestine	4,409	4	11			7.7	5.1	2.4	2.4	82	18	8
Oman	2,905	5	21			7.2	5.1	2.0	2.0	110	12	7
Qatar	1,508	2	20			6.8	2.4	1.9	1.9	57	8	5
Saudi Arabia	26,246	5	19			7.3	3.2	1.9	1.9	105	19	8
Somalia	9,359	4	7			7.1	6.4	3.1	3.1	155	110	48
Sudan	43,192	6	13			6.6	4.2	2.2	2.2	121	69	28
Syria	22,505	5	19			7.5	3.2	2.2	2.2	83	16	8
Tunisia	10,374	10	28			6.2	1.9	1.9	1.9	119	20	8
UAE	4,707	2	18			6.4	2.0	1.9	1.9	57	10	6
Yemen	24,256	4	10			8.7	5.3	2.2	2.2	184	59	15

Source: United Nations Development Programme, *Arab Human Development Report 2011*

5.3.2 *Fertility*

The Arab region has witnessed impressive fertility declines during the past few decades – from over 7 children per woman in 1965 and 6 children in 1980 to 3.7 around 2005 (Tabutin and Schoumaker 2011). Fertility performance, however, remains a complex parameter, one associated with an array of religious, economic, political, and social factors. While several reports and studies have earlier attempted to identify a relation between fertility behaviour and Islam, debates have often been inconclusive, and a succinct account of the link is virtually impossible (Jeffery et al. 2008). The Qur’ān makes no explicit statements about the morality of contraception, but it does contain statements encouraging procreation. All else being equal, the default attitude of most religious leaders has, thus, been to support natalism as an encouragement to the growth of the Islamic community (Fuller 2003). On the other hand, Islam per se has no theological grounds for opposing contraception and has no problem with birth control in itself as long as it does not encourage sex outside the licit relationship of marriage. Overall, and in contrast to Muslim fertility stereotypes, the decision on whether to support birth control measures has been more a political and economic issue than a theological one.

Depending on macroeconomic resources and for various geopolitical and political reasons, the strategies and policy interventions of Arab countries regarding fertility levels and family planning programs have been very much distinct. In some countries – for example, Algeria, Egypt, Jordan, Morocco, Oman, and Tunisia – policies have aimed at decreasing population growth, easing the mounting pressures on renewable and non-renewable resources, and providing decent employment and basic social services to citizens (UNDP 2011). Hence, policy interventions have been directed at reducing fertility rates, and governments have been committed to expanding access to family planning and disseminating information about contraceptive methods and the benefits of smaller families. In pro-natalist countries like Libya and oil rich countries in need of manpower, on the other hand, the superiority of numbers has been an incontestable argument for resisting family planning programs in order to reduce the dependence on imported labour (Fargues 1993). The same contention has been made by Palestinians under occupation and in refugee settings (Courbage 1995) and by minority groups like the Shiite population in South Lebanon; their reason, however, is to become a majority in their own communities or against their rivals (Fargues 1997). Hence, over the past few decades, the interference of power strategies and struggles in population issues and their role in modulating national policies and the behaviour of groups or individuals has affected the shape of the population pyramid in a number of Arab countries.

Furthermore, within civil society and at the grass roots level, endorsement of family planning has been “somehow umbilically tied to the modernization of society” (Szreter et al. 2003, p. 145). That is, whereas slower fertility declines are attributed to the low status of women, early and universal marriage, demand for children as sources of family labour and social security in old-age, as well as religious and cultural mores endorsing procreation; sharp declines in fertility are

linked to increased female education, women's participation in the workforce, increased age at marriage, and increased celibacy rates (Obermeyer 1992; Winckler 2005; Yount and Sibai 2009).

5.3.3 Increases in Life Expectancy and the Burden of Non-communicable Diseases

Reductions in infant mortality, coupled with advances in health care and socio-economic resources, have contributed to substantial gains in life expectancy in the Arab region. Today, both women and men in Arab countries live approximately 7 years longer than they did 40 years ago, and, despite wide variation, a majority of the Arab countries have current life expectancies between 70 and 79 years.⁸

Along with the ageing of the population, the health profile of Arab populations has changed considerably over the last decades (Sibai et al. 2011). Today, the most important causes of morbidity and mortality are chronic non-communicable diseases – most notably, cardiovascular diseases, cancer, diabetes, mental illness, and musculoskeletal disorders – which impose huge demands on health care systems already constrained by scarce resources. There is also a high prevalence of risk factors for chronic conditions, such as smoking, obesity, and lack of physical activity (Yount and Sibai 2009). In fact, in the Pan Arab Population and Family survey conducted in nine Arab countries, the percentage of older adults reporting at least one chronic disease ranged from 13.1% in Djibouti to 63.8% in Lebanon, with the majority of the countries having rates above 45%. Yet resources devoted to the health sector and the coverage and benefits provided to older persons by health-care systems in no way match this changing health profile and the needs of an ageing society. Nor do they address the significant emotional strain, physical health problems, financial burdens (from the catastrophic cost of medical care), and the lost work and leisure opportunities that frequently accompany the provision of care to a co-habiting dependent older person suffering from several co-morbid conditions. All these factors challenge the health care system in most countries and increase the importance of health reforms, policies, and interventions.

5.3.4 Modernity of Social Values and the Marriage Revolution

The traditional nuptiality tenets of the Arab countries in the region – generally characterized by early marriage for women, universal marriage for both sexes, large

⁸ The Gulf Cooperation Council (GCC) States have, overall, the highest life expectancies in the region (range of 72.2 and 78.3 years), while Iraq (57.7 years), Sudan (57.4 years), and Somalia (49.6 years) have the lowest.

Table 5.3 Marriage patterns in selected Arab countries

	Year survey was conducted	Percent ever-married women ages 15–19	Percent ever-married women ages 20–24	Percent of never-married women ages 35–39	Percent of ever-married women (15–49 years old) who married a first cousin
Algeria	2002	2	17	17	22
Bahrain	1995	4	31	9	24
Djibouti	2002	5	26	15	25
Egypt	2003	10	52	3	20
Jordan	2002	6	34	13	26
Kuwait	1996	5	42	11	26
Lebanon	1995	4	30	21	18
Libya	1995	1	12	11	43
Mauritania	2001/2002	28	60	4	43
Morocco	1996/1997	13	39	12	19
Palestine ^a	2004	14	59	12	28
Oman	1995	16	61	1	34
Qatar	1998	4	32	11	34
Saudi Arabia	1996	7	40	3	41
Syria	2001	11	43	11	29
Tunisia	2001	1	15	15	24
UAE	1995	8	42	3	24
Yemen	2003	17	59	3	31

^aIncludes Palestinians living in Gaza and the West Bank (including East Jerusalem)

Source: Rashad et al. (2005)

age differences between spouses, and high levels of endogamy – have in many respects changed greatly over the last 40 years in a drastic shift that Tabutin and Schoumaker (2005) call the “marriage revolution”. For example, in the 1970s, half of all women were typically married by age 17 or 18. By the end of the 1990s, in stark contrast, the mean age of women at first marriage had increased to 24.3 and was approaching 30 years at the national level in Algeria, Tunisia, Libya, and Lebanon (Tabutin and Schoumaker 2011) (see Table 5.3). Age at marriage among men has also risen, although on the whole more slowly, thereby leading to a clear reduction in the age differences between spouses: from traditional high levels of 5 to 7 years (depending on the country) to around 4 in a majority of countries.

These changing demographic marriage patterns in the Arab region, although part of a general global phenomenon, reflect broader social and economic changes, most notably for women (Rashad et al. 2005). For instance, Arab youth overall are more educated today but suffer from high unemployment rates and housing shortages, and young Arab women are more likely to work outside their homes in paying jobs. Likewise, successful career women are more likely to escape traditional stereotypes and find opportunities for self-fulfilment beyond the roles of wife and mother. Such changes challenge women’s traditional roles in family formation and have profound

impact on the family model. As a result, the number of children wanted has been declining, and there has been a clear shift from the large family model to that of a smaller nuclear unit, partly in response to market liberalization and increased cost of living in many countries (Saleh 2010) but also because of urbanization and cultural changes (Jabbour et al. 2011). This shift, away from a life cycle dedicated to marriage and childbearing at the end of adolescence to a cycle that begins with an extended period of single life with fewer children, has altered the construction of women's social identity. Not only this shift has confronted deeply rooted cultural values, it has also raised legal and policy challenges related to the health and social care of older adults.

5.3.5 *Emigration and Immigration*

The poor economic performance of Arab countries has undermined job opportunities, which, coupled with continued population growth, has led to high levels of unemployment (Jabbour et al. 2011). The proportion of unemployed is particularly high among the youth (25%) and in poor and conflict-ridden areas (Chaaban 2010). This widespread unemployment has led to significant waves of labour emigration,⁹ mostly by young families seeking better job opportunities in other countries. The implication of this outflow is twofold: on the one hand, it reduces opportunities for intergenerational co-residence; on the other, it acts as an important source of remittances to the home country and enhanced financial support for older parents.

In this situation, privileged families from middle- and high-income countries have increasingly opted for a new form of in-home care given by full-time, live-in migrant workers, mainly from South East Asia and Africa. These migrants, playing the role of both housemaid and companion, provide long-term care to older people who are dependent on help in daily living. However, although this form of support retains the 'family' orientation for elder care, contributes to delaying or lowering institutionalization rates, and provides an economic convenience especially for privileged families, migrant caregivers have no formal qualifications and lack moral commitment or filial attachment to the older person (Sibai 2009). There is thus the potential for abuse, possibly financial as well as emotional, from the domestic worker towards an older person, a potential that requires more urgent investigation as the degree of frailty increases.

⁹For instance, between 2000 and 2003, 39% of young Lebanese, 34% of Jordanians, 20% of Yemenites, and more than 14% of Algerians, Moroccans, and Tunisians opted for emigration (Chaaban 2009).

5.3.6 *Social and Economic Consequences*

As a result of these challenges, it can no longer be assumed that the spirit of intergenerational solidarity and the customary role of the family are secure. Rather, the transition from large extended families to small nuclear ones, accompanied by high rates of immigration among youth seeking better employment opportunities, and the increased entry of women into the labour force have created a relative shortage of family members available for the provision of care. At the same time, increasing longevity and shifts in disease patterns to degenerative chronic diseases that leave a greater number of persons with disabilities frequently absorb families' savings at a time when social protection nets are either stagnant or regressing. Additionally, reliance on family networks may not fully protect older persons against poverty, because these networks are themselves income constrained. Older persons who are single, widowed, or childless (particularly women) face an even higher risk of destitution.

5.4 Response of the Arab Governments

5.4.1 *The Family Institution in Legislation and Social Policies*

The moral code of Islam has not only permeated the social culture of Arab societies but has also inspired legislation and social and health policies. For example, in the Gulf Cooperation Council (GCC) countries, legislation pertaining to the rights and care of older people have been founded on Islamic *sharia* and issued by the Shura Council. Arab governments have also acknowledged and affirmed the vital role of informal family support channels in the care of older parents, and this is explicitly stated in almost all the National Reports on Ageing from countries in which Islam is the ruling religion.¹⁰ In fact, many are the laws geared towards preserving the institution of the family and the web of relationships within it. Several old-age pension programs in Arab countries preview the eligibility of a pensioner's surviving parents to receive benefits, which reflects the importance of the family as an institution in Islamic societies. Likewise, public insurance schemes in some Arab countries consider the parents of the insured as dependents. For example, retired dependent older parents in Lebanon can, under the National Social Security Scheme, be covered by their children's health insurance policies. In several countries of the Arab region, the focal unit concerned with ageing issues and related

¹⁰ For instance, article (21) of the Permanent Constitution of the State of Qatar explicitly states that "[t]he family founded on religion, morality and patriotism is the basis of Qatari society", and the Qatari Association upholds the role of the family in elder care. Likewise, Egyptian law, founded on Islamic *sharia*, stipulates that sons are obliged to take care of their poor and needy parents.

legislation is intricately connected with councils and directorates of family affairs. For instance, the Department for Ageing Affairs in Qatar is situated under the Supreme Council for Family Affairs and that of Egypt under the General Directorate for Family and Childhood Affairs. Likewise, Jordan's comprehensive strategy for the welfare of the aged has been prepared in close cooperation with the National Council on Family Affairs, and Lebanon's 'Social Plan of Action' comprises all vulnerable individuals within the family as a social unit, including the disabled and older adults, as well as female-headed households. Both the Qatari and Jordanian governments have introduced a 'Family Welfare Programme' to reach older persons in their homes and provide services in situ, while the Tunisian government supports families through a special scheme entitled the 'National Program to Assist the Elderly within their Families'.

5.4.2 Governmental Attempts at Adaptation

In general, several countries in the Arab region have made progress in implementing relevant government programs and formulating new or upgrading existing legislation to meet the increasing needs of their growing older populations. For example, Egypt, Jordan, Oman, and Qatar have initiated health insurance provisions that cover poor and needy elderly; Bahrain and Kuwait have expanded welfare provisions to cover old-age disability; Egypt and Jordan have issued directives to facilitate the mobility and accessibility of older persons within public premises; Jordan, Iraq, Lebanon, Oman, Qatar, the United Arab Emirates, and Yemen have upgraded pension funds, safety nets, and social security schemes; and Jordan has issued tax deductions for nursing homes and clubs for older persons (UNDP 2011; Sibai and Kronfol 2008).

Yet overall, in terms of policy guidelines in support of older people's welfare, all Arab countries have lagged behind in formulating comprehensive national strategies of action on ageing, and only six countries (Bahrain, Egypt, Jordan, Qatar, the Syrian Arab Republic, and Saudi Arabia) have set guidelines for a national strategy. Other countries apparently believe that the existing legislation and provisions within the country's general policies on social issues or within sector policies and programs are sufficient for relevant policy formulation and development. Hence, by and large, the changes to the structure and composition of the populations in Arab countries remain unmatched by an equitable development strategy or corresponding increase in support either through formal channels (e.g., pension plans) or through health or socio-economic security measures, and older people remain marginalized in the health policy-making process. In part, this failure may be attributed to the rather simplistic dichotomy between developed and developing countries, which masks the heterogeneity in population priorities and needs with the assumption that in the developing world, ageing issues are not population challenges (Sibai et al. 2004). This situation is compounded by a lack of reliable data and policy-makers' inherent traditional reliance on families as the main form of social welfare despite trends towards smaller nuclear families and a decreased availability of female caregivers.

5.5 Concluding Remarks

Although the situation and conditions of older persons and the opportunities available to them vary from one Arab country to another, older people in the region face certain common vulnerabilities that have important implications for their care. Most particularly, the demographic, cultural, social, and economic challenges brought about by modernity compromise family cohesion and threaten old-age security, especially in countries that have witnessed large decreases in fertility rates and increasing rates of youth emigration. Governments in these countries have thus missed the momentum of implementing sound old-age social support that can meet the increasing needs of their older persons. To remedy this problem, Arab countries need to invest in policies that build on intergenerational solidarity, support caregivers, and empower them with both financial and non-financial benefits (Sibai et al. 2011). Such support policies must be geared to promoting caregivers as a resource for older persons while at the same time being themselves beneficiaries of health and social services.

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Part III
Country and Regional Studies

Chapter 6

Pakistan's Population Prospects, 2010–2030: A Glass Half Full or Half Empty?

Zeba A. Sathar

Abstract This chapter discusses alternative population projections for Pakistan for the next 20 years and analyzes fertility trends, the main driver of future population growth. The next section explores the important anticipated changes in age structure and in the size and composition of the labour force over the next two decades. The future prospects of prospering as a result of this expansion in the labour force depends on several internal and external factors, but the creation of a huge number of additional jobs is a stark reality that has to be faced in any economic forecasting. In the final section, the paper offers some suggestions for public policy to enable the country to benefit from a period of favourable age structure and declining dependency ratios mainly through expediting the fertility decline and utilizing the positive potential outcomes of raising employment rates for youth and women.

6.1 Introduction

According to the UN's recently released medium assumption estimates, the world's population will increase in the next two decades from its current level of almost 7 to 8.3 billion (United Nations 2011). Most of this increase will be in developing countries, which will further skew the distribution away from developed nations to developing, from rich to poor, and from north to south. During this same period, population growth rates and the population size of the developed countries will reach replacement levels, and many countries will begin to go into negative replacement. Many developing countries, however, particularly those in Africa

The author is the Country Director, Population Council, Islamabad. She would like to acknowledge the research assistance of Batool Zaidi, Maqsood Sadiq, and Imran Mahmood in completing this paper.

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and a handful of countries in Asia, not having completed their demographic transitions, will continue to have high growth rates. In fact, this set of countries, Pakistan among them, will continue to grow because of the built-in momentum of past high growth rates. They will then claim larger shares in the world's population and will most certainly contribute towards world population growth in disproportionately alarming terms. Pakistan's current position as the sixth most populous country and the possibility of its rising to fifth reflects this reality.

Pakistan's population prospects in the coming two decades will depend on the pace of its demographic transition, and particularly, its fertility transition. The main changes expected are a substantial rise in the numbers of Pakistanis and, more important, some major changes in the age structure, which has already begun to feel the impact of the fertility decline. The question is, therefore, whether these changes will manifest themselves in the so-called "demographic dividend" that has accompanied advantageous age structures elsewhere. Leveraging the potential of such favourable age structures through key investments – specifically, a more rapid fertility decline, education and skills, and employment opportunities for youth and women – could have a further substantial impact on Pakistan's development and lead to several benefits for both individual households and overall macro-economic conditions.

A demographic bonus could certainly give Pakistan a chance to make a quantum leap in its development and use its population as a boon and an advantage at a time when Pakistan's struggling economy could really benefit from some impetus. A major constraint that Pakistan will face in comparison to East Asia, however, is the lateness of its transition and its current human resource base, which is certainly deficient in many employment opportunities and competition in the global economy. It is therefore unlikely that this impetus will be as great as that achieved in East Asia at comparable stages of the fertility transition. The economic benefits of fertility decline in those countries have indeed been enormous. Nevertheless, the potential opportunities for Pakistan are there for the taking.

6.2 Current and Projected Growth

Although Pakistan's own future population scenarios will depend greatly on current and future trends in fertility and mortality, it is also of course possible that in the next few decades, migration could become more pivotal for the future course of population growth and distribution. Whereas internal migration streams have a major influence on the economic and spatial distribution of resources, and ultimately on fertility and mortality, it is of course international migration that undoubtedly has a more important influence in terms of national population growth. Nevertheless, it is difficult to predict these trends because they depend on such unanticipated movements as trade flows, labour shortages, opportunities in neighbouring or western countries, visa requirements, wars, and civil disruptions.

Table 6.1 Crude death, birth, and growth rates, 1962–2006

Source	Year	Crude death rate	Birth rate	Growth rate
Population Growth Estimates (CD)	1962–1965	18.0	52.0	3.4
Population Growth Estimates (LR)	1962–1965	15.0	42.0	2.7
Population Growth Survey–2	1976–1979	11.0	43.0	3.0
Pakistan Demographic Survey	1984–1988	10.9	42.0	3.0
Pakistan Demographic Survey	1990–1991	10.0	39.5	2.9
Pakistan Demographic Survey	1995–1996	92	35.9	2.7
Pakistan Demographic Survey	2001	7.2	27.8	2.1
Pakistan Demographic Survey	2006	7.0	25.9	1.9

In the 1980s, Pakistan experienced a boom in its economy largely as a result of remittances from a spurt of out-migration to the Middle East. Since then, migration to those areas has peaked and then tapered off: according to the most recent available figures (which are still pre-2000), the number of Pakistanis officially living outside Pakistan is 4.2 million, a significant reduction from the 6.6 million estimated in 1990. The number of international out migrants is very likely to have declined slightly by 2011. On the other hand, Pakistan is also the recipient of migrants from other parts of Asia and home to a large number of refugees from Afghanistan. In fact, in 2000, Pakistan had the third largest number of asylum seekers in Asia, after Iran and Jordan. Moreover, although official figures put this influx on the order of 1.2 million, it is widely accepted that, because of the very porous borders between the two countries, the actual numbers are much larger given (United Nations 2006). For the purposes of this analysis, however, we assume that international migration has an insignificant impact on population growth.

Mortality and fertility, on the other hand, more directly determine population growth – past, present, and future – and are also more likely to be dependent on country-specific factors. Mortality, began declining as far back in the 1950s, and has continued to decline (albeit less dramatically) in recent years. Nevertheless, even though the crude death rate (currently at 7 per 1,000) shows a slow and consistent decline (Table 6.1), certain components of mortality – that is, infant and child mortality and maternal mortality – remain at unacceptably high levels of 75 per 1,000 live births and 276 per 100,000 live births, respectively. These indicators, although important for protecting particular vulnerabilities of certain age groups and women of reproductive ages, have little impact on population growth and age structures. They are, however, extremely important measures of human development, and infant mortality rates specifically are a direct determinant of life expectation, an important component of population projections.

Fertility decline is more recent, having begun in the 1990s or late 1980s, which makes Pakistan a ‘late starter’ in the demographic transition process and likely to be last to complete its transition to replacement fertility. Moreover, although the initial decline from about 6.5 in the 1980s and 6.3 to 4.8 in the 1991–1998 period was quite rapid, the subsequent decline from 4.8 to 3.7 has taken 13 years (Feeney and Alam 2003; Sathar 2007; Sathar and Zaidi 2009). Earlier analyses, therefore,

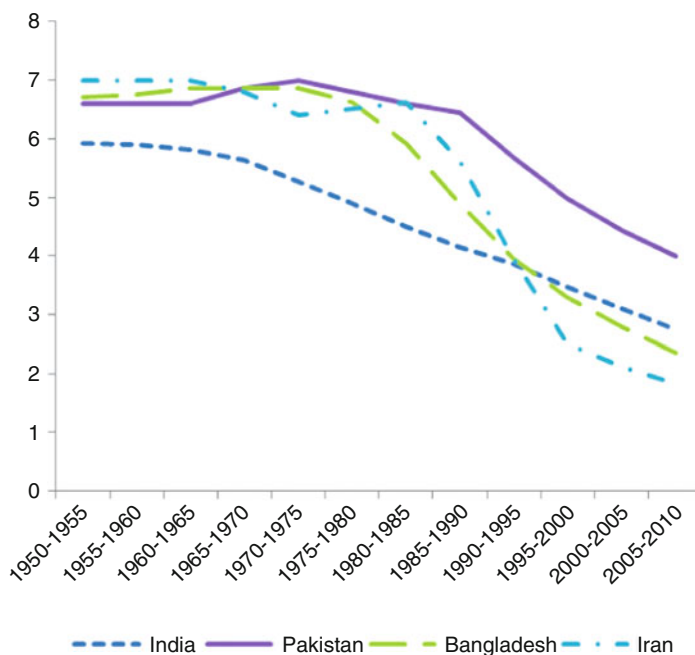


Fig. 6.1 Total fertility rate – trends for Pakistan and neighbours

suggested that despite a rapid early decline, a further decline in total fertility rates (TFR) from 4.0 to replacement might be harder to achieve (Sathar and Casterline 1998), and indeed, fertility in Pakistan (Fig. 6.1) has declined at a slower pace and remains at much higher levels than fertility in other Asian countries (Table 6.2).

In recent decades, the rising age of women at marriage has played a strong role in reducing both fertility and population growth. However, because the singulate mean age at marriage has now reached 23 years, it is hard to believe that this rise will continue much further. The two factors likely to have the most direct impact on fertility trends, both now and in the future, are contraception and abortion. The rise in the contraceptive prevalence rate (CPR), however, which was appreciable in the early 1990s, seems to have slowed down in recent years: after rising from 12 to 28 between 1991 and 1998, an average of 2% a year, its increase from 1998 to 2007 was negligible (National Institute of Population Studies Macro International (NIPS/MI) 1991; 2007). Likewise, even though contraceptive use appears to be hovering around the 30% level, repeated fertility surveys have found a considerable gap between fertility intentions and fertility behaviour. In fact, there has been mounting evidence over the last few years of a steady increase in the level of unwanted and mistimed pregnancies among currently married women.

Evidence of an alarmingly high prevalence of induced abortions (one in every six pregnancies), which is even higher among women of high parity, demonstrates women's strong desires to curtail fertility (Sathar et al. 2007). The levels of abortion

Table 6.2 Total fertility rates over the last three decade (various sources)

Survey	Years	TFR
1980s		
PCPS 1984–1985	1984–1985	6
PDS 1984–1987	1984–1987	6.9
PFFPS 1987–1988	1982–1987	7.7
PDHS 1990–1991	1986–1991	6.1
PIHS 1991	1987–1991	6.3
<i>Average</i>		6.6
1990s		
PCPS 1994–1995	1994–1995	5.6
PFFPS 1996–1997	1992–1996	5.4
PDS 1996	1996	5.5
PDS 1997	1997	5
PRHFPS 2001–2002	1997–2000	4.8
<i>Average</i>		5.3
2000s		
PDS 2000	2000	4.3
PDS 2001	2001	4.1
PDS 2003	2003	3.9
PSWRHFS 2003	2001–2003	4.3
PDHS 2006–2007	2004–2006	4.1
PDS 2007	2007	3.7
<i>Average</i>		4.1

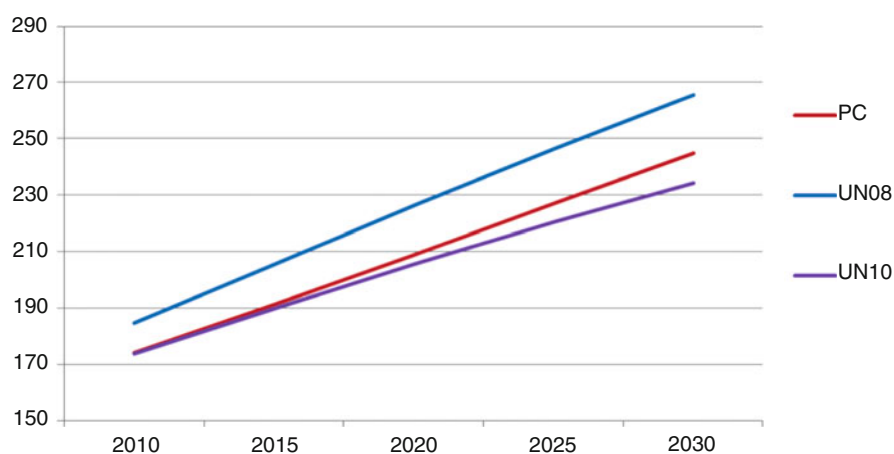
were unexpected but are known to be closely linked to rising levels of unwanted fertility in Pakistan. In 1991, women in Pakistan were on average having 0.7 unwanted children, but as of 2007, this number had risen to an average of one unintended child (Zaidi 2009). These statistics also include differentials across poor and rich and rural and urban communities that clearly document the widening gap in service provision to the very sections that are most unreachable or under-served. In fact, the widening of the gap in TFR is probably a major contributor to the slowing down of the fertility decline: whereas the major urban and highly educated sections are close to replacement fertility, the poor continue to have as many as six children (Population Council 2009).

Fertility decline will also most certainly be the key to answering the questions of how soon Pakistan will reach replacement fertility and when it will reach population stabilisation. Hence, the very first question must be whether the government, in conjunction with other non-state actors, can ramp up efforts to address the unmet need for family planning services, which, according to the latest estimates, stands at 33% of married couples who want no more children, are liable to conceive, but are not using contraception (NIPS/MI 2007). This ‘excess fertility’ represents a serious gap and a loss of opportunity to expedite fertility decline in Pakistan, but it seems that neither the private sector nor the government, particularly the Ministry of Health¹, have yet amassed the needed services or prioritized this responsibility.

¹ The Ministry of Health was abolished in June 2011 as a result of the 18th Amendment.

Table 6.3 Projected population under three different scenarios, 2005–2030

Scenarios	2010	2015	2020	2025	2030
I. Population Council 2011					
Total population (millions)	173.99	191.27	208.86	227.1	245.02
Total fertility rate (TFR)	3.58	3.26	2.98	2.69	2.41
Dependency ratio	0.68	0.61	0.56	0.53	0.52
II. United Nations 2008					
Total population (millions)	184.75	205.50	226.18	246.28	265.69
III. United Nations 2010					
Total population (millions)	173.59	189.64	205.36	220.60	234.43
Total fertility rate (TFR)	3.20	2.86	2.60	2.40	2.23
Dependency ratio	0.66	0.60	0.57	0.54	0.50

**Fig. 6.2** Population projections for Pakistan, 2010–2030

Yet serious concerted efforts to reduce this unmet need for family planning and extend such services in Pakistan could reasonably be expected to raise the CPR to 50%, which would have a direct positive impact on fertility reduction, primarily through reduction of unwanted fertility.

As is immediately obvious from the three sets of population projections given in Table 6.3, the UN's 2010 revision, with a projected population for Pakistan of 174 million, is much lower than its 2008 projection, which assumes a Pakistani population of 184 million. Likewise, whereas the 2010 projections assume a post-2010 TFR in the range of 3.5 children per woman or less, with replacement levels reached by 2030, the 2008 projections depict a much slower fertility decline, with replacement levels reached by 2035.

We also present a set of projections by the Population Council (Fig. 6.2), which, based on the latest data and fertility trends, assume a higher level of fertility for 2010 than the 2010 UN projections, which are based on a gentler decline in fertility. We argue that the Council's projections, which fall in between the two UN

projections, more closely represent the likely scenario for Pakistan's fertility decline. All three sets of projections, however, make only slightly different assumptions about mortality, although the UN projections use higher mortality and lower life expectancy than the council projections.

The different assumptions about fertility decline, on the other hand, generate very different scenarios for Pakistan's population: the divergence of almost 36 million persons in the two UN estimates (252 versus 234 million) for the 2030 population of Pakistan means that a population of 178 million in 2011 could end up in the range of 230–266 million by 2030 and in the range of 275–335 million by 2050 (data not shown).

6.3 Potential Benefits of Projected Demographic Trends

In addition to changes in sheer population size, the next 20 years will also bring about significant changes in population age structure in both developed and developing countries. Whereas most rich developed countries will have not only a substantial over-65 population but also substantial deficits in the working-age population, the developing countries, and especially the region that includes Pakistan, will experience their largest working-age population bulge. It is the prospect of this demographic shift in age structures from young to a middle aged that will most impact development in Pakistan for the coming three decades.

Whereas alternative scenarios for population growth draw primarily on differing assumptions about the future speed of fertility decline – and hence differ in their implications for Pakistan's population size and age composition in 2015, 2020, and 2030 – changes in the age structure are already visible as a result of a decline in TFR from 6.5 in 1990 to below 4 in 2010. According to Population Council projections, the proportion of the population aged 15–64 increased from an estimated 53.6% in 1998 to 57.3% in 2005 and 58.8% in 2010, and congruently, the proportion of children aged 0–14 declined from 41.6% to 38.6% then to 36.1% in the corresponding years.

Yet, although these past changes are important, the real question is what lies ahead. The potential demographic bonus between now and 2030 depends on the pace of the fertility decline over the next 20 years. For example, the more rapid decline depicted in the UN's 2010 projections shows a slightly higher proportion of working-age population than the Population Council projections (Fig. 6.3). That is, even if fertility declines rapidly – and a decline to some extent is highly probable – the proportion at working age will also increase because of demographic momentum. Nevertheless the pace of fertility decline will still make a substantial difference.

Another way of looking at the same trend is to examine the dependency ratio; that is, the ratio of persons under 15 and over 64 to persons between 15 and 64. The dependency ratios projected up to the year 2030 show a declining trend in the young ages of 10–14 and a slight increase in persons 65 and over because of population

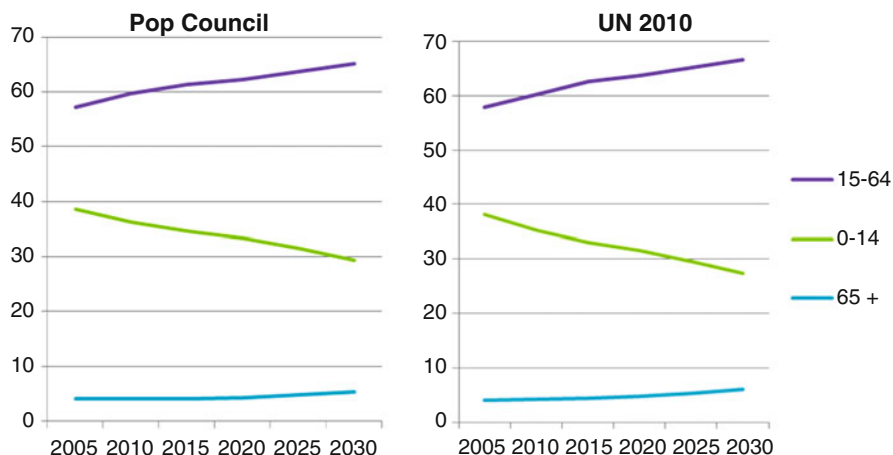


Fig. 6.3 Changes in age structure based on assumptions of rapid or slower fertility decline in Pakistan

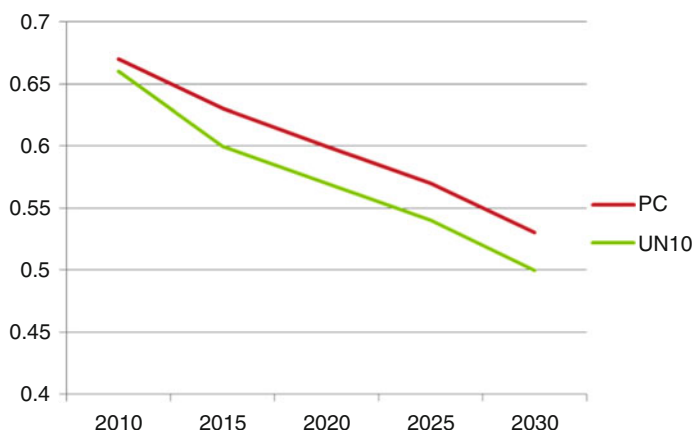


Fig. 6.4 Effects of fertility change on age dependency ratios (alternative fertility decline scenarios)

ageing (Fig. 6.4). The most important point for Pakistan is that it is finally experiencing what most of South Asia and the rest of the Muslim world has already experienced – a period of declining dependency ratios. Given the past high fertility trends, this declining dependency constitutes a significant change, one that is primarily advantageous for all development processes. Potentially, the declining dependency ratios will save resources formerly spent on children that can be diverted and invested in improving the quality of education and health care. Likewise, the greater numbers of the working-age population present an opportunity to generate more income and savings, although as discussed below, this augmentation will come with several important provisos.

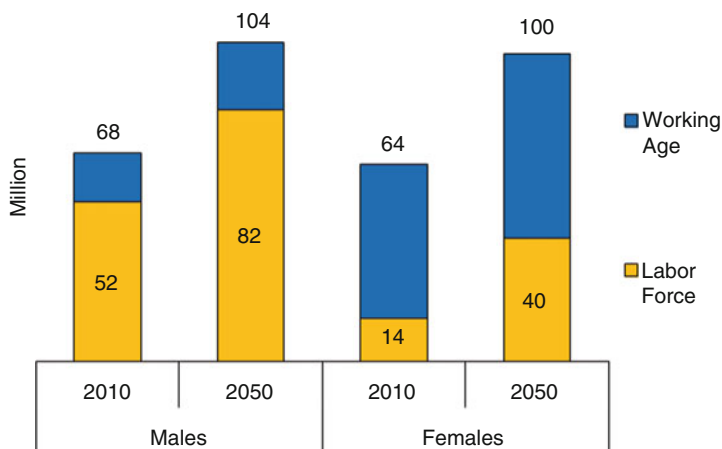


Fig. 6.5 Current and projected working-age population and labour force

First, the increasing number of persons entering the labour force, although potentially a good opportunity, is also a threat because of the limited ability of the economy to absorb an increased labour force. That is, on the one hand, the increased participation of men and women in the labour force leads directly to increased savings at the household and macro levels, while increased employment, particularly among women and youth, leads to numerous indirect benefits (e.g. investments in the schooling of young children or siblings). On the other hand, the challenge of employing an ever-increasing labour force, although by no means new to developing countries, is formidable. However, the number of jobs to be generated has increased manifoldly with the rising momentum of population growth. Moreover, whereas earlier increases in population growth impacted numbers of children, the surge of 60% in the labour force is a new reality: the under-25 population in particular will join the search for jobs in unprecedented numbers.

Normal rates of economic growth, therefore, will not necessarily ensure success in gaining employment: new sources of employment – particularly for the young – will have to be generated, and the ultimate outcome, whether Pakistan experiences a dividend or not, depends on whether Pakistani society can absorb this additional labour force. Therefore, although carefully reviewing the state of Pakistan's economy is beyond the scope of this paper, we will briefly outline recent trends with a focus on the labour supply that is emerging as a reality in the country. Most particularly, because Pakistan's growth rate has slowed down dramatically since 2007, the forecast for the absorption of this new rapidly growing labour force is far from optimistic. Essentially, the rate of growth of the economy is about 2–3%, while the annual growth of the labour force is around 6%.

In terms of men and women of working age, including both urban and rural residents in search of work, Fig. 6.5 shows the growth in the size of the male and female labour force and the likely gaps in jobs based on the assumptions that labour force participation rates for males will remain the same (rather a leap of faith given

Table 6.4 Employment rate trends 2001–2008

Region	Male		Female	
	2001–2002	2008–2009	2001–2002	2008–2009
Total	65.6	66.4	12.1	18.9
Urban	61.7	62.7	7.6	8.3
Rural	67.8	68.5	14.4	24.6

Source: Pakistan Labour Force Survey 2001–2002, 2008–2009.

the shrinking economy) and those for females will rise at about 1.0% per year from the current level of 21–40% by 2030. Whereas the likelihood of this happening is discussed in detail in the subsequent section, what is important for now is the several millions jobs that need to be created by 2030. While a huge number of additional jobs are a requirement if current employment trends are to continue, they do not reflect the staggering gap between the full working-age population and the employed population. In 2010 the gap between those available for work and those employed is about 60 million persons. In 2030 with an even larger working population estimated at over 160 million, the gap between the working-age population and jobs could be as much as 80 million in 2030.

Not only is employment closely linked to economic growth rates, but greater employment has in turn contributed significantly to the recent increase in GDP growth, most of which in the last decade has occurred in the services and manufacturing sectors. Nevertheless, the major share of employment opportunities remains in the agricultural sector, whose share in the overall economy has nonetheless been shrinking. As the economy diversifies away from agriculture, and the share of agriculture decreases, it brings with it not only domestic growth but also the volatility linked to investment and the global economy. Therefore, in terms of creating new jobs for young people, the outlook depends almost entirely on the non-agricultural sectors.

The recent employment trends identified by the 2001 and 2008 Labour Force Surveys (Table 6.4) also highlight two notable points: (1) overall employment levels among men remain stable while those among women are rising continually (see Fig. 6.6 for the 2010 numbers) and (2) for women, there is a wide differential between urban and rural employment: the latter has risen far more than the former. This difference is presumably related to the fact that female unemployment rates in urban areas are higher than in rural areas, which implies that women in urban areas are seeking work at quite high levels but lack opportunities (Table 6.5). Overall, unemployment rates for women are twice those for men, having risen to almost 21% in urban areas and 7.2% in rural areas by the 2009–2010 period (Pakistan *Economic Survey* 2010–2011). In general, urban unemployment is higher than rural unemployment mainly because of the lack of growth in non-agriculture sectors like manufacturing and services, while a large proportion of the labour force in rural areas is absorbed as unpaid family workers.

Table 6.5 also shows employment and unemployment rates by education level and age. Whereas men show roughly even levels in all education groupings except

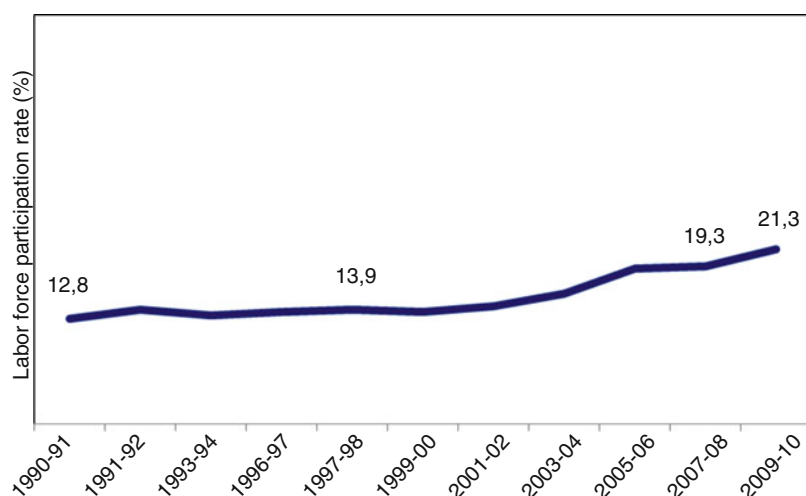


Fig. 6.6 Female labour force participation rate, 1990–2010

Table 6.5 Employment and unemployment rates by sex, education, and age

Background characteristics	Male			Female		
	Employed	Unemployed	N	Employed	Unemployed	N
Total	66.4	4.5	92,083	18.9	9.0	85,283
Age Group						
10–14	14.6	9.7	18,532	8.7	8.7	15,542
15–19	48.1	8.9	15,715	16.8	11.3	13,127
20–24	80.4	6.2	10,989	20.2	11.5	10,734
25 and above	88.4	2.9	46,847	22.5	7.9	45,880
Education						
Illiterate	80.1	4.0	27,330	25.6	7.1	48,139
Below matric.	53.3	4.6	41,384	8.8	10.3	24,654
Matriculated	72.0	5.0	12,238	9.6	21.3	6,249
Intermediate and +	75.2	4.9	11,131	18.8	16.7	6,241

Source: Pakistan Labour Force Survey 2008–2009

the below-matriculation group, which has distinctly lower employment; women show a U-shaped association between education and employment: the highest rates of employment are among the uneducated and the most educated. Unemployment rates for the more educated women, however, are higher, which reinforces the earlier finding that many women, mostly located in urban areas, are searching for jobs. The employment patterns by age in this table are also important: for younger men, employment levels are lower and unemployment levels higher, which reflects the challenges of entering the labour market. Moreover, unemployment in the 10–24 age groups is much higher than in the 25+ age group, even though these lower age groups are the very ones that need to find employment if the demographic

dividend is to be realized. For women unemployment rates are more even, with older women facing lower unemployment.

Of particular concern is additional employment for younger persons and for women, as opposed to men, aged 30 or over who do appear to enter the labour market successfully. Whereas for young men, unemployment may be a question of skills and education not matching emerging job opportunities – a mismatch that can ultimately be taken care of – the problem of employment for women in Pakistan is a different story. Even though the rise in female employment from 14% in 1999 to 21% in 2010 does represent a deviation from past trends (Pakistan *Economic Survey* 2010–2011), employment rates for women have traditionally been much lower than in other Asian societies. This lower female participation in the labour force results from a whole host of social, cultural, and economic forces, ranging from the seclusion of women, limited mobility, and childcare and household responsibilities to sheer lack of opportunities and employer bias against hiring women. Equally important is the demand for employment, which is being fuelled by increasing education among women, poverty, and demands on family income. It is therefore important to point out that changing the employment situation for women requires a quantum jump not only in female education and capacity building but also in the social mores surrounding women's work. Specifically, employers will have to create environments supportive of women's work, such as separate toilets, transport, flexible work hours, crèche facilities, and remunerations for their time outside the home. In certain instances, this employment may even involve out-migration without families, such as in the case of nurses. The continuation, and in fact escalation, of such a trend will most certainly determine whether Pakistan experiences a demographic dividend as a result of the expansion of its working age population.

It is also important to note where women's employment is concentrated. At present, 75% of women's labour force participation is in agriculture, although there is a trend towards an increasing proportion of women entering the labour force especially in occupations outside this sector. Especially notable is the visibility of women in service professions and blue-collar occupations, including female health worker, contracted teacher, shop assistant, bus attendant, or production line operator in industries like electronics manufacturing, most of which require a certain level of education. Overall, about 11% of female workers are employed in community/social or personal services, and a notable 11% work in manufacturing. It is a hopeful sign, however, that to a large extent there is an opening of new avenues of employment that did not exist before.

Figure 6.7, which presents the distribution of employment by sector for three educational groupings of men and women, to some extent reflects the opportunities for women by sector. Uneducated women appear to be concentrated in agriculture, while those with some education are about equally distributed between manufacturing and services; and the more educated (those with more than matriculation) work almost exclusively in the services sector. Future trends, however, will depend on enhanced opportunities for educated women in manufacturing and services, because additional jobs in agriculture, which are often unpaid, are unlikely to

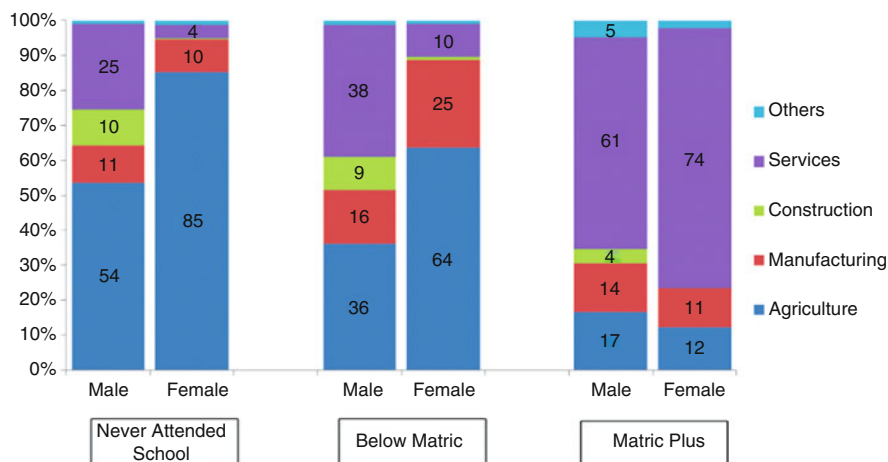


Fig. 6.7 Employment by sector, by major education groups, and by sex (LFS 2008–2009)

boost female employment trends overall. In other words, employment opportunities for women with some education are of particular interest when predicting future trends.

6.4 The Likelihood of Reaping a Demographic Dividend

Based on the findings reported above, this final section identifies the main demographic changes that can be expected and explores the chances for any positive outcomes of age structure changes in terms of Pakistan's development. In general, most population growth over the next 30 years will depend on two factors: how effective the nation is in reducing current fertility, and how well it ensures that the youthful population entering reproductive ages has fewer children than their parents. For example, the wide differences in fertility – and particularly in unwanted fertility – among currently married women in rural areas and the poor will have to be directly addressed. In the case of youth fertility, the levels of both wanted and unwanted fertility must decline. In other words, younger couples will have to decide on fewer than the four children desired by their parents. Since in general, youth tend to be more educated than their parents, education level will also make a difference in fertility reduction; however, equally important is the supporting environment, in which family planning and a smaller family should definitely be the preferred option.

There is a need for a policy (which will be a bit late in coming) marshalling all health resources, private and public, to ensure the provision of basic family planning services. Achieving such a goal is possible, but only with serious efforts by the various arms of the government, provincial support, and the private and

corporate sectors all contributing their share. Most especially, such a policy must address the barriers that prevent large numbers of couples from accessing family planning, maternal health, and child health services. Additionally, even though social and cultural factors may be harder to address, the policy must ensure 100% coverage of reproductive health, including good quality reproductive health services throughout Pakistan. Reproductive health knowledge must also be disseminated to young adolescents and youth so they can delay their first pregnancy, avoid unwanted pregnancies, and subsequently have the number of children they want, when they want them. At the moment, however, this large cohort of young persons has access to few services, especially if unmarried.

To realize its second goal of fully reaping the potential of the demographic bonus, Pakistan has the daunting task of translating a labour force of 200 million into matched numbers of jobs. Needless to say, the benefits will be manifold in terms of increased savings and investment ratios, yet it must be stressed that such benefits are in no way automatic. To the extent that the demographic bonus has been essential to the East Asian success story, it has not been an independent force, but rather one of working to enhance the impact of well-thought-out, successful economic policy. To turn the demographic bonus from opportunity to reality, therefore, the increased proportions of working-age citizens must actually be put to work, and the opportunities for increased savings must be realized through productive investment. To achieve these aims, new jobs must be created through growth of Pakistan's internal economy and, as previously mentioned, that the entry of young people and women into the labour force must be assured. Employment opportunities must also be created in sectors outside of agriculture, with wage levels that enable young people to save and invest income. Only as this generation ages with a much better savings profile to support them when not productive will the demographic bonus take effect.

A third important condition under which most countries in East Asia and elsewhere have successfully capitalized on the demographic dividend arising out of their fertility transition has been by making timely investments in primary and then secondary education, which results in more skilled and productive labour ready to be trained for technical and higher education. In Pakistan, however, there has been a deficiency of successful planning for the basic education, knowledge, and skills that adequately prepare a productive labour force. Hence, creating a critical mass of manpower with scientific and technological skills must now be a priority. In the absence of any such planning and investment, there is a danger of missed opportunities in such emerging fields as IT and telecom precisely because the youthful labour force is ill-equipped.

In fact, Pakistan's education profile, with nearly half its population still illiterate and less than 5% educated up to graduate level, presents a far from encouraging picture (Pakistan Economic Survey 2006–2007). Even though the primary and secondary net enrolment rates have risen (from 42% and 11%, respectively, in 2001; PIHS 2001–2002), they still stand at only 57% and 32%, respectively (PSLM 2008–2009). Hence, the scale and quality of education, particularly scientific and technical education, are issues of serious concern for the advancement of education

in Pakistan. Also extremely low is the proportion of those taking up vocational and technical education after leaving school – around 3% compared with 40% in India and Korea.

To effectively invest in the development of its human resources, therefore, Pakistan must achieve full primary enrolment quickly and move rapidly towards higher enrolments at secondary and university levels and in technical training. Of particular concern should be increasing opportunities for girls' education. To the extent that women are educated and employed, their place in Pakistani society will change rapidly, and their potential contribution to national development will be more fully realized. If this opportunity is missed, there is a real threat that large segments of the population will remain uneducated, unskilled, unprepared, and unable to adapt to changing market conditions at both macro and micro levels. All depends on whether Pakistan can take on the challenge and reverse this direction.

Pakistan's final goal should be for its workers to fill in the labour gaps and skill shortages in nearby countries that are more advanced in their demographic transition and are facing the issues and constraints of an ageing society. For example, in the past, the surge of migration to the Middle East and even earlier to the UK not only represented opportunities for both jobs and a huge amount in remittances, but also took pressure off the limited domestic job market. If Pakistan is smart and well-informed of such trends, it can benefit from the bonus by ensuring a 'fit' between the needs and labour forces of both the sending and receiving countries. All such exchanges, of course, are necessarily contingent on the migration and return migration policies in the receiving countries, so Pakistan will need to strategically develop trade treaties and diplomatic relations with countries in the region to allow the absorption of 'excess' manpower and ensure the maximization of earnings/remittances.

Providing such a fit between regional labour opportunities and the Pakistani work force, however, will be largely dependent upon the path of human resource development in the immediate future, which will also determine whether the working population is educated or uneducated, skilled or unskilled, and whether the investments in education are suited to the needs of the emerging realities of Pakistan and the rest of the region. Appropriate educational development is also crucial for turning economic opportunity into reality because young people entering the labour force now and during the next 20 years of demographic transition must have the types and levels of skills that make them competitive in global markets and global economies. Basically, it will determine how good they are at filling the gaps in other nations and how smoothly they can move across countries.

6.5 Conclusions

Failure to achieve the potential of the demographic bonus would be more than a missed opportunity: if at the end of the demographic transition, Pakistan remains poor and underdeveloped, it will be drawn into dangerous trap in which

demography again plays a leading role, but one that is negative. Hence, the demographic transition, despite being an exciting opportunity, is also a profound challenge. If Pakistan fails to improve on its historical record of political and economic governance, it may fall into a trap of poverty from which it will be very difficult to emerge.

Two groups central to these transformational changes are youth and women, who are not only lead actors but also potential beneficiaries. If women are to constitute closer to half the work force, however, the pace of change is not the only issue. For the demographic dividend to have its total impact, young people and women must be adequately equipped for their role in the labour force. Hence, the gaps in education and skills, which are currently even greater for young women than for men, must be addressed immediately. The dire consequences of not meeting these needs and perpetuating a disenfranchised young labour force are already being seen in the revolutionary waves rippling throughout the Muslim world. The negative effects of failing to improve the lives and status of the female half of the population, however, although perhaps less visible, are all the more significant because they will have ripples for generations to come.

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Chapter 7

Demographic Transition in Iran: Changes and Challenges

Meimanat Hosseini-Chavoshi and Mohammad Jalal Abbasi-Shavazi

Abstract Iran has experienced remarkable demographic changes over the last three decades. After a major political shift from a monarchy to an Islamic Republic in 1979, the new government took a pronatalist ideology which resulted in the suspension of family planning programs and encouragement of early marriage and high fertility. However, the high fertility regime was short lived, and the government reversed population policies and programs in favor of fertility control in late 1980s. Rural development, advancement of education particularly for girls, and nationwide health network system providing free primary health care and family planning services accelerated fertility decline in all provinces as well as in the rural areas. Total fertility rate fell from around 7.0 births per woman in the early 1980s to the replacement level in 2000, and to the below replacement level by mid-2000s. These fertility changes have led to a population with a young age structure which in combination with the expansion of education created the so called ‘demographic window’ for the country. While potentially this ‘golden opportunity’ can result in economic prosperity, the current economic and political situation may hinder the positive prospects in the foreseeable future. Further fertility decline is projected for Iran, and the dynamics of current population calls for the revision of population policies and plans in the country.

Assistance from Dr. Rasoul Sadeghi on an earlier version of this paper is gratefully acknowledged.

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7.1 Introduction

Iran, whose population of 74 million makes it one of the most populous countries in the Middle East, has experienced remarkable demographic changes over the last three decades. In 1979, a major political shift altered the government from a monarchy to an Islamic Republic and led to revision of the constitution and civil laws based on *sharia* law, a pronatalist ideology resulted in the suspension of family planning programs and the encouragement of early marriage and high fertility. This policy was reversed, however, after the 1986 census when policy makers realized that Iran had attained the highest population growth (3.9%) ever recorded. As a result, the family planning program was revived, reproductive health services and free contraception became available throughout the country, and all ministries were obliged to review their policies and programs to facilitate the fertility control policy adopted in 1989.

Over the last two decades, mostly because of the advancement of education (particularly for girls), comprehensive rural development, a nationwide health network system, and the Islamic government's pragmatic views on family planning programs, there has been a sharp fertility decline from around 7 births per woman in the early 1980s to replacement level by 2000 down to 1.9 in 2006. The gap between urban and rural areas has also narrowed, although fertility remains relatively high – about 3.7 – in a small proportion of the population residing in the South-Eastern province of Sistan and Baluchistan. This fall in fertility has led to a young population age structure, which, in combination with the expansion of education, has created a so-called 'demographic window' of opportunity. Recent debates at the government level have paid attention to the prospect of further fertility decline and its possible negative impact on future population growth. As a result, the government has taken a pronatalist approach to increase fertility, although this attitude is not shared by all policy makers and concerned academics and legislators. One possible scenario for the future of population in Iran, in contrast, predicts a narrower gap between rural and urban fertility, more migration from rural areas to the cities, and a smaller gender gap in terms of educational achievements, all of which would contribute to further fertility reduction.

This chapter examines population dynamics and future population and development perspectives in Iran using various demographic data sources. Specifically, after outlining the trend of population growth over the last few decades, it analyzes the level, trend, and pattern of each main element of population growth and then discusses the impact of demographic variables on the age structure, as well as the emerging issues and future challenges of Iran's population and their policy implications.

7.2 Iran's Population: An Overview and Trends

Over the last century, Iran's population has shown a continual rate of growth. At the beginning of the 20th century, the population of Iran was estimated to be around 10 million increasing to 13 million by 1933 (Bharier 1968: 274–275). If these

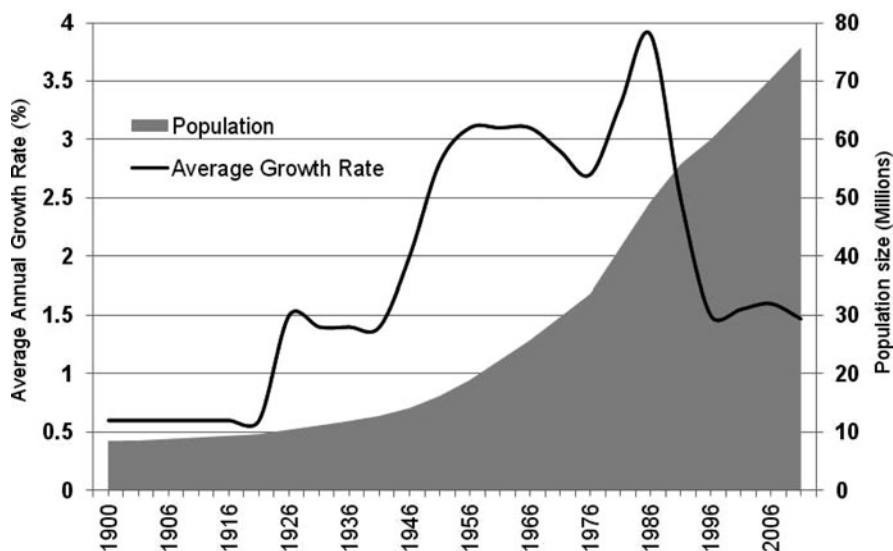


Fig. 7.1 Average growth rates and population size, Iran, 1921–2006 (Source: Based on data drawn from the ‘Iran Statistical Year Book 1389’ (Tables 1-2 and 2-2) published by the Statistical Center of Iran available on <http://salnameh.sci.org.ir/AllUser/DirectoryTreeComplete.aspx>)

population estimates are correct, the rate of growth in the first third of the twentieth century was just 0.8% per annum. Iran’s population continued to grow at a slow rate until the late 1940s. Between 1956 and 1966, the population grew at 3.1% annually due to the decline of mortality along with high fertility, but because of a family planning program launched in the second half of the 1960s, it reduced to around 2.7% over the next 10-year period (Amani 1970, 1996; Maroufi Bozorgi 1967; Saraie 1997). The population increased to approximately 33.7 million by 1976 before it reached 70.5 million by 2006 (Fig. 7.1). From 1976 to 1986, and following the Islamic Revolution with its pronatalist ideology, the growth rate reached its highest level at 3.9% (3.2% due to natural growth and 0.7% from migration), a number unprecedented in the history of the country’s recorded population changes. This sharp rise prompted officials and policy makers to revive population control policies, which resulted in a 1.9% drop in annual population growth rate between 1986 and 1996 and a further reduction to around 1.6% over the subsequent decade. By 2011, Iran’s population was estimated around 75 million.

7.3 Fertility Transition in Iran

During the second half of the twentieth century, Iran experienced phenomenal changes in fertility, from a pre-1961 fertility level that was high but relatively stable to a transitional period following the mid-1960’s introduction of the official

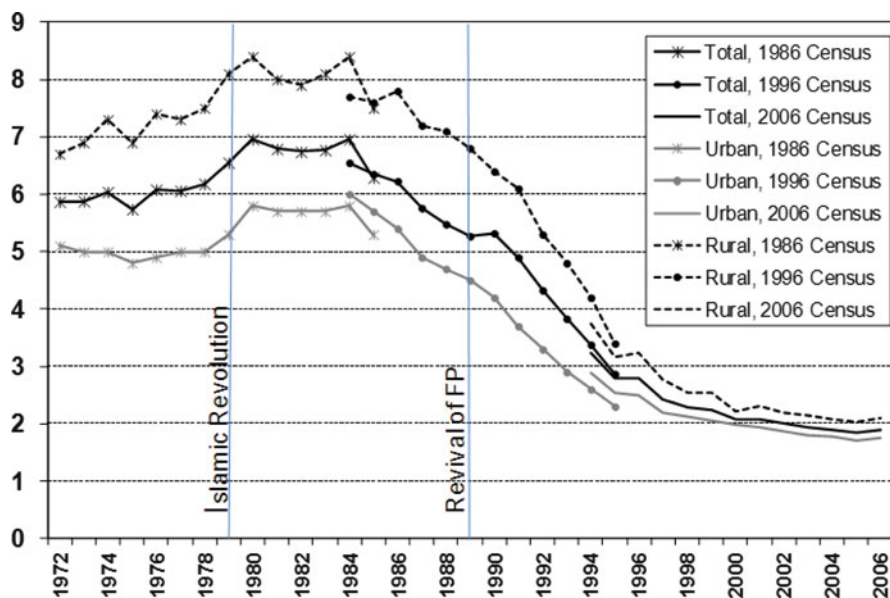


Fig. 7.2 Estimated total fertility rate, Iran, 1970–2006 (Source: Abbasi-Shavazi et al. 2009)

family planning programs resulting in a slight decline during the first half of the 1970s. During the late 1970s and early 1980s, because of social, cultural, and political circumstances, fertility increased to around seven children per woman, but in the mid-1980s, it again began declining, reaching an extraordinary speed of decline during the late 1980s and 1990s. By 2000, Iran's total fertility rate (TFR) was around 2.1 (Fig. 7.2) and, according to the 2006 census, has since declined to around 1.9 children per woman (Abbasi-Shavazi et al. 2009).

Both urban and rural areas have experienced similar fertility trends over the last three decades, although during the 1970s and 1980s, the fertility level in rural areas was significantly higher than that in urban areas. For instance, in 1980, the TFR in rural and urban areas were 8.4 and 5.8, respectively, as opposed to 2.1 and 1.8, respectively, in 2006 (Fig. 7.2). This reduced rural-urban fertility gap resulted primarily from developmental changes and the diffusion of new ideas throughout the country, the expansion of the rural health network system and establishment of health houses (*khanah behdasht*) in rural areas, the promotion of maternal and child health care, and a consequent reduction in infant mortality.

There has also been a ubiquitous fertility transition in the provinces, all of which, regardless of development level, have experienced a sharp decline in fertility. This similarity or "convergence of fertility behaviors" (Abbasi-Shavazi and McDonald 2006) is the product of public awareness and the nationwide diffusion of a small ideal family size norm, together with a reduced infant mortality rate brought about by the health network system. In the 2006 census, most provinces in Iran showed below-replacement level fertility, with Gilan experiencing the lowest TFR (1.3), and

only nine provinces having a TFR between 2.1 and 3.0. The only exception was Sistan and Baluchestan, which had the highest TFR at approximately 3.7.

7.3.1 Reasons for Iran's Fertility Transition

What, then, lies behind the sharp fertility decline and, in particular, the changing patterns of fertility over the last two decades? First, the increased fertility engendered by the post-revolution discontinuation of family planning programs, sociopolitical conditions, and a pronatalist ideology was short-lived, and since the mid-1980s, the TFR has resumed its downward trend, accelerated by the revival of the official family planning program at the end of the 1980s. Such a rapid decline in fertility resulted from both structural changes and changes in values and attitudes. For instance, the female literacy rate and education level increased significantly during the decades after the revolution, which led to an increase in the marriage age and shortened the childbearing period (Abbasi-Shavazi et al. 2007). This increase in women's education raised their public awareness and led to their further participation in various areas of family decision making, particularly marriage and family formation and mate selection. At the same time, the gap between economic aspirations and existing economic realities has widened over the last two decades, the ideal fertility size norm has fallen, and family planning programs have provided the necessary services and means for families to meet their demand for a small family size. These factors have been operating within the context of continued development, modernization, increased urbanization, and the opportunities available over the last three decades for modern lifestyles, which together have generated reciprocal fertility and demographic changes in Iran.

7.4 Future of Fertility

According to the literature (Abbasi-Shavazi and McDonald 2006; Abbasi-Shavazi et al. 2007), this downward trend of fertility will continue in the next decade, discrepancies between fertility levels in rural and urban areas and among the country's provinces will narrow, and the regions and provinces with slightly high fertility will continue their declining fertility trend (albeit at a slower pace) and reach a lower level than the current situation. Fertility will also decline because of continued increasing urbanization as the urban lifestyle and its amenities change couples' aspirations and opportunities in favor of a wealthier life. This attitude change alone can lead to changes in fertility behaviors and the realization of a small ideal family size. The new generation's literacy rate and education level, particularly girls' tertiary education, will also increase, and the next generation will consist of educated people whose attitudes are different from those of the previous generation. The rise in literacy and the inclination toward continuing education may well

lead to the postponement of marriage and childbearing, which may also be delayed by girls' and women's expectations of entering the workforce. Their job seeking and employment outside the home, particularly, will lead to increased independence, which will boost their bargaining power in family and fertility decision making. Although attainment of higher education for women has not yet translated into their participation in Iran's workforce, women's high aspirations for employment and workforce participation make it likely that the rise in education will lead to a rise in female employment and, ultimately, will increase the opportunity costs of childbearing.

In addition to these structural and attitudinal changes in Iran, family planning programs have also played a significant role in institutionalizing the idea of planned families, particularly in rural areas and even among couples with a lower educational and socioeconomic status. These programs thus provide a context for realizing this goal, and improving their quality could help families achieve their ideal family size and reduce unwanted pregnancies.

7.5 Changes in Marriage Patterns

Social and economic changes in the Iranian society during the last half century have led to a transformation in marriage patterns. The mean age at marriage has risen constantly from 18.4 for women and 25 for men in 1966 to around 23.5 and 26.3, respectively, in 2006, although the figure for men underwent only a relatively small decline between 1976 and 1986. These changes have been accompanied in recent decades by a reduction in the gender gap in marriage age, which decreased from 6.6 in 1966 to approximately 3.0 in 2006. The proportion of married women in the 20–24 age group also fell from 79% in 1976 to 50% in 2006. Yet, despite these changes, marriage is still universal, and in 2006, for example, only 1.3% of men and 1.8% of women aged 45–49 had never been married. These trends are consistent with the rise of higher education among females during this period, on the one hand, and the rise in the gap between economic aspiration and reality which was discussed earlier, on the other hand. Aghajanian (1998) noted that, in terms of social norms, the proper time for a woman to marry has moved to after she has finished her high school education.

Although divorce is not common in Iran, there have also been fluctuations in the divorce rate over the last four decades. For example, the divorce-to-marriage ratio increased from 9.8% in 1966 to 10.8% in 1976. This figure declined, however, in the years following the Islamic Revolution only to move upward again in 2001, reaching 12% by 2006. Saroukhani (1997) in his study, *Divorce: A Study on the Reality and its Causes*, analyzed the level and trend of the divorce rate in Iran by province. He showed that the divorce rate has been very low in Iran, before it reached its highest rate in 1974 after the amendments made to the Family Protection Law which gave women the right to divorce (Saroukhani 1997, p. 36). His findings indicate a variation in divorce rates by province. Yazd province has recorded the

lowest divorce rate throughout the years which can be explained by the cultural-religious factors in the province discussed earlier.

The divorce rate in urban areas is almost twice that in rural areas. Nassehi-Behnam (1985, p. 560) argued that three main factors contributed to a higher rate of divorce in urban areas: better employment opportunities for women not only in conventional women's jobs such as teaching and medical assistantships but also in the industrial and service sectors; promulgation of new laws and modification of regulations to attract the female workforce to the sectors of production that provide women with the opportunity to improve their social and economic status; and higher tolerance in urban society for the breaking of civil and religious contracts such as marriage. Although the ratio of divorce to marriage can be influenced by population age structure, the divorce rate is expected to continue rising in the years to come.

The transformation of ideas on and attitudes toward age at marriage and family formation, together with socioeconomic changes like increased levels of education and aspirations for employment, have had significant impacts on marriage postponement among youth. In relation to family change, McDonald (1994) has argued that an idealized family morality is a fundamental component of the culture of all societies. Because family organization is at the core of all societies, it is a component of the society's definition of itself, its identity. Consequently, change in family organization can be expected to be slow and measured. Nevertheless, as globalization proceeds and education levels increase and as communication brings the world and its ideas to everyone's doorstep, the forces of change are ever-present. The extent to which societies will be open to change will vary according to the degree to which deviation from the idealized morality is tolerated. Thus, changes in the Iranian family need to be interpreted not in a conventional western sociological framework of structure and ideology but in terms of the interpretation of idealized morality by religious and state institutions, an altogether more political approach (Abbasi-Shavazi and McDonald 2008). Given the idealized family morality and the important roles of tradition and religion in Iranian society, changes in marriage and the family will be gradual, even in the face of modernity.

Table 7.1 Female singulate mean age at marriage (SMAM) and age-specific never-married, Iran, 1976–2006

Year	SMAM	Ever-married (in %)	
		15–19	20–24
1966	18.4	45.6	86.3
1976	19.7	34.3	78.6
1986	19.8	32.3	72.3
1996	22.4	17.7	60.1
2006	23.3	17.7	50.8

Source: Figures was calculated based on data drawn from the Iran Statistical Year Books (Statistical Center of Iran, 2011).

7.6 Mortality Transition: Levels and Trends

The reduction of mortality has been the main factor underlying Iran's population changes over the last century: the crude death rate, estimated at about 32 per 1,000 in 1920 (Saraie 1997; Amani 1996), has decreased rapidly since 1956, reaching around 6 per 1,000 in 2006. Likewise, the infant mortality rate, which was around 154 per 1,000 live births in 1964, declined to about 26 per 1,000 live births by the mid-2000s (Khosravi et al. 2007). The decline over recent decades – particularly in post-revolutionary Iran – has been phenomenal (Fig. 7.3).

The decline in infant mortality was more pronounced in rural areas, probably because of sound development (i.e., the provision of education, health, road construction facilities, portable water networks, and electricity) and the extension of the health network system. This latter grew to include about 18,000 health houses and 26,000 health officers that serve about 95% of the rural population and provide maternal and child health care throughout the country. Another contributor to the rapid fall in infant and child mortality rates was the rise in urbanization and increased education levels (especially among women), which also lowered the demand for children. Nonetheless, rural-urban and regional differences in child mortality are still observable.

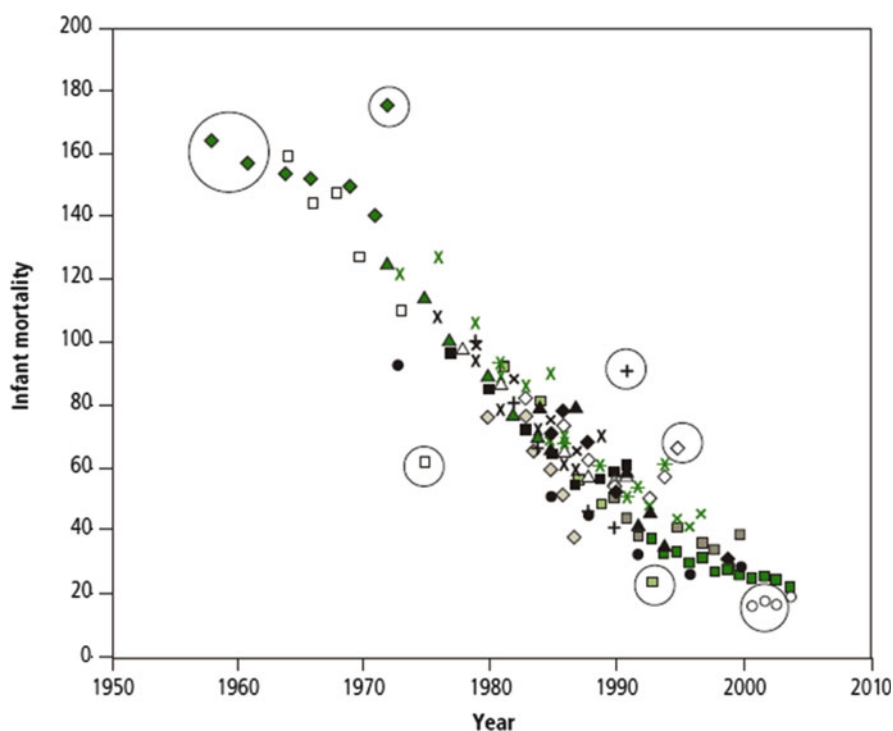


Fig. 7.3 Estimates of infant mortality per 1000 live births according to different sources, Islamic Republic of Iran, 1958–2004 (Source: Khosravi et al. 2007)

Together with the changes in infant and child mortality, life expectancy at birth has risen significantly, from around 38 years during 1950–55 to 56 years by 1976 and then declined to near 50 years in the early 1980s. The improved health conditions and the decline in infant and child mortality following the Islamic Revolution led to an even more substantial rise in life expectancy, to around 70 in 2006. Nevertheless, there is still a 2-year gap between male and female life expectancy, estimated at around 69 and 71 years, respectively, for that same year (UN 2011).

Despite the improvement of health conditions in Iran, life expectancy for men and women in disadvantaged areas is lower than in other areas. There is, however, potential for further reducing mortality and increasing life expectancy, particularly in disadvantaged regions of the country. For instance, it is projected that by 2021, the infant mortality rate will have declined to around 8.25 per 1,000 and life expectancy at birth will have increased to 77.2 (74.7 for men and 79.8 for women) (Statistical Center of Iran 2003, pp. 187–208). Reaching this level of life expectancy, however, will require additional efforts to reduce health disparities and improve the control and treatment of many chronic diseases.

7.7 Migration and Urbanization

Migration is a dynamic process that originates from changing social and demographic circumstances and impacts both origin and destination societies. Iran has experienced significant movements in both internal and international migration over the last half century. And urbanization, besides being deeply rooted in the country's history, has expanded rapidly during the modernization process to become one of the major elements in Iran's population dynamics (Fig. 7.4). This process of urbanization has accelerated over the last fifty years; after increasing gradually from 18% in 1921 to around 31% in 1956, it rose rapidly thereafter to reach 68.5% in 2006. In addition, as Fig. 7.4 clearly shows, the trend for the proportion of urban and rural population displays a crossing pattern: In 1956, 68.6% of the population resided in rural areas, while the remaining 31.4% lived in urban areas. By 2006, these figures were exactly the same only in the reverse direction. Accordingly, the rate of urbanization has grown more than twofold over the last 50 years, a trend that is expected to continue until the rate reaches 75% in 2021, after which it is still likely to increase but only gradually.

A province-by-province assessment of urbanization also indicates an upward trend in all provinces during 1956–2006. In 2006, in only 5 provinces did more than 50% of the population reside in rural areas, while the remaining 25 provinces had a larger proportion of urban population. There are, however, significant differences between provinces in terms of their rate of urbanization, ranging, for instance, from 94% in Qom to 47% in Hormozgan.

Another aspect of the dynamic nature of urbanization in Iran is the increase in the number of cities, from 199 in 1956 to 1,012 in 2006, a growth that has been even more significant in the last decade with the addition of 400 cities (Zanjani 2007).

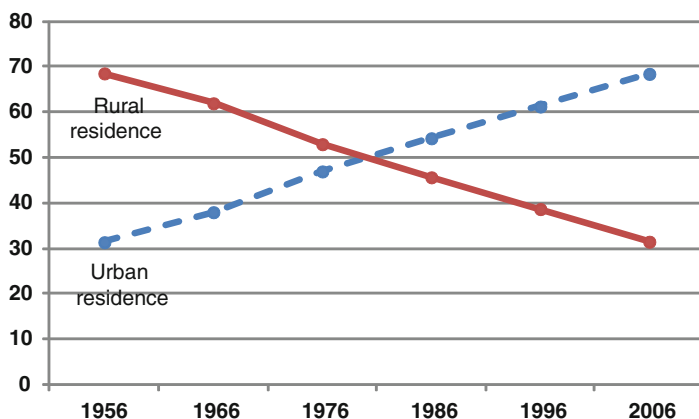


Fig. 7.4 Changes in proportion of population in urban and rural areas, Iran, 1956–2006 (Source: Figures were calculated based on data drawn from the Iran Statistical Year Books published by the Statistical Center of Iran available on http://amar.sci.org.ir/index_e.aspx)

Iran's urbanization process has also been greatly fueled by urban centralization, characterized by a high population concentration in provincial centers and especially the city of Tehran (as the capital city). This centrality has resulted not only in a concentration of population but also a concentration of resources, services, investments, employment opportunities, and in general, the unequal distribution of resources and amenities (*ibid.*, p. 16).

The rapid growth of urbanization in Iran stems from four factors; natural growth in the urban population, rural-urban migration, the transformation of rural areas to urban areas through redefinition and reclassification of cities, and the integration of peripheral villages into the urban domain because of the mushroom-like development and extension of cities. Migration, however, has been the major factor for the expansion of the urban population and the reduction in the rural population in Iran over the last 50 years.

7.8 Family Planning and Fertility Regulation

Various scholarly hypotheses have been put forward to explain the effect of religion on fertility, including a claim that Muslim people are resistant to a small family size (Knodel et al. 1999). The high contraceptive prevalence in Muslim countries like Iran and Turkey, however, argues against this Muslim resistance hypothesis. In addition, different governments interpret the rules of Islam differently, meaning that, depending on the government's position, the religious ideology of Islam may favor a birth-control policy (Omran 1992; Mirzaie 2005). In fact, Iran exemplifies such a position: soon after the 1979 revolution, pronatalist policy makers used Islam's laws to suspend the family planning program and encourage people to have more children. In the late 1980s, however, those with an antinatalist viewpoint applied Islamic dictums to legitimize a birth-control policy and contraceptive use. It should also be

Table 7.2 Contraceptive prevalence rates by method, Iran, 1976–2005

Contraceptive method	IFS 1976	IKAP 1989	IKAP 1992	IKAP 1993	IKAP 1994	IKAP 1995	IKAP 1996	IKAP 1997	IDHS 2000	IMES 2005
Pill	17.3	18.1	22.6	24.5	22.0	22.8	21.9	20.9	18.4	19.4
Condom	4.0	5.7	6.4	6.7	6.6	5.7	5.6	5.4	5.9	8.6
IUD	1.4	3.7	7.1	7.2	7.8	7.1	8.3	8.3	8.5	9.1
Female sterilisation			7.6	9.2	11.1	13.7	15.0	15.5	17.1	17.5
Male sterilisation			0.9	1.0	1.2	1.3	1.6	1.9	2.7	2.8
DMPA (injection)					0.5	1.3	2.5	2.9	2.8	2.8
Norplant					0.1	0.1	0.1	0.5	0.5	0.1
Other methods	3.2	3.0		0.6	1.9	1.7	1.2	0.6	0.1	0.0
Traditional methods	10.1	18.4	20.0	18.6	18.9	19.2	18.0	16.9	17.8	13.6
All methods	36.0	48.9	64.6	67.8	70.0	72.8	73.7	72.9	73.8	73.8

Source: Iran Fertility Survey (Aghajanian 1995) for 1976. The figures for 1989–2005 are taken from the 1989–1997 KAP surveys and the 2000 Iran DHS and the 2005 IMES conducted by Iran's Ministry of Health, whose data the first author of this paper has been authorized to access and analyze

pointed out that the late Imam Khomeini, the religious leader of the Islamic Revolution, never prohibited the use of contraception; rather, it was the war in 1980 that led to the neglect of family planning programs and to the encouragement of early marriage and high fertility (Abbasi-Shavazi et al. 2007; Mehryar et al. 2001).

In fact, Iran has been very successful in birth-control policy, as well as in providing a wide variety of contraceptive choices. Ten years after the 1967 introduction of the family planning program by Iran's Ministry of Health, the 1976 Iran Fertility Survey revealed that about 23% of married women aged 15–49 were using a modern contraceptive method such as the pill, condom, or IUD.¹ Following the revival of the family planning program in 1989, sterilization was actively added to the list of family planning services provided by the government sector and in 1993, DMPA² was introduced into the family planning program. Since then, pill users have been advised to switch to DMPA because it is thought to be more effective and women do not have to remember to take a pill every day. Norplant was also available for a few years from 1994 to 1997, but because of a high demand for early removal, it was eliminated from public family planning services and is now available only in the private sector.

The first situational analysis for implementing a new family planning program in late 1989 revealed that fertility control was being practiced during the 1980s by about 49% of currently married women of reproductive age. Given that the 1980s were a relatively inactive period for the family planning program in Iran, the increases during that period in the use of both modern and traditional methods is a solid indicator of couples' willingness to avoid pregnancy, an avoidance that contributed to the 1984 onset of fertility decline. As Table 7.2 also shows, not only

¹ Intrauterine device.

² It is an injectable contraceptive containing the synthetic hormone progestin in the form of depot medroxy-progesterone acetate (DMPA).

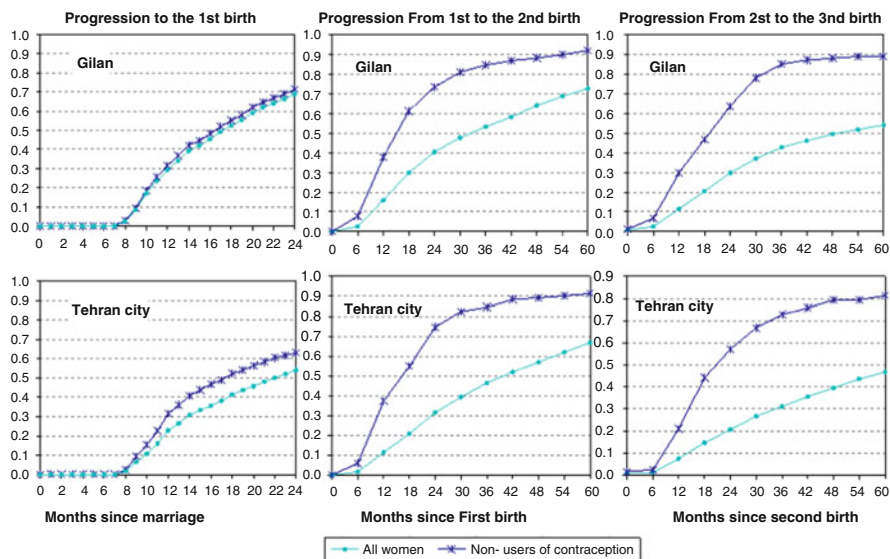


Fig. 7.5 Cumulative life table probabilities of progressing to a first, second, and third birth in Gilan province and Tehran city; all women versus non-users of contraception, Iran, 2005 (Source: Hosseini-Chavoshi 2007)

did the use of modern methods of contraception among currently married women aged 15–49 double during the 1990s (increasing from about 28% in 1989 to 56% in 2000), but the mix of methods was gradually replaced by more effective methods. For instance, during the 1990s, one in five couples of reproductive age adopted a sterilization method to stop their childbearing. Today, the contraceptive prevalence rate among eligible Iranian couples has seemingly reached its peak; there has been no significant increase since the mid-1990s and the rate for any form of contraception has remained constant rate at 73–74%. Nevertheless, according to the last national survey, conducted in 2005, the use of modern contraceptive methods among currently married women of reproductive age has reached 60% while the use of traditional methods has decreased to 14% (Table 7.2). There has also been variation in pattern and level of modern contraceptive use by place of residence ranging from less than 50% in Sistan and Baluchistan and Hormozgan provinces to over 70% in provinces located in west of Iran. However, regions with the lowest fertility level such as Tehran city and Gilan province have the highest rates of traditional contraceptive users (Hosseini-Chavoshi 2007).

Using information from the 2005 Iran Low Fertility Survey (ILFS), in Fig. 7.5, we examine the extent to which contraceptive use affects the postponement of births through contraception's contribution to the parity progression rates for Gilan province and Tehran city. Using a survival analysis, we compose the probability of progression to each parity among all women (contraceptive users and non-users) and compare it with the progression among non-users. The differential then represents the overall effect of contraceptive use on parity progression. Contraceptive use

before the first birth has little effect on first birth timing: in general, about 55–70% of all women had their first child within 2 years after marriage, with the figure being slightly higher for non-users of contraception (first left panel in Fig. 7.5). This panel also indicates that the ‘all women’ sample progressed to the first birth only slightly later than women who had not used contraception; in other words, fertility decline in Iran has not been due to delay of the first child within marriage.

Nevertheless, the general pattern of progression at parity one onward differs greatly from that for parity zero, and the remarkably high progressions from the first to the second birth, and from the second to the third birth among non-users of contraception suggests that delaying the third child is profoundly affected by contraception use, with non-users of contraception progressing to the third child twice as quickly as users and non-users combined (Hosseini-Chavoshi et al. 2006).

7.9 Changes in Population Age Structure

Fertility, mortality, and migration trends within the process of demographic transition (i.e., declines in mortality and fertility to an ultimately low level) have significant impacts on the population age structure. During the first transitional stage results from declining mortality but high fertility, which leads to a young population age structure. The second stage is the result of a rapid decline in fertility and a resulting shift of the population structure to middle age. The third stage is characterized by a rapid decrease in both fertility and mortality, resulting in a move towards ageing and a 65+ portion of the population that will increase in the future.

Iran has had a young population since the early twentieth century, with around 40–45% of its population being under 15 years (i.e., 40% over the 1956–1986 period but around 42% in 1956 and 46% in 1966). As Fig. 7.6 illustrates, during the last three decades, as a result of the sharp fertility decline, the age structure of the population has shifted toward a middle-aged population, with the ratio of the population under 15 decreasing to 39.5% in 1996 and to only 25% in 2006.

The main characteristic of population ageing in countries that have experienced fertility transition over a short period of time is the acceleration of the ageing trend. Population policies, therefore, should consider the trend of the population transition and prepare the necessary conditions for supporting an elderly population. The pace of future change in Iran’s population age structure will be influenced by the population momentum (a rise in the number of births despite the reduction of fertility to a below-replacement level because of the rise in the number of women of reproductive age). This impact will end, however, over the next 30 years, and an aged population will emerge. At the same time, the downward trend of the under-15 population will continue over the next few decades, albeit at a slower pace, and is estimated to reach around 20% by 2051 (UN 2011). As a result, in the next few decades, a large proportion of Iran’s population will be in their middle and active ages. This reality, although it can have a potentially positive impact on

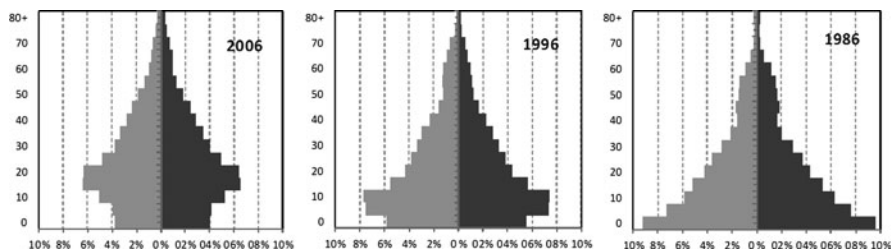


Fig. 7.6 Transitions of the age structure of Iran's population, 1986–2006 (Source: Figures made based on data drawn from the 'Iran Statistical Year Book 1385' published by the Statistical Center of Iran available on http://amar.sci.org.ir/index_e.aspx)

socioeconomic development trends, will create new needs and demands in everyday life that population policies and planning must take into account and address.

Figure 7.7 presents three age pyramids that project the future size and age structure of the population in 30 years (i.e., 2040). The different optimistic and pessimistic scenarios were developed based on the actual 2006 population (70.5 million) and an assumption that current fertility patterns and the Western mortality model will remain constant from 2006 to 2040. The first scenario assumes that fertility will continue declining until it reaches the 1.5 level and predicts a population about 90.4 million in 2040. The second scenario assumes that fertility will be constant at the 1.9 level by 2040 and estimates a national population of around 96.5 million. The third scenario assumes that if the level of fertility increases slightly to replacement level, the population will increase to over 100 million by 2040. The important point here is that under any of these assumptions, whether optimistic or pessimistic, Iran, given its current age structure, will not experience negative population growth rate in this century.

7.10 Population and Education

Over recent decades, Iran has made major achievements in education and health; for example, according to the 2006 census, around 84.6% of the population aged 6 and above (88.7% for men and 80.3% for women) were literate. The gap in literacy and education between rural and urban areas has also been reduced; for instance, in 2006, the literacy rate in urban areas was 88.9% compared to 75.1% in rural areas. Not only has the enrollment rate in secondary and high schools risen, but the expansion of higher education in Iran – including a state higher education system and the establishment of Islamic Azad University (private university) and Payam-e Noor University (a distance learning institution) – has increased access to higher education. More important, statistics for higher education show that around 65% of university students in recent years have been women (Abdollahyan 2004), a clear indication of women's access to and success in higher education throughout Iran. Nevertheless, the educational system still faces many challenges. For example,

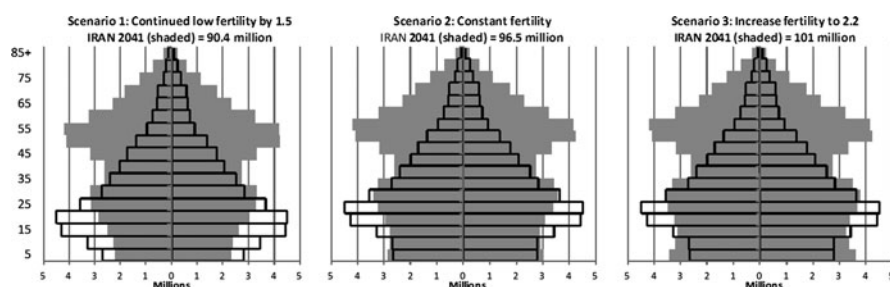


Fig. 7.7 Predicted projection in 2040 using the actual 2006 population from the 2006 Census (*shaded*) and different fertility scenarios (Source: Projections have been made by the authors using the 2006 census data available on website of the Statistical Center of Iran (<http://amar.sci.org.ir>))

existing statistics also show that, for a variety of reasons, a significant percentage of school students drop out at the primary stage and are left behind educationally. Literacy gaps also remain between women and men, between urban and rural areas, and between more developed and less developed provinces of the country.

The quantity and quality of education in Iran has been, and will continue to be, affected by population changes. For example, in the 1980s, the high fertility rate and a significant rise in the number of school-aged children so increased the demand for education that many schools operated in shifts. Increased enrolment was also a factor in increasing pressure on the educational system, which affected the quality of education in schools negatively. There is a mismatch between education and the job market and not all university graduates get a job based on their qualifications (Salehi-Isfahani and Egel 2007). With the fertility decline, the population of school-aged children has decreased, which has reduced the pressure on the education system at the primary and secondary levels. This decline has thus contributed to some extent to the enhancement of the quality of educational standards. Nevertheless, the impact of the age structure transition on school-aged children will be marked and the need for schools and teachers in different regions will be vary greatly. At the same time, the post-revolutionary baby boom cohort has now reached the stage of higher education, meaning that the higher education system is currently facing the same challenges as the school system in the 1980s. Therefore, although the increase in the number of university graduates can be viewed as a positive that will increase the number of educated people available for the workforce, in reality, under such circumstances, educational quality tends to be sacrificed for quantity. Projections of the resources needed for education at various levels, therefore, should be incorporated into educational planning.

7.11 Demographic Bonus/Dividend

Because of high population growth during recent decades, Iran is currently faced with an increased supply for the workforce. In fact, the decrease in population aged 0–15 and the transition to a higher age group have led to an increase in the number

of the active population (15–64), which has provided a ‘demographic bonus’ or ‘demographic window of opportunity’ for national development (Sadeghi and Farjadi 2009). As a result, the human resources available for work have risen, and the dependency ratio (the ratio of the under-15 and 65+ age groups to the 15–64 age group) has declined. Although this demographic bonus, if supported by appropriate plans and policies, could lead to increased production and investment, it will only do so in the presence of an attractive investment environment, the creation of job opportunities, and a financial commitment to education and skills training for the growing workforce. It will also be of limited duration (around 30–40 years) and will be accompanied by a simultaneous shift towards ageing that will increase the dependency ratio and create more difficult circumstances for the country. Hence, failure to seize and manage this ‘golden opportunity’ will not only eliminate potential capital for the country’s socioeconomic development, it may also lead to future sociopolitical crises.

7.12 Population and Labor Force Participation

Despite the favorable population situation, special economic conditions have resulted in high unemployment and labor market disparities that present a serious challenge to Iran. Moreover, even with the existence of graduates in various subjects from both public and private universities, there is a visible shortage of a skilled and professional labor force in certain specializations. This problem especially affects the young – and particularly the educated – population, which presents a major challenge for Iran. As Table 7.3 shows, in 2006, the unemployment rate (the number of unemployed to the total active population) was highest in the 15–19 age group (47% for women and 30.7% for men), followed by the 20–24 age group at around 38% for women and 18% for men. This rate declines by age, reaching around 16% for women and 11% for men in the 25–29 age groups. Overall, around 20% of youth (15–29) were unemployed, although there is a noticeable gap between the unemployment rate for men (18.2%) and that for women (34.6%). The overall unemployment rate for the total population 10 years and above in 2006 was 10.2% (8.8% for men and 15.4% for women).

Women’s participation in economic activities, particularly outside the home, is a major factor influencing the labor force supply (Salehi-Isfahani and Egel 2007).

Table 7.3 Unemployment rate of youth aged 15–29 by sex and age group, 2006 census

Age group	Total	Males	Females
15–19	30.7	27.8	47.0
20–24	20.5	18.1	38.1
25–29	11.2	10.7	15.7
15–29	20.2	18.2	34.6

Source: Figures was calculated based on data drawn from the Iran Statistical Year Books 1385 published by the Statistical Center of Iran available on http://amar.sci.org.ir/index_e.aspx

Although social changes and an increase in women's education, especially at the tertiary level, have led to a slight increase in female participation – for example, the 2006 census showed a rate of around 16.6%, almost twice as high as the 1996 rate – the rate for women is significantly lower than that for men (Mahmoudian 2006). Moreover, in spite of the many factors that could increase women's economic participation and their vertical mobility to higher levels, a high percentage of employed women are engaged in low-skilled and low-income jobs, or in the unofficial 'black' sector.

In brief, the optimal use of this window of opportunity for economic development in Iran requires attention to the following points: First, the impact of this golden opportunity is transitional and will finish within three decades. Second, exploiting the existing opportunity requires the establishment and strengthening of an appropriate institutional framework and sociopolitical environment. Third, failing to enforce the appropriate policies to benefit from this opportunity could lead to serious challenges, including higher unemployment, partial employment, political instability, exhaustion of resources, and a lack of social security for the aged population.

7.13 Conclusions

This chapter has examined the population dynamics and future perspectives of Iran's population and development. Specifically, it has shown that the population of Iran increased from around 10 million in 1920 to around 75 million in 2011, and that major social, economic and political changes in post-revolutionary Iran led to a suspension of population control policies, which in turn led to a significant increase in population growth. This large population increase, together with the negative impacts of the Iran-Iraq war, resulted in the pragmatic review and reinterpretation of family planning programs by religious leaders and policy makers and a subsequent revival in 1989 of the family planning program. The advancement of women's education, rural development, and the expansion of the health network system in the post-revolutionary period have also had a significant impact on health improvement in Iran. As a consequence of the fall in infant mortality rate, the demand for children has decreased but the need for contraception has increased substantially. The government has therefore committed fully to providing couples free access to contraceptives, and there has been a major change in attitude toward a small ideal family size and increased age at marriage. All these factors have contributed to a sharp fertility decline throughout the country over a short period of time.

Iran's fertility transition is important for several reasons. First, the decline occurred in an Islamic context in which the pragmatic view of religious leaders on contraceptive use is exemplary. The comprehensive development measures taken in the post-revolutionary era also helped the success of the family planning program. Second, the demographic changes in Iran over recent decades have had economic and social consequences, including a shift in age structure that has

produced a large cohort of post-revolutionary youth. This young generation differs greatly from their parents' generation in being more educated and having more access to new technology. Nevertheless, the age structure shift, although it has created a golden opportunity for economic investment and prosperity in the country, has also left the nation facing a high unemployment rate, particularly among university graduates, a shortfall that results not only from the post-revolutionary youth bulge but also from a mismatch between education and the job market.

Given the current situation of Iran's population, what policies should be formulated and implemented to manage the future population trends? As we have discussed in this chapter, the current population situation in Iran is different from that in the 1980s: although the objectives of the population control policies have been reached, the post-revolutionary baby boomers are making new demands. Nevertheless, fertility has reached below-replacement level, even in most provinces, and there is a prospect for further fertility decline during the next decade. A significant number of pregnancies, however, are still unintended and some are terminated, which, apart from its ethical, religious, and social dimensions, may result in health and psychological complications for the woman. Because such unplanned pregnancies and resultant abortions can be decreased by a sustained family planning program of high quality, family programs must continue to provide services that meet the demands of couples who wish to control their fertility. The young structure of population along with the demands for new jobs and employment opportunities is one of the priorities of population policies. These will have impact on family formation and fertility decision making for the large number of post-revolutionary baby boomers who are in reproductive ages in recent years. Overall, the current population opportunities and challenges in Iran call for a comprehensive review of past population policies and the introduction of a timely and appropriate policy to address the current needs of the population.

Acknowledgement Some portions of this chapter draw upon previous unpublished report supported by the UNFPA-Tehran.

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Chapter 8

Demographic Profile of Turkey: Specifics and Challenges

Banu Ergöçmen

Abstract The new demographic phase of Turkey is characterized by the low level of fertility and declined mortality. At a rate of 2.16, the fertility is now very close to the replacement level. Social and economic development, the increase in educational level and urbanization, accompanied by attitudinal changes as well as the effect of economic and social globalization have been the underlying factors in the persistent decline of fertility in Turkey. As regards the proximate determinants that have played a direct role on the reduction of fertility, mechanisms of fertility control through increased and effective use of contraception and postponement of marriages have been the fundamental factors. As a result of the primary demographic consequence of fertility decline, combined with a rise in life expectancy, a rapid increase in the absolute numbers and proportions of the elderly will be the future outcome that the country will face. Besides, the young age (0–14) population is expected to stabilize and the size of the economically productive age group to increase doubling within the next two or three decades. However, despite the potential for rapid ageing that will produce high demands on social and economic life, the increase in the numbers of economically productive age group will present a demographic window of opportunity, provided that appropriate economic and social policies are realized.

8.1 Introduction

The recent decline in fertility, which has brought the country close to replacement-level reproduction of 2.1 children per woman, has been the most salient phenomenon in the course of Turkey's demographic history. Nonetheless, the rapid change

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in demographic structure over the past few decades has raised several population challenges. On the one hand, from a demographic standpoint, the decline in Turkey's fertility rate is not surprising given its steady downward trend since the last quarter of the twentieth century. Rather, it is the pace of decline that has been the unforeseen component in this process. On the other hand, since the 1923 founding of the Republic, the population size has increased over five times from the 13.6 million recorded in the Republic's first census (in 1927) to 74 million in 2011. This remarkable change in Turkey's demographic structure, which is still ongoing, has positioned the country 17th among the most populous 20 countries of the world. Although inherently interlinked with the country's social, political, and economic life and diverse population policies, this shift has also been influenced by such external dynamics as global approaches to population issues.

Turkey is situated in both Europe and Asia, with 3% of its total area lying in Eastern Thrace and the remainder on Anatolia, the historic peninsula of Asia Minor. Its population is the second largest after Germany in Europe and the second largest after Egypt in the Middle East. How, then, did the population of Turkey reach 74 million? Is the population growing at an acceptable rate and when will the growth end? How will the components of population growth vary over time? Will Turkey continue to be a young population or will it age in the near future? Such questions are issues of concern not only for Turkey but for the entire region, both continents, and ultimately the entire world, because the effects of demographic events are not constrained by national borders.

This chapter, therefore, describes the current demographic phase of Turkey's population and explores the future demographic developments that can be anticipated based on the existing demographic structure. Because the population's demographic history has played a major role in the formation of the present pattern, it also reviews past trends and changes in major demographic indicators.

8.2 Demographic Change and Its Drivers

A demographic transition, a conceptual model that explains the impact of industrialization on demographic processes, can be defined as the progress from a premodern regime of high and sharply fluctuating fertility and mortality levels to a postmodern one in which both are low and relatively stable (Kirk 1996; Lee and Reher 2011). Observed long term trends in fertility and mortality illustrate that Turkey, like other developing countries, experienced such a demographic transition in the second half of the twentieth century. More specifically, based on current trends in its major demographic parameters, Turkey is about to reach the final stage of a first demographic transition, one in which fertility and mortality decline, life expectancy increases, and the population age structure changes profoundly. In fact, it was rapid declines in fertility and mortality that led to a speedy decline in population growth rates, especially during the last quarter century, leading to today's annual population growth rate of 1.5%, birth rate of 18, and death rate of 6 per 1,000 population (Figs. 8.1, 8.2).

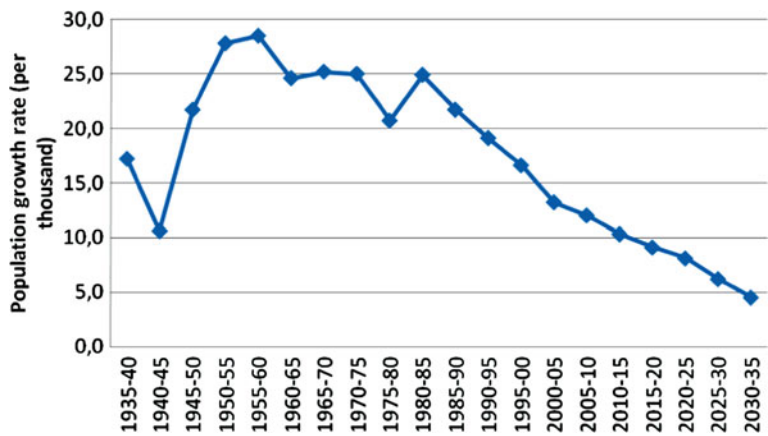


Fig. 8.1 Population growth rates, Turkey, 1935–2035 (Source: SIS 2000; TURKSTAT 2011)

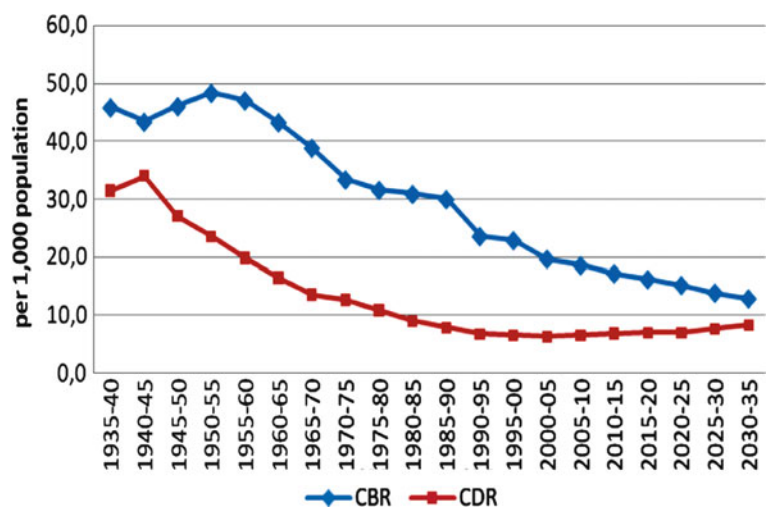


Fig. 8.2 Crude birth and crude death rates, Turkey, 1935–2035 (Source: SIS 2000; TURKSTAT 2011)

Nonetheless, although it is clear that structural changes in mortality and fertility have played a major role in the process of demographic change in Turkey, the modernization process, as conventional demographic transition theory emphasizes, is the real cause of demographic transition because it affects the socioeconomic structure. Also deserving of attention, especially when the transition is considered over a wide time spectrum, are improvements in the social and economic spheres, which prepared the foundation for demographic change, and the diverse population policies put into effect officially at different times.

8.2.1 Population Policy: From Pronatalist to Antinatalist

In the early years of the Republic, population size was among the country's greatest concerns because three consecutive major wars (the Balkan Wars, the First World War, and the War of Independence) had led to heavy human losses and a serious shortage of manpower. At the same time, poor economic and health conditions in the country were contributing to high levels of mortality. The national aim was thus to assist population recovery by increasing the number of births and thereby rebuilding social and economic life. This policy was based on the assumption that population is essential for production increase, agricultural development, and national prosperity, and that manpower is the most important factor for a strong army (Fişek 1967; Franz 1994). Accordingly, the laws decreed up to 1960 were aimed directly or indirectly at population growth, prohibiting, for example, the importation, production, and sale of contraceptives and providing financial incentives to encourage large families. These laws, together with other social factors like political stability, the extension of health protection, the spread of education, improving economic conditions, and, most particularly, public adoption of a pronatalist policy, brought about a gradual increase in population (Taeuber 1958). As a result, high birth rates prevailed until the early 1950s, with the total fertility rate¹ (TFR) rising to 6.6 children in the mid-1930s when life expectancy at birth was no higher than about 35 years and a quarter of births stood no chance of survival to age 1 (SIS 1995). Because these high death rates balanced out the high birth rates, population growth rates remained below 2% during that period, with the highest population growth rate occurring in the 1955–1960 period at 2.85%.

In the 1960s, when population growth began to be regarded as the fundamental cause of many economic and social problems, the pronatalist population policy was replaced by a relatively liberal antinatalist policy. This policy change was pioneered by a joint effort of intellectuals and government officials who began discussing the adverse effects of rapid population growth. They also saw a need to prevent the unwanted pregnancies seen as the main cause of high maternal mortality, whose rates paralleled the increased numbers of illegal abortions. The resulting was the Population Planning Law of 1965, which gave every Turkish couple the right to determine the number and spacing of their children. It also authorized the importation of contraceptives, the provision of services free of charge at public health institutions, and public education to avoid unwanted pregnancies. In 1983, the policy was further improved when voluntary surgical contraception and induced abortions up to the 10th week of pregnancy were legalized on social and economic grounds. The population growth rate, which had started to decline after 1965,

¹ Total fertility rate is the total number of children a woman would have in her lifetime if she were to experience the prevailing age-specific birth rates assuming hypothetically that she survives until the end of her childbearing years.

remained fairly stable until the 1990s, fluctuating at 2–2.5 per annum with parallel declines in the birth and death rates.

8.2.2 Mortality

Mortality in Turkey entered its declining trend in the late 1930s, although the major decline came after the Second World War (Shorter and Macura 1982). As a result of improved health services and living standards, death rates fell sharply during the 1960s, and the crude death rate, which declined from around 35 per 1,000 in the 1940s to 12 per 1,000 in the 1970s to 6 per 1,000 in the late 1990s, has since remained stable. The driving forces that precipitated this drop in mortality levels were the socioeconomic development of the country as a precursor to improving health and the transfer of knowledge and medical technology from developed countries. As a result of these significant improvements, today's life expectancy at birth stands at 72 years for both sexes (PRB 2010). Increases in life expectancy during recent decades have resulted mainly from the improvements in child survival, as well as from betterment of the adult population's survival probabilities.

Nonetheless, in spite of the early gains in adult mortality, the decline in infant and child mortality in Turkey was slow until 1990, with rates as high as 134 infant deaths per 1,000 live births in the late 1970s. Since the last decade of the twentieth century, however, the decline in infant mortality rates has gained speed: in the 15 years from 1993 to 2008, a decline of almost 70% brought the 5-year infant mortality rate down from 53 infant deaths per 1,000 live births to 17 infant deaths per 1,000 live births (Fig. 8.3) (HUIPS 2009). Another notable point in the decline was the structural transformation in the early 1990s of neonatal and postneonatal mortality rates, the former of which, as in developed countries, exceeded the latter. Because postneonatal mortality often reflects the child's environmental conditions and exposure to environmental risk – as opposed to neonatal mortality, which is typically related to maternal and antenatal factors and the availability of skilled and

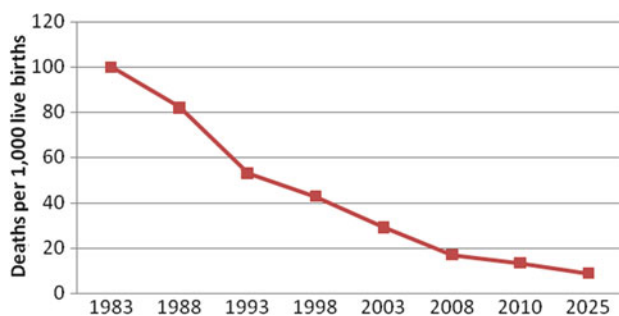


Fig. 8.3 Infant mortality rates, Turkey, 1983–2025 (Source: HUIPS 2009; TURKSTAT 2011)

specialized care at delivery – it came more rapidly under control as the society developed.

Turkey's achievements in reducing mortality among infants and children over the last two decades have been remarkable. In terms of the under-five mortality rate, Turkey is among the countries with the most rapid advances, with an average 7.5% per year decline over the last two decades that is one of the highest in the world. In addition, Turkey has already surpassed the Fourth Millennium Development Goal (MDG4) by achieving more than a two-thirds reduction from the 1990 under-five mortality rate well before 2015. This substantial decline was only slightly less than that of Portugal during the same period, Portugal being the only other European or OECD country to have achieved a greater decline than Turkey (UNICEF 2009).

8.2.3 Pioneering Features in the Decline of Infant and Under-Five Mortality

The main determinant of the decline in under-five mortality is the rapid and significant reduction in neonatal and postneonatal death, thought to have been systemically induced by broad comprehensive improvements in public health and health system services, as well as contextual factors like urbanization, decreased family size, increased GDP/capita, and an increased level of education in women (UNICEF 2009). The survival chances for newborns have also been improved by remarkable improvements over recent decades in maternal and child health and in children's overall nutritional status. Rapid increases in antenatal care attendance, large increases in the proportion of women delivering in health institutions, and the rapid development of neonatal intensive care have also directly contributed to the increased survival of newborns and children (ibid.). At the same time, because of expanded childhood vaccination programs, the proportion of fully vaccinated children has reached 81%, considerably higher than the percentages in prior years (ibid.).

8.2.4 Fertility

Fertility in Turkey has been in a declining trend since the mid-twentieth century, with a major decline after the 1970s and further decline in the early twenty-first century. Nonetheless, tracing the demographic history back to the Ottoman period suggests that the "fertility transition was well under way before the founding of the Republic" (Behar 1995, p. 37). As Behar points out, the total fertility rate of 3.5 for Istanbul as early as the turn of the nineteenth century is a level "far below the normal range of total fertility of pre-industrial Europe" (ibid., p. 37). After the collapse of the Ottoman Empire, however, following a structural and political social

transformation in the early 1920s, fertility increased significantly from around 5.5 children to nearly 7 children, while death rates declined steadily from 1923 to about 1950 as a result of changed perceptions evoked by the social and economic conjuncture of that period. Put simply, fertility climbed rapidly because population growth was encouraged. Yet the effect of policy on fertility cannot be considered the sole factor in the fertility increase. This period is also one of societal change in Turkey, change in which developments were quite favorable for a high fertility regime. These favorable conditions included the nation's agrarian structure, the demobilization of armies and reductions in the length of military service, improvements in nutrition and sanitary conditions, and the emergence of a relatively free market (Taeuber 1958; Shorter 1985).

Permanent decline in fertility began in the late 1950s at a time when the pronatalist policies were still in effect; however, since the rate of decline was lower than the rate of mortality, the population doubled between 1955 and 1985, from 24 to 51 million (SIS 1995). This period is therefore characterized by the onset of a persistent overall fertility decline caused, no doubt, by a number of factors but particularly by changes in population policy. Specifically, there was recognition of the need to control population growth rate, which led to the implementation of corresponding population policy changes that represent a milestone in the country's fertility history. From 1978 to 1993, fertility declined in Turkey by 48%, from 5.1 to 4.3 and then to 3.2 births in the late 1980s, a much faster fertility decline than in many other Middle Eastern countries. In fact, whereas Turkey, Egypt, Morocco, Iran, and Sudan were at similar fertility levels in 1960, three decades later, the fertility level of Turkey was 20% lower than that of Egypt and 40% lower than that of Iran even though fertility had also been on the decrease in these two countries (Behar 1995). There was, admittedly, a period of stagnation at around 2.6 births in the late 1990s, but since then, fertility rates have declined steadily and recently have reached close to replacement level at 2.16 births (Fig. 8.4, Table 8.1) (HUIPS 2009).

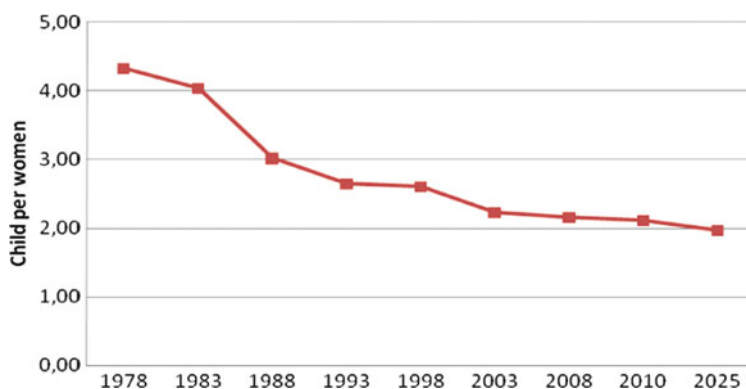


Fig. 8.4 Total fertility rates, Turkey, 1978–2025 (Source: HUIPS 2009; TURKSTAT 2011)

Table 8.1 Key demographic indicators, Turkey, 1990–2025

Indicators	1990	2000	2010	2025
Total population (thousands)	56,473	67,803	73,722	85,407
Population growth rate (‰)	17.0	13.8	15.9	7.7
Crude birth rate (‰)	22.9	20.3	17.5	14.4
Crude death rate (‰)	7.1	6.6	6.3	7.1
Total fertility rate	2.65 ^a	2.23 ^b	2.11	1.97
Net reproduction rate	1.32	1.11	1.01	0.95
Life expectancy at birth, both sexes (years)	67	71	74	76
Life expectancy at birth, females (years)	70	73	76	79
Life expectancy at birth, males (years)	65	69	72	73
Infant mortality rate (‰)	52.6 ^a	29 ^b	13.2	8.8

Source: TURKSTAT (2011)

^aHUIPS (1994)^bHUIPS (2004)

8.3 Correlates of Recent Fertility Decline

8.3.1 Proximate Determinants

Social, economic, and cultural conditions that affect fertility behavior operate through a number of biological and behavioral factors that directly influence fertility. Several analyses of fertility decline in different time periods have used the Bongaarts (1978) analytical model,² a framework for describing the relation between fertility and its determinants. These studies identify rapid increases in contraceptive use and improvements in contraceptive mix, followed by the fertility-inhibiting effect of delays in marriage, as the major factors behind the rapid decline of fertility in Turkey (HUIPS and MI 1997; HÜNEE 2010). Within this pattern, in which contraception and delayed marriage are the most substantial factors, the percentage of contribution of each proximate determinant to the fertility reduction changes over time. Parallel to the increase in the level of contraceptive use, the relative effect of contraception increases, while those of the remaining factors decreases.

Contraceptive use, especially, which was around 50% two or three decades ago, now accounts for 67% of fertility reduction and has shown a sustained increase, one that began in the 1960s but had soared to 73% by 2008 (Table 8.1). Fertility control has also been affected by significant changes in the contraceptive mix, with the

² More specifically, the Bongaarts (1978) model expresses the actual level of fertility, measured by the total fertility rate, as the outcome of the fertility-inhibiting effects of proximate determinants on fertility. It explains variation in fertility by looking at a relatively small number of intermediate fertility variables, including proportion married, contraceptive use, incidence of induced abortion, and postpartum insusceptibility as affected by breastfeeding practices.

Table 8.2 Selected demographic and socioeconomic indicators, Turkey, 1993–2008

Indicator	1993	2003	2008
Median age at first birth (25–49)	20.8	21.8	22.3
Percent of married women 15–49 using any method of contraception	62.6	71.0	73.0
Percent of married women 15–49 using modern contraception	34.5	42.5	46.0
Total induced abortion rate	0.77	0.38	0.29
Proportion never married (aged 20–24)	41.5	50.2	54.4
Proportion never married (aged 25–29)	15.6	20.0	22.7
Population urban (%)	60	68	76
School enrollment (females) (%)	70.8	87.0	91.9
School enrollment (males) (%)	74.1	90.6	93.5
GDP/per capita in USD	5,466	6,808	13,447

Source: HUIPS (1994, 2004, 2009, 2010)

proportion of modern contraception users rising over the last two decades from 31% to 46%. Nonetheless, despite the overall decline in the use of traditional methods, withdrawal has remained the most common traditional method, with around one-fourth of married women in Turkey relying on it.

As the Turkish population has moved toward controlled fertility, in line with Bongaarts' (1982) findings, this control has been exerted primarily through a rise in contraceptive use accompanied by a decline in the proportion married. Hence, delay in marriage is the second major factor inhibiting fertility in Turkey. Even so, the relative effect of marriage on fertility decline is only 24%, five percentage points lower than that 25 years ago (HUIPS and MI 1997; HÜNEE 2010). In Turkey, particularly in the traditional segments of society, individuals are expected to enter wedlock no later than their late 20s. In fact, marriage is so widespread that whereas 9 in 10 teenagers is never-married, this number declines to 2 in 10 among women in their late 30s. Only a small proportion of women remain never-married (1.8%) after age 40, and divorce rates are low (1.7%), meaning that women live their reproductive years predominantly in a marital union, although the proportion of never-married women in Turkey has shown a gradual rise, particularly for the younger age groups. For example, in the figures reported in Table 8.2, when 15 years between 1993 and 2008 is considered, the rise from 15.6% to 22.7% in the proportions of 25–29 age group who have never married signals women's postponement of family building. According to the Turkey Demographic and Health Survey, 2008 (TDHS–2008), a comparison of women aged 25–29 and 45–49 at the time of the survey shows that over the past several decades, the median age at first marriage increased from 19 to 22. This result can be roughly interpreted as indicating a 3-year delay in marriage over a 20-year period. Hence, although women in Turkey experience their prime reproductive years during their twenties, suggesting that the age pattern of fertility still tends toward younger ages, the recent shift of the peak childbearing ages from the 20–24 to the 25–29 age group suggests an increased desire to postpone births to later ages (HUIPS 2009).

Parallel to the increase in age at first marriage, age at entry into motherhood is also on the rise. According to the latest statistics, the median age at first birth is

22.3 years for women of reproductive age, and women give birth to their first child within 1.5 years of marriage. Thus, despite the upward trend in age at first marriage and first parturition, this 1.5 years difference between entry into marriage and entry into motherhood has remained almost unchanged, implying certain established cultural behaviors. In other words, to marry and give birth within a rather short period of time following the marriage appears to be the prevailing structure for marital unions in Turkey. The balance, therefore, comes through the strong desire to stop childbearing after having two living children: 72% of married women with two children prefer not to have another child, and this proportion increases further with the rising number of living children. In TDHS-2008, the theoretical desired fertility rate, however, has been estimated at 1.6 children, meaning that women's fertility aspirations are actually 0.6 children less than the real fertility level.

The other intermediate variables, induced abortion and postpartum insusceptibility, play no substantial role in the recent fertility reduction in Turkey: their relative contributions to reducing fertility below its potential level are no more than 5% each (HÜNEE 2010). In fact, the TDHS-2008 results indicate that the relative effects of these two factors have decreased compared to prior years. The relative contribution of postpartum insusceptibility, determined primarily by the length of breastfeeding,³ has shown a sustained decline from 12% in 1983 to 5% recently (HUIPS and MI 1997; HÜNEE 2010). This pattern is in line with the general understanding that when contraceptive use is widespread, a decrease in the relative effect of postpartum insusceptibility can be expected because of an increase in the relative effect of contraception.

8.4 Selected Social and Economic Factors: Education and Urbanization

In the association between demographic changes and progress in social and economic development in Turkey, education appears as a powerful factor. As shown by numerous studies on Turkey's demography, educational level is significantly associated with demographic variables, and increases in literacy and educational level have played a major role in the transformation of Turkish society. Since the 1960s, particularly, major progress has been achieved in educational attainment, with net primary enrollment ratios in Turkey of 92 for females and 94 for males in 2008 (Table 8.2). Nonetheless, despite this sustained increase in both literacy and educational attainment, the 89% literacy rate for the population over 6 years clearly indicates that overall literacy in the country has yet to be achieved. There also remains

³The median duration of postpartum insusceptibility is 3.9 months. Of the two components of postpartum insusceptibility, the median duration of postpartum amenorrhea (3.6 months) is longer than that of postpartum abstinence (1.7 months) (HÜNEE 2010).

a gender gap in literacy that needs to be addressed: 13% of women over age 6 lack basic literacy skills, whereas only 3% of the male population do so (HUIPS 2009).

In Turkey, more than 76% of the total population lives in urban areas, and urban growth reached its highest in the three decades between 1950 and 1980, when the share of urban population increased from 25% to about 44%. This population movement, generally from rural to urban residential areas and from eastern to western regions, is a result of social change and has thus, since the mid-twentieth century, placed urbanization high on the country's social, economic, and demographic agendas. Today, this migratory shift, which began in the second half of the last century, continues at time-variant rates, and the high population growth rates resulting from internal migration – both rural-to-urban and urban-to-urban – remain very high, especially in metropolitan areas. For instance, one 2005 study found an average of 1.2 migrations for the overall population, with respondents in the 18–69 age group participating in the migration process more than once during their lifetime and an average of 1.9 of the population migrating at least once. In other words, a significant number of the respondents that have migrated at least once have experienced more than one migration (HÜNEE 2006). Nonetheless, although the share of urban population within the total population is expected to continue in the twenty-first century, the rate of urban growth is expected to slow down (TUSIAD 1999).

8.5 Age Structure and Future Prospects

As a result of the interaction of demographic processes, the population age structure in Turkey has changed completely. Most particularly, the population pyramids for different years reveal a transition from a young population with high fertility and mortality to one with declining mortality and fertility in which the base for the youngest cohorts is constricted and reflects the recent rapid fertility decline (Fig. 8.5). For instance, the overall shape of the pyramid for 2000 reflects the existing population momentum, which is also indicative of the potential for future growth. That is, as the 2025 population pyramid suggests, the typical triangular pyramids of the past century are being replaced by rather rectangular figures in which the proportions of the population are fairly evenly distributed among all age groups. As a result, declining birth rates, improving life expectancy, and an ageing population are the future expectations for Turkey's demography.

Although Turkey currently enjoys a young population age structure, with 27% of its total population below age 15 and a median age of 29 years, the projections signal a different profile in the coming decades. On the one hand, the radical changes in the vital rates have paved the way for potentially rapid ageing, and the proportion of elderly already accounts for 7.2% of the population, the highest level in Turkey's history (Fig. 8.6). On the other hand, the share of the adult population aged 15–64, which constitutes the potential labor force, is currently 67% and expected to increase constantly during the next two decades. This age composition

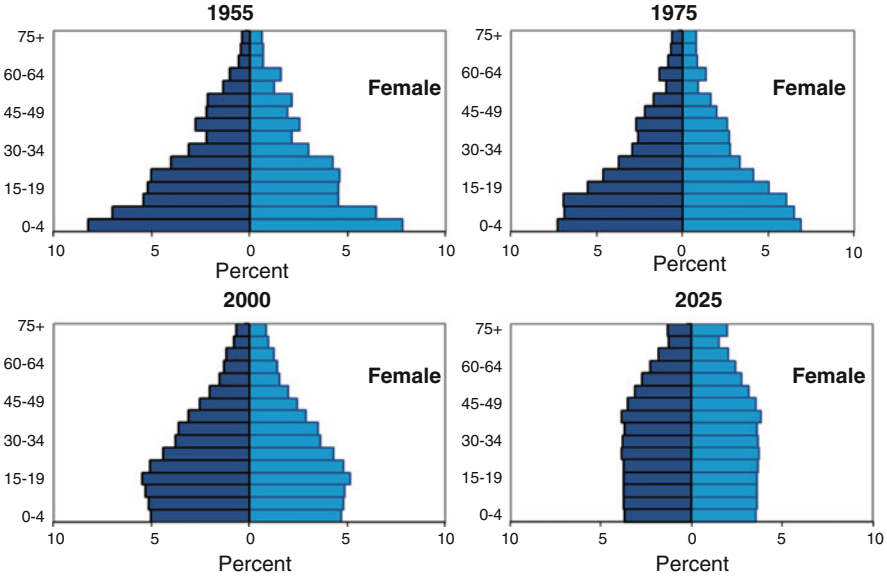


Fig. 8.5 Population pyramids, Turkey, 1955–2025

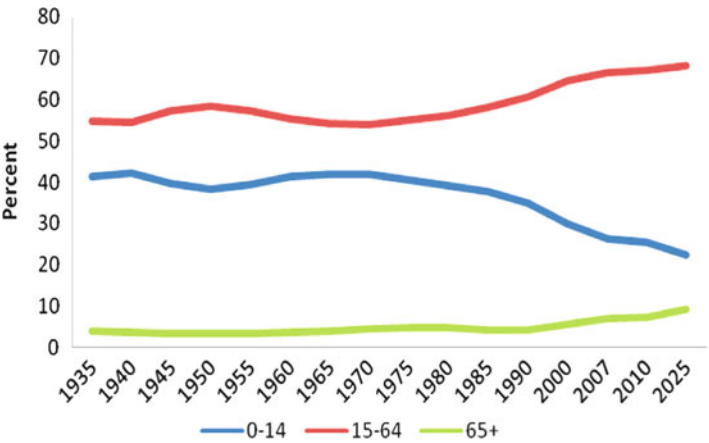


Fig. 8.6 Changes in age groups, Turkey, 1935–2025 (Source: Population Census results and TURKSTAT projections (TURKSTAT 2011))

is a reflection of the joint effect of recent demographic changes; for example, the rapid decline in fertility reduced the numbers in the youngest age groups, life expectancy at all ages increased, and the size of the cohorts reaching age 65 grew considerably because of the high fertility of earlier decades (HUIPS 2009). Projections for 2025 also indicate that the number of children aged 0–14 will stabilize, the size of the economically productive age group will increase and

double, and the number of today's elderly, currently 5 million, will surpass 8 million (TURKSTAT 2011). In total, the population of Turkey is expected to reach 84 million in 2025 but stabilize after reaching 95 million by mid-century.

8.6 Conclusions

Turkey's demographic profile today is very different from that in the twentieth century. Without doubt, the country is more developed and more urbanized, with comparatively higher levels of literacy and educational attainment, as well as longer life spans, a slower population growth rate, a fertility rate close to replacement level, and relatively low levels of infant mortality. Current demographic trends, however, are posing challenges for several aspects of the population issue, and the social, economic, and demographic implications of recent demographic behavior patterns are governing the twenty-first century agenda.

One factor already high on this agenda is the share of elderly, whose steady increase during the period ahead will soon make them and their problems more noticeable. Because of its growing size, this group is expected to place huge demands on social and economic life. With births at a constant 1.4 million per year and no growth in the under-15 age group, on the other hand, the younger population is expected to place far less relative or absolute pressure on society. Nonetheless, this age group is likely to be particularly concerned with the quality of services offered. The working-age population, obviously, will be a major constituent of the "demographic window", an opportunity whose potential will only be realized if accompanied by appropriate economic and social policies. In addition, because the demographic transformation of Turkey, although well underway, has not been uniform throughout the country, the nation will also face the challenge of managing regional disparities during the transition process.

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Chapter 9

Changes in the Demographic Profile of the Egyptian Population: Prospects and Implications

Zeinab Khadr

Abstract Currently, Egypt is experiencing significant age structure changes that will have major implications for its socioeconomic development. Continuing declines in mortality, combined with recent rapid declines in fertility offer Egypt the potential for a demographic dividend on one hand and rapid pace aging process on the other. Although the demographic dividend is considered a gift for many developing countries, it is not permanent. Therefore, it is essential that Egypt seizes this gift and channel it toward national development. At the same time, the rapid pace population ageing combined with the ongoing social and economic changes can result in eroding some of the main traditional sources of support needed for the welfare of the rapidly increasing ageing cohorts. Confronting and benefiting of these two new emerging demographic phenomena requires the adoption of new strategies. These new strategies should secure better the needed labor market skills for the new generations to enable them to compete in the global labor market and hence achieve the full potential of the demographic dividend. They are also required to secure a better quality of life for the ageing population and enable them to work and live independently in their own communities.

9.1 Introduction

Egypt, the most populous Arab country and the second-most populous on the African continent, has a current population of around 84.5 million people, all living in the narrow Nile river basin that comprises only 4% of the country's total area. The official population density based on the total area of the country is estimated at

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84 per km², whereas the actual density calculated using the inhabited area only would amount to 10 times this figure (849 per km²) (CAPMAS 2011). Not surprisingly, over the last five decades, population issues, and in particular population growth, have been of the highest priority for the government of Egypt, which in 1962 became the first Arab country to adopt a national population policy. Since then, many policies have been implemented to tackle the rapid population growth with approaches ranging from a total focus on family planning and well-being in the early stages of life to the post-1994 ICPD (International Conference on Population and Development) concentration on reproductive health and individual well-being. This long history of government commitment has paid off in a significant fertility decline from a total of 7.02 children per woman in 1962 (CAPMAS 1983) to 3 children per woman in 2008 (El-Zanaty and Way 2009).

This decline in fertility levels, accompanied by continuing declines in mortality levels, has contributed to the production of a “boom” generation that is gradually working its way through the country’s age structure resulting in two of the most important demographic phenomena widely experienced in many developing countries, namely the demographic dividend and population ageing. These two phenomena are expected to have many ramifications for the country’s social and economic well-being in the near future. On the one hand, if the potential ‘demographic dividend’ is appropriately managed, it offers Egypt a unique opportunity for economic growth. On the other, the rapid growth of the ageing population presents Egypt with the new challenge of developing appropriate public policies that cater to the needs of this population and their families.

This chapter presents an overview of Egypt’s past and current demographic profile and discusses the major implications of recent changes in the demographic parameters of the age structure. It is organized as follows: Sect. 9.2 summarizes past and future trends in mortality and fertility levels in Egypt. Section 9.3 analyzes the effects of the changes in demographic parameters and their implications for the future demographic profile of the Egyptian population. Section 9.4 examines the main features of two of the most important phenomena of Egypt’s future demographic profile – the demographic dividend and population ageing – and assesses the extent to which Egypt is prepared for these two phenomena.

9.2 Demographic Transition in Egypt

Like many developing countries, Egypt underwent its demographic transition over the second half of the twentieth century. This transition, which is clearly delineated by the nation’s birth and death rates over the last century (Fig. 9.1), consisted of three stages. The first, from 1917 to 1946, was characterized by high levels of mortality and fertility and a natural increase rate between 1.1% and 1.8%. The second, between 1947 and 1986, was characterized by declines in mortality levels accompanied by high levels of fertility, and by its end, a natural increase rate that had reached its highest level of 3.1%. 1990 marked the onset of the third stage in

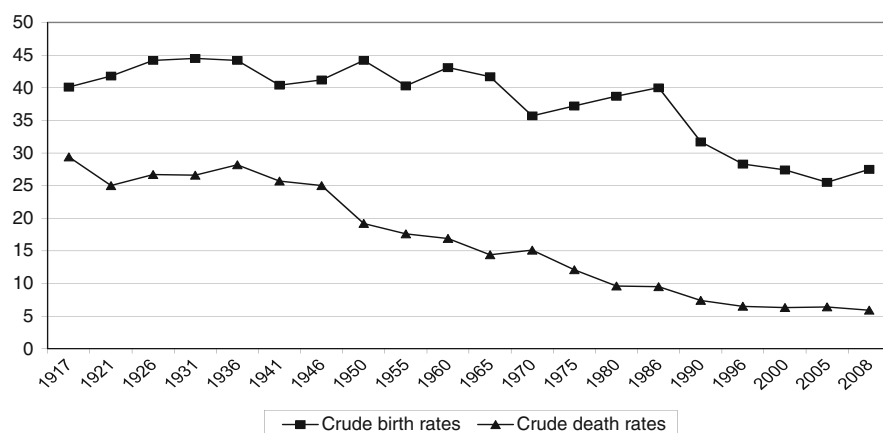


Fig. 9.1 Crude birth and death rate in Egypt, 1917–2008 (Source: CAPMAS (various years))

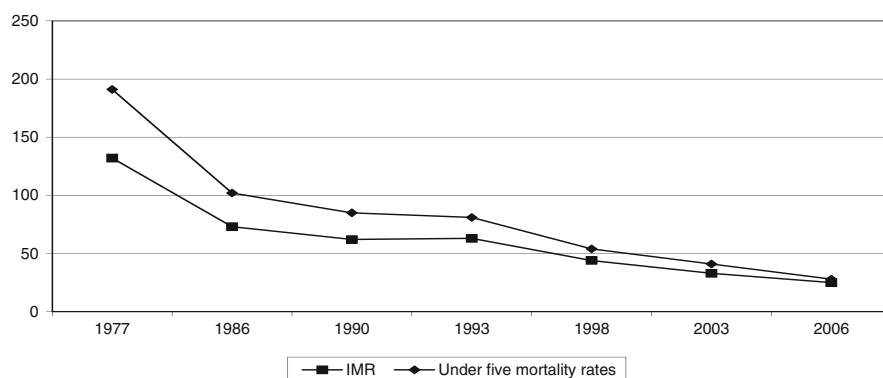


Fig. 9.2 Trends in infant and under-five mortality in Egypt, 1977–2006 (Source: El-Zanaty and Way 2009)

which both mortality and fertility levels experienced significant declines, and by 2009, the natural growth rate had lowered again to 2.3%. Egypt's passage through these three stages was shaped not only by changes in fertility but also by changes in mortality.

Declines in the death rate over the second half of the twentieth century resulted mainly from declines in infant and child mortality due to improved control over infectious, parasitic, and respiratory diseases. These declines in the young population were then followed by further declines across all age groups. Figure 9.2 outlines the trend in early childhood mortality rates estimated from different Egyptian surveys over a 40-year period (El-Zanaty and Way 2009). As Fig. 9.2 shows, between 1965 and 2004, the infant mortality rate declined by more than 80%, and an Egyptian child born between 1965 and 1969 experienced eight times the probability of dying before age 5 compared to a child born between 2004 and 2008.

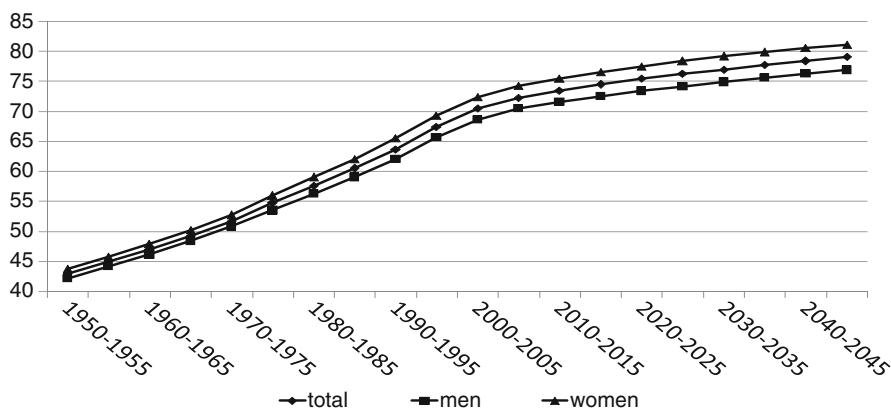


Fig. 9.3 Past and projected life expectancy at birth by gender, 1950–2005 (Source: UN DESA 2011)

These gains in the probability of survival translated to significant gains in life expectancy at birth, which rose from 42.9 years in 1950–1955 to 72.3 years in 2005–2010, an increase of more than 30 years over a 60-year period (Fig. 9.3). Current life expectancy falls midway between the average for the less developed countries, 65.9 years, and that of the more developed countries, 76.9 years (UN DESA 2011).

Differentials in life expectancy at birth by gender in Egypt resemble those observed in other developing countries where women’s life expectancy is longer than men’s (Fig. 9.3). This difference widens as life expectancy increases, rising from 1.6 years in 1950–1955 to 3.8 years in 2005–2010 (UN DESA 2011), and is attributed primarily to declines in maternal mortality accompanied by increases in male-related mortality from non-communicable diseases, accidents, and violence. Improved obstetric care and increased access to family planning, combined with the training of traditional birth attendants and the education of women and families to seek prompt medical care for problems during pregnancy and labor, have succeeded in decreasing the maternal mortality ratio in Egypt by 88%, from 352 deaths per 10,000 live births in 1980 to 43 deaths per 10,000 live births in 2008 (Hogan et al. 2010). In the meanwhile, according to a recent WHO (2011) report for the East Mediterranean Region, it is now “road traffic accidents [that] are responsible for a far higher rate of injury and death among men, by a ratio of about 4:1”.

Declines in birth rates, on the other hand, are attributed primarily to the country’s successful implementation of its population control program starting in the early 1960s. This success has manifested in the achievement of almost universal knowledge of family planning methods, an increase in contraceptive prevalence among Egyptian women – from 24.2% in 1980 to 60.3% in 2008 – and a doubling of the numbers of those who have ever used contraception during the same

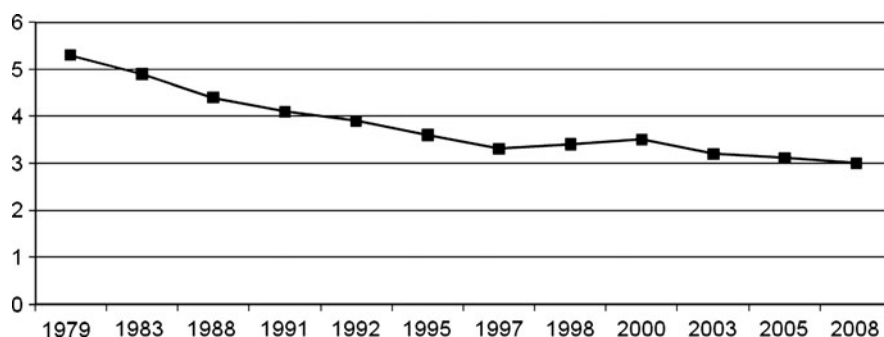


Fig. 9.4 Trends of unmet family planning needs in Egypt, 1979–2008 (Source: Compiled from various fertility survey and DHS reports)

Table 9.1 Age specific fertility rates and total fertility rates: Egypt DHS1988–2008

	1979	1988	1992	1995	2000	2005	2008
15–19	78	72	63	61	51	48	50
20–24	256	220	208	200	196	175	169
25–29	280	243	222	210	208	194	185
30–34	239	182	155	140	147	125	122
35–39	139	118	89	81	75	63	59
40–44	53	41	43	27	24	19	17
45–49	12	6	6	7	4	2	2

Source: El-Zanaty and Way (2009)

period – from 40% to 81%. It further succeeded in decreasing the unmet need for family planning from 63% to 25% (Sayed et al. 1985) and then to 9.2% (El-Zanaty and Way 2009). These efforts brought about a significant decline in the total fertility rate from 5.3 children per woman in 1979/80 to 3.0 children per woman in 2008 (ibid.) (Fig. 9.4).

A closer look at the changes in fertility levels across the different age groups shows that although all age groups have experienced a decline in their age-specific fertility rates, the largest decline over this time period occurred among those aged 30 years and older and in particular those aged 40 years and older (Table 9.1). For those aged 30 and older, the 2008 age-specific fertility rates were only 25% of the 1979/1980 level. Unfortunately, the steep decline observed over the 1979–1997 period began slowing down and Egypt, like many developing countries, is currently experiencing a fertility plateau.

The above changes in mortality and fertility have had and continue to have an impact on Egypt's demographic profile. One of their main consequences is the age structural transition, which has profound and unprecedented implications for development and policy in general if these latter are to achieve their full potential. Hence, the following sections explore the age structural transition in Egypt and present a detailed discussion of the demographic dividend and population ageing.

9.3 Age Structural Transition in Egypt

In response to the rapid changes in the levels of mortality and fertility, Egypt is currently experiencing what is commonly referred to as an ‘age structural transition’; that is, changes in the share of three major age groups (0–14 years, 15–59 years, and 60 years and older) in the total population. These changes, which are clearly reflected in the growth rate of both the total population and the three major age groups (Fig. 9.5), have significant implications for the country’s economic performance, as well as for the social well-being of its entire population. In general, the Egyptian population has been growing at declining rates since 1950, when the average annual growth rate was 2.6%, a number that has now dropped to 1.3% and is expected to reach 0.6% by 2050. Different trends of population growth are observable, however, for different age groups: The number of children under 15 has been growing at declining rates and is expected to decline in absolute number by 2020/2030. The adult population maintained a relatively high growth rate (2.5%) over the 1960/1970 to 2000/2010 period but has been declining steadily since and is expected to reach a steady state by 2040/2050. The highest recorded growth rate is that for the older population, which prior to 2000 fluctuated between 2.5% and 3% but began an increasing trend in 2000 and is expected to peak in 2010/2020 at 3.89 and then range between 3% and 3.5% over the subsequent 20 years.

In absolute numbers, the population of Egypt increased four times over the 1950 to 2010 period – from 21 million in 1950 to 81 million in 2010 – and is projected to increase an additional 40% over the next 40 years to reach 116 million by 2050. Again, considerable variation is observable among the different age groups:

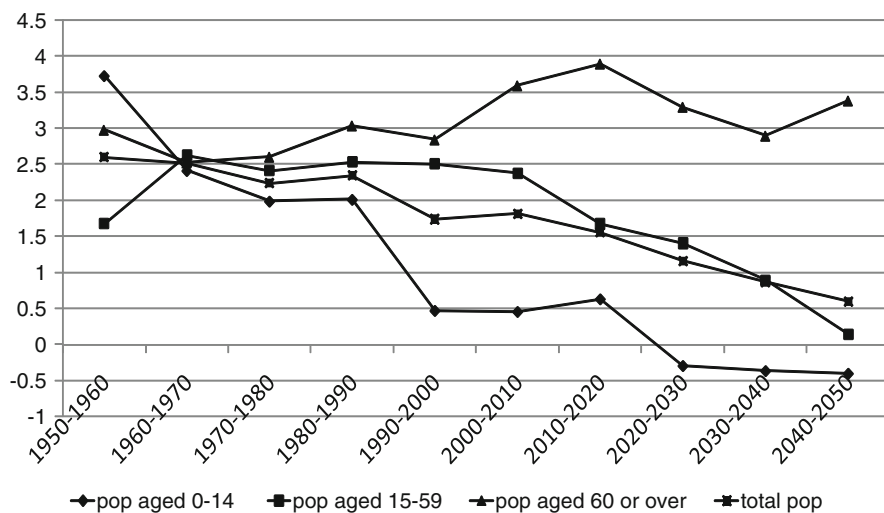


Fig. 9.5 Past and projected growth rates of the major age groups: Egyptian population, 1950–2050 (Source: UN DESA 2011)

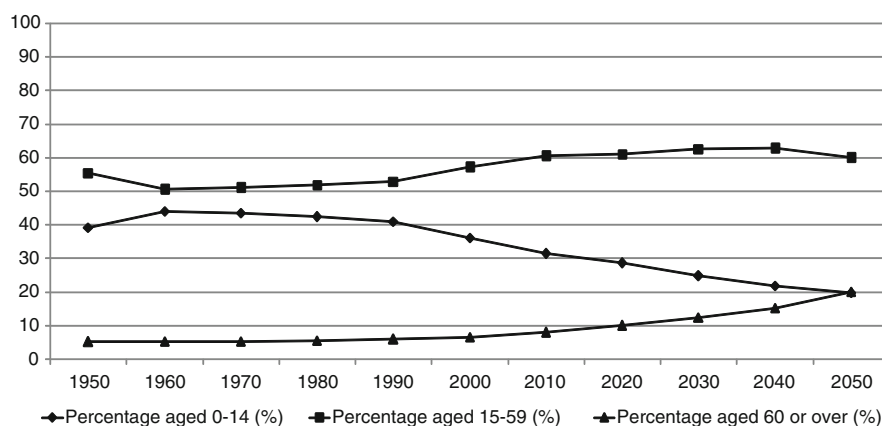


Fig. 9.6 Past and projected relative shares of the three major age groups: Egypt, 1950–2050 (Source: UN DESA 2011)

Whereas the young population more than tripled between 1950 and 2010, it is expected to remain the same until 2050. The adult population, however, not only more than tripled over the first period but is projected to continue increasing over the second period by about 1.5. The most significant changes are occurring among the older population, which quadrupled over the first period and is expected to quadruple again over the second period.

A comparison of the past and projected relative shares of these major age groups in the total population reveals the time line for Egypt's age structural transitions (Fig. 9.6). Whereas the 1960–1990 period was characterized by a large percentage of children under 15 years (a trend that then began declining), the relative share of the aged population began increasing in 2010, and by 2050, for the first time in Egypt, the relative share of young children (<15 years) will be similar to that of the older population. At this time, according to current projections, each of these age groups will account for one fifth of the total population, and by 2055, the relative share of the older population can be expected to continue increasing and exceed that of the young population. By 2085, the relative share of the older population (31%) is projected to be exactly double the relative share of the young population (15.5%).

The above changes in the different age group shares could potentially have strong impacts on Egypt's socioeconomic development, impacts for which the dependency ratio can be a valuable indicator. Figure 9.7 therefore graphs the total, young, and old age dependency ratios for Egypt for 1950–2050. As the figure clearly illustrates, although the young dependency ratio began declining in 1960, it began its truly steep decline in 1990 from 77 young children per 100 adults to a projected 33 young children per 100 adults by 2050. The old age dependency ratio, in contrast, maintained a relatively stable level over the first 60 years, at 11 older persons per 100 adults, but is expected to have increased steadily to 33 older persons per 100 adults (i.e., the same as the young dependency ratio) by 2050. The combination of these two ratios results in the classic pattern of total dependency

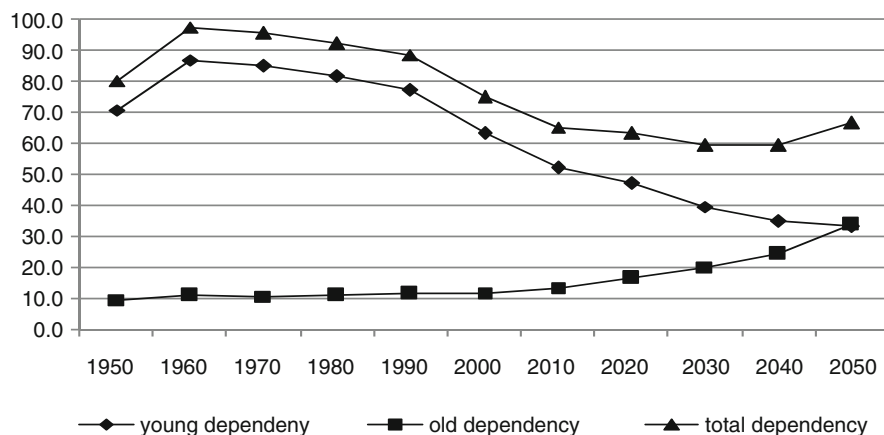


Fig. 9.7 Past and projected total, young, and old age dependency ratios: Egypt, 1950–2050

ratio observed in many developing countries, one characterized by a steep and steady decline followed by a period in which the dependency ratio reaches its lowest level before beginning another upward trend. In Egypt, the first period extends between 1960 and 2020, during which the total dependency ratio declined from 97 dependents per 100 adults to 63 per 100 adults, while the lowest dependency ratio of 59 dependents per 100 people is projected to occur between 2030 and 2040 before another upward trend begins in 2050. In any country, all such changes in dependency ratio are closely tied to economic development.

It is also worth noting that the period during which the dependency ratio reaches its lowest levels is considered a demographic ‘gift’, one usually referred to as the ‘demographic window of opportunity’ or ‘demographic dividend’. During this period, the large share of economically active individuals combined with the small share of dependents in the population can boost economic growth through more savings and capital accumulation. In Egypt, this period is expected to extend between 2010 and 2040.

9.4 Emerging Demographic Issues in Egypt

9.4.1 *Demographic Dividend*

As in many developing countries, one major consequence of the demographic transition and the subsequent age structural transition in Egypt is the demographic dividend, which, dependent on the fertility change scenario used, is expected to take place in one of three different periods. According to Zaky’s (2009) calculations, if Egypt can attain a total fertility rate (TFR) of 2.1 children per woman by 2017, the demographic dividend may begin in 2014 and end in 2042; if it attains a TFR of 2.1

by 2022, the dividend may occur during 2015–2046; but if it achieves a 2.1 TFR by 2032, the dividend will probably emerge in 2020–2050.

Regardless of the starting point or duration of the dividend period, there is considerable consensus in the literature that such a dividend is not automatic and the only path to profiting from the opportunity it offers is the implementation of appropriate and well-designed policies in other areas. Bloom and colleagues (2003), for example, emphasize that a demographic transition is likely to be ineffective in realizing the demographic dividend in the absence of appropriate political, social, and economic policies and their outcomes (e.g., the rule of law, an efficient bureaucracy, a low level of corruption, political freedom, a low expropriation risk, openness, freedom of political representation and freedom of speech, health care systems, schooling, roads, and transport). This argument is clearly echoed in other literature:

A demographic bonus can only be realized if, as was true in East Asia, human capital investments have been made in the health and education of those entering the labor force, and jobs have been created to meet the demand. Only then can youth realize their potential as healthy and productive members of society and boost their countries' economic and development status. Investment in youth must be made early enough to create the conditions for this bonus to occur. Otherwise, a large, uneducated, unhealthy, unskilled, and underemployed workforce creates a burden to society and threatens its stability. (Hakkert 2007)

Some researchers would go even further by claiming that countries must choose between two radically divergent paths: making the necessary investments in human, economic, and political capital or wasting the opportunity to reap the demographic dividend and perhaps even having it become a risk. Making the necessary investments entails educating the young, making physical capital investments, and ensuring stable political and economic institutions, as the East Asian economies did, in which case the demographic bonus will offer substantial benefits. Without such complementary investments, the demographic bonus may be wasted or even become a burden for countries whose inability to provide productive employment for an increasing labor force results in increasing unemployment. As Bloom and colleagues (2007) put it, “without the right policy environment, countries will be too slow to adapt to their changing age structure and, at best, will miss an opportunity to secure high growth. At worst, where an increase in the working-age population is not matched by increased job opportunities, they will face costly penalties, such as rising unemployment and perhaps also higher crime rates and political instability” (p. 3).

Given that the window of opportunity in Egypt is expected to open within 3 to 9 years (depending on the fertility decline scenario), the primary question is the extent to which Egypt is ready to cash its demographic dividend. This question can be partly answered by an exploration of the current state of Egypt's human capital and labor. As regards the first, even though investment in human capital is an obvious first step toward seizing the opportunity of the demographic dividend, a recent study reveals that, despite the Egyptian government's long commitment to education, 11% of Egyptian youth aged 18–29, about 81% of whom are girls, have

never been to school (Population Council 2011). According to this same study, 17% of young people drop out of school before finishing basic education and 36% of young people's education is vocational or technical, with only 28% of youth going on to higher education. This educational profile points to the shortfalls of Egypt's educational system (Population Council 2011).

In terms of the labor market and its relation to demographic potential, in 2007, the unemployment rate for young people aged 15–29 was 24.5%, more than double the world average of 11.9% (INP 2010). Therefore, even though the Egyptian labor market survey shows a decline in youth unemployment from 25.6% in 1998 to 16.7% in 2009, this issue remains of major concern in Egypt. Closely tied to this labor market shortfall is the fact that Egypt, like many developing countries, suffers from a slow economic growth that constrains its opportunities for job creation.

The Egyptian labor market also continues to be subject to a gender gap: the unemployment and jobless rates give ample evidence of the limited contribution made by young women. In 2009, the unemployment rate for young women was more than 2.5 times that for young men (32% vs. 12.4%), and the jobless rate for young women was 3.5 times the jobless rate for young men (87.5% vs. 23.7%) (INP 2010). These differences pose the important question, 'why are women withdrawing from the labor market?'. Common answers to this query focus mainly on the significant role of shrinking employment opportunities in the public sector, which offers women a more accommodating work environment than the private sector, and on female withdrawal from the labor market (Assaad and Barsoum 2007; Assaad 2007).

Another important dimension to be considered is the ability of the educational system to qualify its graduates to meet the needs of the labor market. In Egypt, the quality of education – and in particular, higher education – has been the subject of substantial criticism (Antoninis 2001; El-Hamidi 2006). In fact, one recent World Bank/OECD document on the higher education sector in Egypt explicitly points to the following shortcomings (OECD 2011):

- Narrow access and limited opportunities for students;
- Poor quality educational inputs and processes;
- Deficiencies and imbalances in graduate output relative to labor market requirements; and
- Underdeveloped university research capability and linkages to the national innovation system.

These shortcomings manifest in the ill performance of young graduates in the labor market. For example, in an ILO survey (ILO 2006) of the labor market opportunities and challenges facing young Egyptians 15–29 as they first exit school, 66% of the employers rated the overall ability of their young recruits as merely fair and 41% rated the young recruits' ability to apply their knowledge to the workplace as poor. One explanation offered for these findings was three decades of a governmental policy of guaranteed public employment for secondary school and university graduates, which has been instrumental in attenuating the educational system's emphasis on quality and increasing its concern with quantity (Assaad and Barsoum 2007). As a result, the system has produced a large cohort of graduates qualified to

deal with a bureaucracy or state-owned enterprise but unprepared for productive employment in a market economy. This lack of needed job skills combined with the large number of graduates has helped delay young people's entrance into the job market and their transition from school to work.

Given the above profile of the human capital and labor market situation for young people in Egypt, the only way for Egypt to cash its demographic dividend is to commit to reforming its education policies and the policies governing its labor market.

9.4.2 Population Ageing in Egypt

Individuals 60 years and over make up the fastest growing segment of the Egyptian population. After sustaining a 3.5% growth rate in 2000–2010, this segment is expected to grow at a rate of 4% per year over 2010–2020, meaning that the older population in Egypt will double in size every 18 years. This rapid pace of growth is also manifested in the projected increases in the proportion and share of older adults in the total population over the next 40 years. Whereas current statistics put older adults at 8% of the total population, by 2050, this proportion is expected to have risen to 20.2% of the total population. In terms of number, whereas 6.5 million are currently aged 60 and older, by 2050 this number is expected to almost quadruple to around 24.4 million.

These statistics raise two important questions: what are the main characteristics of the ageing population in Egypt and to what extent is Egypt ready to care for its rapidly growing ageing population?

As regards ageing characteristics, as in all countries, Egyptian women are more likely to outlive men, with an estimated sex ratio of 85 men to 100 women for those 60 and older in 2010 (UN DESA 2011). This sex ratio does decrease gradually with age, however, from 94 men to 100 women at age 60–65 to 68 men to 100 women by age 80 and older (Fig. 9.8). Nevertheless, in the Middle Eastern context, the feminization of ageing, although a well-recognized phenomenon worldwide, is uniquely affected by culturally oriented traditions of son preference and gender bias practices throughout the life course that contribute to the vulnerability of women in their old age. Among these practices are discrimination against female children, which leads to inequitable access to food and health care; restrictions in accessing education at all levels; childbirth without adequate health care and support; care-giving responsibilities associated with motherhood; grandmothering and looking after a spouse or older parents, which prevents or restricts employment for income and access to an employee-based pension; and widowhood that limits women's access to support (WHO 2007). These practices not only leave women in need of social, emotional, financial, and medical care in old age but increase their reliance on informal sources of support.

The implications of these practices are clearly reflected in the gender differences among the various attributes of Egypt's ageing population. In the 2006 census,

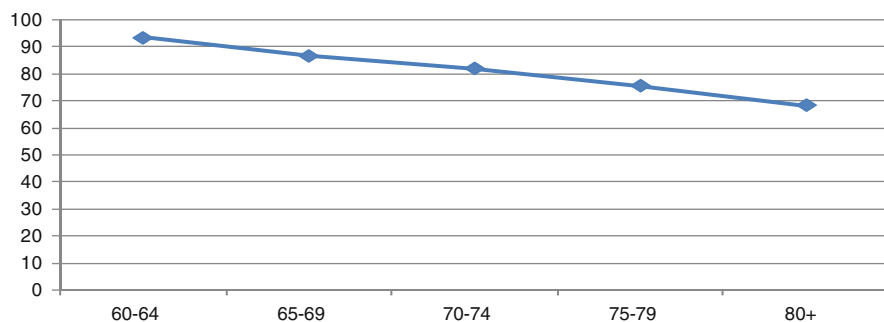


Fig. 9.8 Sex ratio at old age (60+) by age group, Egypt 2010 (Source: UN DESA 2011)

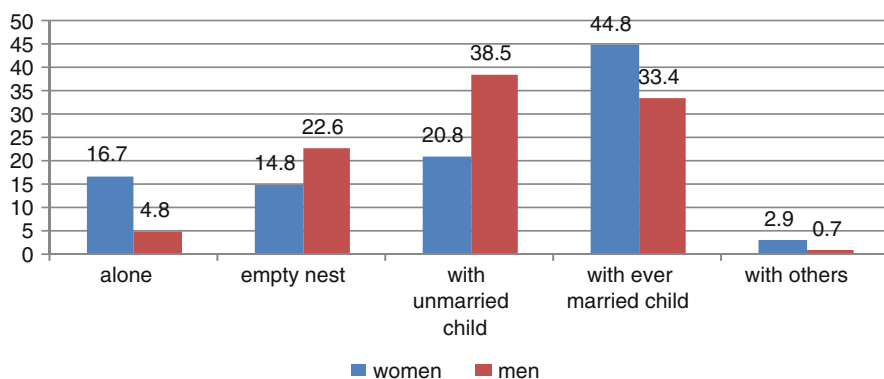


Fig. 9.9 Living arrangements of older population in Egypt 2008 by gender

more than 88% of older women were illiterate or unable to read and write, in contrast to only 70% of men. The census data also showed that, even though employment during old age was significantly high, with 16% of all older individuals holding a job in the labor market, only 2.8% of those working were older women as opposed to 28% of men. This differential reflects women's lower lifelong contribution to the labor market, with only 24.6% women aged 15–59 years making such a contribution compared to 75.4% of their male counterparts (CAPMAS 2011). Women were also less likely to be married in old age because age difference at marriage and women's higher survival rate contribute to an increased likelihood of widowhood (ibid). As a result, whereas 86% of older men were married and a mere 13% had previously been married, 64% of older women had been married but only 35% were still married (ibid).

These general attributes of older persons, and older women in particular, clearly affect an individual's welfare and social support systems. For instance, one of the most common implications of early widowhood is the higher propensity for older women to live alone or with married children. As Fig. 9.9 shows, in 2008, about

17% of older women were living alone compared to fewer than 5% of older men. Moreover, whereas the most prevalent living arrangement for women was living with *married* children (45%), among older men, the most prevalent living arrangement was living with *unmarried* children (39%).

At the same time, although co-residence is seen as the most culturally appropriate path to supporting older persons, the exchange of material support is also considered a viable means of providing for older parents. According to one recent study, however, it is older women who are always on the receiving end of this exchange. Specifically, 43.1% of women 60 years and older were receiving regular material or monetary support from their non-resident children, while the comparable proportion among older men was only 16.4%. The study further showed that this type of support does not always flow upward from child to parent: downward material and monetary support from parents to non-resident children was reported by 38% of older persons, although, as expected, older men were more likely than older women to provide such support (47.6% vs. 28.5%, respectively).

One major critical issue in the life of older persons is health status and access to health care, but in Egypt, information on the older population's health status is extremely limited. One recent comprehensive study of older persons' health status and access to health services in the Ismailia governorate, however, did show that although women usually outlive men in Egypt, older Egyptian women are more likely to have a worse health status than men of the same age. This difference is evidenced by the higher number of poor health self-ratings among older women: about 39.1% of women 60 and older self-rated their health as very poor or poor compared to 28.4% of their male counterparts. Gender differences in health status were also observed in older persons' self-reports of physical limitations and disability. As Fig. 9.10 shows, women 60 and older tended to experience more limitations in their activities of daily living and in both their upper and lower extremities than their male counterparts.

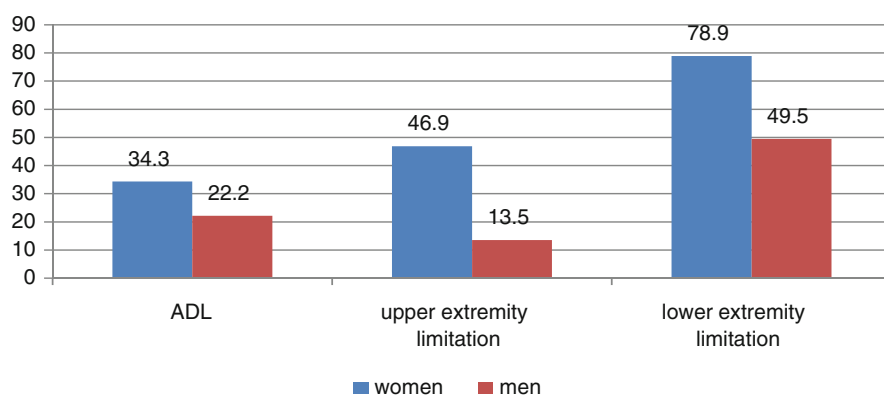


Fig. 9.10 Proportion of older persons reporting limitations in the activities of daily living and upper and lower extremities by gender, Ismailia Governorate (Egypt)

The study also showed that women are more likely than men to be diagnosed with two or more illnesses, 48.5% versus only 30.6%, and to report symptoms of depression: only 5.7% of the older women reported having none of the depressive symptoms listed, as opposed to 16.8% of the older men.

Older persons' access to health services is greatly facilitated by access to health insurance, but in Egypt, such coverage is limited to a mere 38% of the general population (Shawky 2010). The coverage among older persons is even lower, 32.1%, and once again, the gender differences are significant, with 51.6% of older men covered versus only 10.8% of older women.

Yet even given these striking gender differences in the ageing experience, Egyptian society continues to maintain a strong conviction that the ultimate responsibility for older persons rests squarely within the family and their informal support network (ESCWA 2007). Until now, therefore, there has been little progress in formulating a national policy for older people. As a result, the needs of the older population must still be addressed through existing general policies and programs, which frequently incorporate uncoordinated plans, activities, and projects.

9.5 Conclusions

Currently, Egypt is on the brink of significant age structure changes that will have major implications for its socioeconomic development. Continuing declines in mortality, for example, combined with recent rapid declines in fertility offer Egypt the potential for a demographic dividend, one that, however, although a gift for many developing countries, is not permanent. It is therefore essential that the country seize this gift and channel it toward national development. Essential prerequisites for doing so include not only a stable and transparent political and economic environment but also educational reform that equips newer generations with the appropriate skills to compete in the contemporary open labor market. Likewise, the entire Egyptian economy must be restructured so that this gift can be absorbed efficiently and productively and the 'demographic dividend' can be cashed.

At the same time, the rapid population ageing and ongoing social and economic change resulting from current demographic trends will render most traditional sources of support inadequate to meeting the needs of the rapidly increasing ageing cohorts. Solving this problem will require the adoption of new strategies that can better secure quality of life for our ageing population and enable older individuals to work and live independently in their own communities. These strategies must be comprehensive and must address all the needs of older persons and their families, with particular emphasis on providing appropriate healthcare and social security in old age. There is also an intrinsic need to more fully comprehend the gender differences in the Egyptian experience of population ageing.

The important role of demography in providing needed insights for setting the priorities in future political agendas is particularly well explained by David Bloom and his colleagues (2003):

Demography provides a clear narrative within which policies can be framed and a powerful lens through which priorities can be identified. Embracing and understanding demographic challenges must therefore be a priority for all governments, as they build the broad partnerships that will be necessary to secure change. (p. 82)

In the next few decades, policy makers will have to learn to balance the needs of the rapidly growing ageing population while leveraging the potential of the upcoming demographic dividend.

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Chapter 10

Demographic Transition and Gender Systems: The Case of Jordan and Yemen

Ebba Augustin

Abstract Although popular discourse in the West often treats the Arab World as an entity, in reality its countries are as diverse as those that make up Europe or Asia. This chapter therefore focuses specifically on the demographic changes occurring in Jordan and Yemen and links fertility trends and the “youth bulge” to current political developments and prevailing gender systems. It is argued that prevailing patriarchal political systems prevent the development of the type of less-stratified and equitable gender system that is a prerequisite for a balanced demography. That is, it is less gender equality itself that is a key aspect in this process than the social acceptance of a woman’s right to multiple roles, decision-making ability, freedom of movement, and citizenship. This is substantiated by presentation of relevant demographic figures and recent study findings from Jordan and Yemen; both countries with distinctly different Human Development Ranks but with conservative and tribal socio-political systems. Since the early 1970s both countries have significantly reduced their Total Fertility Rate (TFR) from 8.7 to a still high 5.1 in Yemen and 7.9 to 3.6 in Jordan respectively. Despite significant progress in key development indicators Yemen still has a long way to go to provide basic services to the countries primarily rural population to balance its demography. Jordan, on the contrary is able to maintain good and gender equitable health and education coverage for its city based people and still its decline in birth-rate has stalled at a high 3.6 TFR since 2002. The prevailing gender and patriarchal political system in Jordan is a major determinant for this trend. Demographers that have long predicted the risk of social and political upheaval that is associated with the Youth Bulge in the countries of the Arab World need to be persistent in their recommendation for equitable gender systems as important prerequisite for countries to reap the demographic dividend of their youthful population.

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10.1 Introduction

Although popular discourse in the West often treats the Arab World as an entity, in reality its countries are as diverse as those that make up Europe or Asia. This chapter therefore focuses specifically on the demographic changes occurring in Jordan and Yemen and links fertility trends and the “youth bulge” to current political developments and prevailing gender systems. Most particularly, it addresses “gender systems”, the structures, norms, values, and expectations that differentiate males and females beyond biological traits and then justify resulting inequalities on the basis of these differences. Such systems affect demographic development by setting a framework of values and norms that determine fertility-related behavior and individual actions. They thus determine how external changes (i.e., improved access to contraceptives) will eventually influence fertility trends. Prevailing gender norms and values also influence policy making, policy implementation, and the allocation of resources. As a result, demographers and development planners have long recognized the impact of gender systems on fertility decline and on nations’ development progress and have formulated respective policy recommendations. Their realization in Arab World however is patchy and often more window dressing than real, primarily because of the states’ fundamental patriarchal orientation.

When the research for this chapter was originally conducted for a presentation on “Upcoming Demographic Changes in Islamic Countries” at the WDA Expert Symposium (October 2010), neither my fellow presenters nor I could foresee the seismic events that would shake the region only a few months later. Moreover, although the staying power of the strongmen regimes of the Arab World and North Africa had, like the fall of the Iron Curtain that divided Europe, been much discussed and speculated about, such discussion had produced few solid indications of the revolutions to come. Nevertheless, to demographers with insights into the Arab region and an interdisciplinary historical view, it was clear that the demographics of the Arab World, characterized by the largest youth population increase in modern history in combination with other social, economic, and political developments over recent decades, provided an explosive situation that needed only a spark to ignite.

In the extant literature, the close interlinking of the gender system and demographic changes within a country has been widely acknowledged since the early 1980s, when analysis revealed how the patriarchal family and state tend to encourage high fertility. Since then, demographic studies that take into account the differences in gender systems have also shown that, conversely, lower gender stratification leads to fertility and mortality decline. For example, in one study, measures of female status explained as much variance in fertility as all the other socioeconomic predictors combined (Balk 1995). Hence, the current upheaval in the region, although it does pose significant risks, also offers a unique opportunity to tackle the root causes of high fertility; that is, the symbiotic relationship between

state authority and patriarchy that has denied citizens their legitimate rights and kept women locked in a narrow reproductive framework of values and life-choices.

10.2 Trends in the Arab Region and the “youth bulge”

The United Nations International Conference on Population and Development, held in Cairo in 1994, focused on ways to create a balance between population and sustained economic growth. It concluded that to achieve this goal, the regional total fertility rate (TFR) would need to drop to fertility replacement levels of 2.1 children per woman, a goal that Jordan strives to achieve by 2030. Nonetheless, although much progress has been made in the Arab region, which reaches from Morocco and Mauretania in the West to Oman in the East, the Arab World, with a population growth rate of 3.4% per year, is still the fastest growing region worldwide. Moreover, even though fertility rates in the region have begun to decline over the last two decades the pace and intensity of change varies dramatically between countries, with total fertility rates ranging from 1.8 in Lebanon to 5.2 in Yemen and 3.6 Jordan (Higher Population Council 2009a, p. 8).

The countries of the region can thus be classified into four broad categories of fertility transition (Saxena and Rozzet 2002):

1. Countries with early and gradual fertility decline that have the lowest fertility levels in the region: Lebanon and Tunisia;
2. Countries in the Arab region with early but interrupted fertility decline: Bahrain, Algeria, Morocco, Syria, Qatar, and Egypt;
3. Countries experiencing the onset of a fast-paced fertility decline that have reached in a decade what it took other Arab countries 20 years to achieve: the Emirates, Sudan, Libya, and **Jordan**; and
4. Countries that are in the early stages of fertility decline and still have high total fertility rates: Iraq, Saudi Arabia, Kuwait, Oman, and **Yemen**.

In all these countries, high population growth has resulted in an expansive bottom-heavy population pyramid, with youth between 15 and 24 years of age constituting more than one third of the total citizenry, the largest age group in the Arab World. This “youth bulge”, however, must be seen in the context of other key indicators of national well-being, such as infant and maternal mortality, education, youth employment, and gender status, all of which are elaborated below for Yemen and Jordan.

10.2.1 *Developments in the Region: The Arab Spring*

Above all, the key indicators addressed here symbolize Arab youth. These youth, brought together by a negative perspective on the future, very limited possibilities

for civic engagement, and the threat of perpetuated autocratic rule through the dynastic succession of unpopular sons, are shifting the balance of power in the region. Most particularly, they aspire to what former Senator Barack Obama described in a 2004 speech: "... that we can tuck in our children at night and know that they are fed and clothed and safe from harm; that we can say what we think, write what we think, without hearing a sudden knock at the door; that we can have an idea and start our own business without paying a bribe; that we can participate in the political process without fear of retribution, and that our votes will be counted – at least most of the time" (Obama 2004). One might add to this list "to be treated as a citizen with rights and responsibilities and not a minor on whose behalf decisions are made by a patriarchal ruler". It is this concept of equality before the law – which encompasses women and men and runs contrary to the principles of the patriarchal state – that will be an important denominator of population change in the Arab World.

The current winds of change in the Arab world began with a breeze of discontent in Tunisia when in June 2010 a young man was killed by undercover security agents. The resulting low-level protests erupted into the full-blown "Sidi Bouzid Intifada" in December 2010 when a young street vendor, Mohamed Bouazizi, set himself alight in front of the governor's office in Sidi Bouzid. Mohamed had been unable to find decent employment for years and kept himself and his family barely afloat with street vending, constantly harassed by police and municipal workers. The verbal and physical abuse he suffered on the 16th of December was one humiliation too much. Mohammed died 18 days later of his severe burns. His death triggered a rebellion that was directed against what U.S. ambassador Robert Godec described in a 2009 cable as "a police state, with little freedom of expression or association, and serious human rights problems ... , [one] ruled by a dictator whose family was hated for their venality".¹

Within the time-span of a few months the popular uprising had spread to Egypt, Yemen, Bahrain, Libya, and Syria with repercussions and demonstrations in Morocco, Saudi Arabia, and Jordan. The current status quo, however, is as diverse as the Arab World countries themselves. Tunisia and Egypt, where the Arab spring began, are preparing for multiparty elections with a likely scenario of a more democratic system than allowed by the old guard of autocratic rulers. Libya, in contrast, is in a state of armed conflict, with armed rebels fighting for terrain against government forces. Syria's government is promising reform, on the one hand, but continues to wage war against "an armed insurrection" of citizens that take him by his word. In Bahrain, the Saudi family intervened to support a regime that faces sustained popular protest; as a result, the Kingdom is deeply unsettled but trying to buy its way out of public discontent.

¹ "US Embassy Cables Tunisia – A US Foreign Policy Conundrum", *The Guardian*, Tuesday, 7 December 2010, accessed 29 June 2011 <http://www.guardian.co.uk/world/us-embassy-cables-documents/217138>

Two of the overthrown autocrats, Yemen's former president Ali Abdullah Saleh and Tunisia's former president Zine al-Abidine Ben Ali, have found initial refuge in Saudi Arabia. Meanwhile, since January 2011, the Hashemite Kingdom of Jordan has seen increased demands for reform as demonstrators, inspired by the events in Tunisia and Egypt, aired their grievances. These demonstrators, who admittedly number in the thousands rather than the hundreds of thousands, are demanding better employment opportunities, subsidies for rising fuel and commodity prices, and electoral reforms toward more parliamentary power. In contrast to Yemen, however, where protesters are asking for regime change, the monarchy in Jordan is rarely questioned, and the most far-reaching political demands are a gradual process toward a constitutional monarchy and an elected government. In Yemen, the massive protests against Ali Abdullah Saleh's regime, which began in February 2011, continued peacefully until armed men from the Hashid tribal federation confronted armed government forces. After surviving an attack on his compound, President Saleh, who had refused several times to sign externally brokered transition deals, left Yemen for medical treatment in Saudi Arabia and has yet to return.²

10.2.2 The Youth Bulge: Gender Systems and Conflict

Research has found a clear and quantifiable link between a country's age structure and its overall political, democratic, and economic development. For example, since the 1970s, 80% of all civil conflicts have occurred in countries in which 60% or more of the population is below 30, and, as history shows, countries at the beginning of the demographic transition have a nearly 90% risk of autocratic government (Madsen 2010, p. 6). The fact of a young population on its own, however, does not create conflict; rather, unrest results from a combination of factors, including low levels of services, high youth unemployment, high levels of poverty, low levels of education, or an education that bypasses market needs. As a result, a large number of young men who are prevented from engaging socially with the opposite sex outside wedlock must postpone marriage for economic reasons. Mired in unemployment or underemployment, they see all channels for meaningful civic or political engagement as blocked while also finding themselves despised by a political elite that benefits from nepotism and favoritism. Such nepotism, together with corruption, in turn fosters a sense of hopelessness and marginalization at the same time that gender segregation and discrimination mirrors and recreates the patriarchal autocratic state structures on a family level. Indeed, the link between gender discrimination, high population growth, and a young age structure is statistically well supported: countries with a large youth bulge rank

²“Middle East Unrest: Country by Country”, *BBC World News*, 7 June 2011, accessed 30 June 2011 <http://www.bbc.co.uk/news/world-12482293>

on average 27% lower on gender equity than countries with mature age structures.³ These conditions, used in Table 10.1 to summarize the status quo of Jordan and Yemen vis-à-vis Egypt, make up a recipe for trouble.

10.3 Background Information for Each Country

10.3.1 Yemen

Since its declaration of unification in May 1990, the Republic of Yemen has officially been a constitutional democratic republic, governed for 33 years by President Ali Abdullah Saleh, former President of the northern Yemen Arab Republic, whose fourth and last presidential term was extended in 2006 from 5 to 7 years. Although formally a multiparty democracy, Yemen's central government is weak, and the ruling party, the General People's Congress (GPC), de facto constitutes the state. Tribal institutions also play a major role in Yemeni society and politics, and limit the influence (and service provisions) of the increasingly corrupt state. In fact, as of 2011, Freedom House rates Yemen as a 6 on its 7-point political freedom scale (most to least free) and a 5 on its civil liberties scale.⁴ Although the Yemeni government has in recent years alleged implementation of a decentralization policy that grants more authority at the local level, in reality the decentralization process has further institutionalized the informal patronage systems that function in place of an effective national government.

In addition, although Yemen has made significant progress on certain key social indicators, its growing population must also be seen in the context of other serious, multiple, and large-scale challenges like the effects of the global financial and food crisis, declining donor assistance, water scarcity under conditions of climate change, and security. Not only is progress on human and other development indicators slow, especially in gender equity and environmental sustainability, but progress in reducing extreme poverty, malnutrition, and the still high levels of maternal mortality has been reversed. As a result, the 2010 MDG report for Yemen notes that "[d]espite the importance of the efforts exerted by the government to reach the MDGs, the structural challenges and additional challenges, which the process of development in Yemen encounters, have undermined the ability to reach them".⁵ Likewise, the 2010 UNDP Human Development Index ranks Yemen 133 out of 177 countries.⁶

³ Ibid., p. 9.

⁴ Freedom House, "The Authoritarian Challenge to Democracy", *Freedom in the World*, accessed 19 May 2011 http://www.freedomhouse.org/images/File/fiw/FIW_2011_Booklet.pdf

⁵ Ibid.

⁶ UNDP, *Yemen: Second National Millennium Development Goals Report*, <http://undp.org.ye/reports/24d06139cb9b57MDG%20Yemen%20English.pdf>

Table 10.1 The youth bulge in context (“Middle East Unrest” (if not specifically indicated, the table is based on a data summary on the *BBC World News* website))

	Yemen	Jordan	Egypt
Unrest index^a (see footnote ^b)	86.9	50.3	67.6
State fragility index (2009)^c	High	Low	Serious
Corruption^d	146 (178)	50	98
Poverty	41.8	14.2	16.7
GDP (per capita in US\$) ^e	1060	3740	2070
Median age	17.9	21.8	24
Population under 15	45%	35% ^f	33% ^g
Youth out of work (15–25 years of age: ILO definition)	15%	22.6%(m) 45.9% (f) ^h	42.8%
Mean year of schooling for adultsⁱ	2.5	8.6	6.5
Urbanized population (2009)^j	31%	78%	43%
HDI status (total 169) ^k	133	82	101
Gender status (total 134) ^l	134	120	125

^a“The Shoe-throwers Index”, *The Economist Online*, 9 February 2011, accessed 30 June 2011 http://www.economist.com/blogs/dailychart/2011/02/daily_chart_arab_unrest_index

^bThe “unrest index” rating (compiled by BBC World News) is the result of ascribing a weighting of 35% for the share of the population under 25, 15% for the number of years the government has been in power, 15% for both corruption and lack of democracy as measured by existing indices, 10% for GDP per person, 5% for an index of censorship, and 5% for the absolute number of people younger than 25

^cMonty G. Marshall and Benjamin R. Cole, *State Fragility Index and Matrix*, 2009, Center for Systemic Peace, accessed 26 June 2011 <http://www.systemicpeace.org/SFImatrix2009c.pdf> (this index distinguishes between different degrees of fragility: extreme, high, serious, moderate, low, little/no)

^dBased on the Transparency International Corruption Index, 2010

^eUNICEF, *Country Statistics*, 2009

^fWorld Bank (2010)

^gPopulation Reference Bureau, *Data by Geography, Egypt*, accessed 24 June 2011 http://www.prb.org/DataFinder/Geography/Summary.aspx?region=10®ion_type=2

^hThe unemployment rates vary drastically depending on the source. This figure is taken from the employment figures provided by Jordan’s Department of Statistics in its *Gender Perspectives*, 2009. http://www.dos.gov.jo/sdb_pop/sdb_pop_e/index.htm

ⁱUnited Nations Development Programs (UNDP), *Human Development Report*, 2010. Country Profiles and International Human Development Indicators Database, accessed 16 July 2011 <http://hdr.undp.org/en/data/profiles>

^jThe figures on rate of urbanization are based on UNICEF, *Country Statistics*, 2009, accessed 16 June 2011 <http://www.unicef.org/infobycountry/northafrica.html>

^kUNDP, “The real wealth of nations: Pathways to human development”, *Human Development Report*, 20th Anniversary Edition, accessed 20 June 2011 <http://hdr.undp.org/en/reports/global/hdr2010/>

^lWorld Economic Forum (WEF) (2010)

Yemen is also a *largely rural country*, 76% of whose population resides in the countryside and depends primarily on agriculture for a living. Hence, Yemen, with its declining water resources and limited agrarian land, will be severely impacted by expected climate changes. Indeed, it is in the remote mountain areas of Yemen and on its rural plains that infrastructure like roads, health and education facilities, water

and sanitation networks, and employment is seriously lacking. Moreover, Yemen's water situation is already dire and deteriorating rapidly: by 2006, 52% of Yemen's population had no access to clean drinking water (World Bank/UNDP 2007) and the possibilities of allocating new water resources are slim. As a result, water shortages are frequent and widespread, and Sana'a, the fastest-growing capital in the world (at 7% a year), whose groundwater level is decreasing by 4–6 m a year because of overpumping, is expected to run out of economically viable water supplies by 2017. This situation is mirrored throughout the country (WFP 2010).

Yemen's water shortage is complicated by the population's dependence on the narcotic stimulant *qat*, a quick-cash farm crop requiring such heavy irrigation that it consumes 68% of all irrigation water. This crop is also linked to malnutrition and poverty because male heads of household frequently prioritize cash to buy *qat* over family nutrition. Scarce resources, primarily land and water, lead to conflicts, which in turn increase violence in the country, thereby further hampering service provision to rural areas. For instance, one recent survey on small arms notes that “[a]ccording to Government of Yemen estimates, violence accompanying land and water disputes results in the deaths of some 4,000 people each year, probably more than the secessionist violence in the south, the armed rebellion in the north, and Yemeni al-Qaeda terrorism combined. ... While political violence is highly prevalent, individual incidents of social violence are more deadly than political or criminal violence, resulting in higher mortality and morbidity rates per incident”.⁷

Likewise, Yemen's oil reserves, which currently account for three-quarters of the state's revenues, are declining rapidly and expected to run out by 2020 (Boucek 2009). At the same time, Yemen's economic growth of up to 5% until 2008 is almost completely offset by its population growth: almost half of Yemen's population is under 15 years of age – which puts tremendous pressure for services on a government that cannot deliver – and unemployment among both youth and women is increasing. Economically, Yemen, with an average national per capita income of US \$950, is a low-income country, with nearly half its population living on less than two dollars a day. In fact, a 2007 poverty assessment⁸ identified 34.8% of the Yemeni population as poor, and since the food and financial crisis of 2008, close to half (42.8%) the population is estimated to be living below the poverty line. The social development indicators like child malnutrition, maternal mortality, and educational attainment also remain very poor (see Table 10.2) (WEF 2009, p. 189). Yet to maintain even this low status quo, the country would need an additional 16,000 doctors and 500,000 teachers by mid-century.⁹

At present, limited access to health care, as well as its poor quality, present another major challenge. Whereas 80% of women in urban areas have access to primary health care, only 25% of women in the countryside have access to any

⁷ “Yemen Armed Conflict Assessment, Small Arms Survey”, Issue Brief No 2, Graduate Institute of International and Development Studies, Geneva, October 2010, pp. 3–4.

⁸ *Yemen Poverty Assessment Report*, 2010, p. 7.

⁹ World Bank. *Economic Update on Yemen*, Sanaa 2007, cit. in Madsen, *Effects*, p. 5.

Table 10.2 Selected social and health indicators for Yemen

% of under 5 under- weight	Maternal mortality ^a 2009	Under 5 mortality ^b 1990 2009		Literacy, men ^c	Literacy, women	Youth literacy, female	Youth literacy, male	Mean age of marriage (f) ^d
46% ^e	210 ^f	125	66	65.3%	26.9%	70%	95%	22

^aPer 100,000 live births (2009)^bProbability of dying by age 5 per 1,000 live births (2009)^cCentral Statistical Organization, *Statistical Yearbook*, 2008^dWEF (2010, p. 314)^eUNICEF (2009)^fIbid.

health facilities, which severely limits their access to contraceptives and antenatal care. At the same time, girls are initiated early into the prevailing gender roles and respective chores of obedient wife, mother, and housekeeper, whose decision-making powers are limited. As a result, they must take on heavier domestic responsibilities, which also limits their free time and mobility. In this context, the needs of boys take precedence while girls face more restrictions irrespective of school needs.

10.3.2 *Jordan*

The Hashemite Kingdom of Jordan, founded in 1923 as the Emirate of Trans-Jordan under the British mandate declaration to the UN, became a sovereign state in 1946. A constitutional monarchy, Jordan recognizes its king as the highest executive authority, one that nominates the prime minister and supervises the formation of each respective government. Since its very foundation, however, Jordan, which borders Israel, the West Bank, Lebanon, and Iraq, has been closely affected by and involved in the Israel-Palestine conflict; most particularly because, since the outset, it has offered a safe haven for refugees and displaced persons. For instance, during the 1948 war and the Palestinian “Al-Naqba”, 350,000 Palestinians from the West Bank and Gaza streamed into Jordan. This exodus was repeated again during the 6-day war in 1967, and the Iraq–Kuwait war in 1990 resulted in 300,000 displaced Palestinians with Jordanian citizenship returning to Jordan (Goujon 1997). Today, more than two million Palestinians are registered with the UNRWA and, with the exception of 140,000 refugees from the Gaza strip, have full Jordanian citizenship.¹⁰ Jordan is also home to approximately half a million Iraqi refugee “guests” who have no clear legal status or right to work. Of these, only 30,000 are registered with the UNRWA and receive support (UNHCR 2011). Not surprisingly, the

¹⁰The UN Agency for Palestine Refugees, UNRWA, Jordan, website, accessed 17 July 2011 <http://www.unrwa.org/etemplate.php?id=66>

country's legal and political systems reflect the impact of this population influx, as well as the resulting demographic challenges past and present.

The influx has also affected the make-up of Jordan's Arab population, which comprises native Jordanians, mostly from villages and cities on the East Bank but also of Bedouin descent, together with the Palestinians who have sought refuge since the 1948, 1967, and 1973 wars. Although the exact population ratio of each group is neither known nor reflected in public statistics, estimates for Jordanians of Palestinian descent vary between 45% and 75%. The relationship between these two groups is likely to remain politically sensitive as long as the Israel-Palestinian conflict is unresolved. Jordan is also home to Circassian (from the North Caucasus), Chechen, and Armenian minorities that are fully integrated into Jordanian society. Politically, however, the Jordanian monarchy relies for its support on the native Jordanian elite, and Jordanian Palestinians, although seen as part of the economic elite, are politically underrepresented.

Jordan today is confronted with a number of development challenges; most particularly, political, social, and economic reforms; the impact of the global financial crisis; and the increased costs of food and fuel. Consequently, even though the country has achieved its MDGs for poverty reduction (reducing poverty of under 1 USD per day from 6.6% to under 1% since 1992), (Jordan Ministry of Planning and International Cooperation/UNDP 2010) under current socioeconomic conditions, these numbers could rise again. At the same time, the country's persistently high fertility rates pose a serious challenge for public services and the labor market. However Jordan's biggest challenge are its very limited natural resources, especially water.

Having experienced declining rainfall for several decades (see Fig. 10.1) (Subah 2011), semi-arid Jordan is effectively mining its groundwater resources by over 200 MCM. Additionally, even though the 2050 estimate assumes that the current TFR will remain steady, population growth (see Fig. 10.2) has actually produced a parallel and unsustainable increase in demand.¹¹ Nor is overpumping the only threat to water quality, which is also negatively impacted by insufficient management of domestic wastewater, illegal dumping of industrial and domestic waste, and excessive use of pesticides and agricultural fertilizers. Hence, although the vast majority of Jordanians (97% in 2004) (UNDP 2006), unlike Yeminis, have access to piped water, wastewater and solid waste management remain problematic.

Because of its limited natural resources, Jordan has instead built on its human resources and has made significant progress in the last two decades. For example, the educational sector reform begun in the 1990s was reaffirmed and upgraded in 2001 to allow Jordan to participate fully in the global economy. As a result, the

¹¹ Jordan Department of Statistics, website, accessed 18 June 2011, http://www.dos.gov.jo/sdb_pop/sdb_pop_e/ehsaat/alsokan/wom_in/gender2009/health/10.pdf Data source: Jordan Department of Statistics, 1952–1979, cit. in Goujon, *Population and Education Prospects*. The 2050 figure is an estimation based on Scenario 1, in which the current TFR of 3.6 remains. See also, “The Demographic Opportunity in Jordan, 2009”, p. 16.

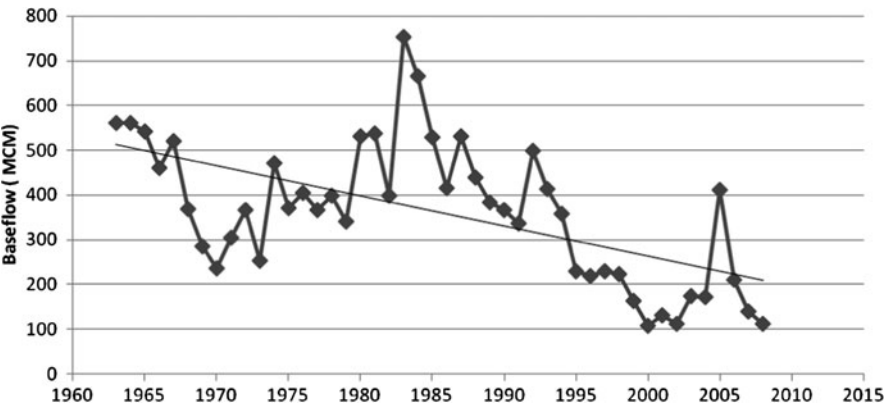


Fig. 10.1 Total groundwater base flow in Jordan from 1963/1964 to 2009/2010 (Armin Margane, *Geologisches Jahrbuch*, C68, 2002)

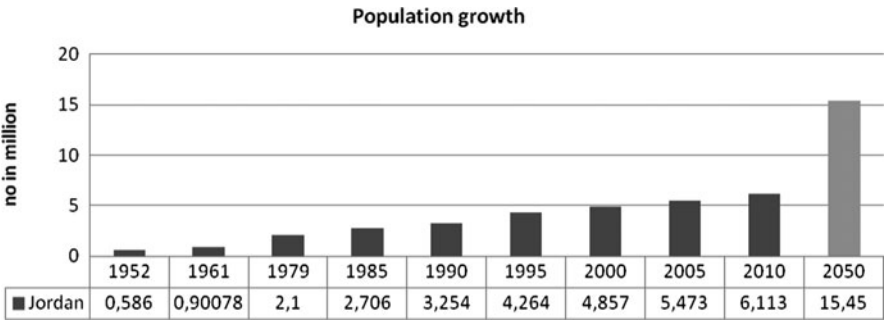


Fig. 10.2 Population growth in Jordan, estimated for 2050 under the current growth rate

mean years of schooling more than doubled from 3.8 in 1980 to 8.65 in 2010.¹² Primary schooling is now compulsory (albeit gender segregated) and almost universal, and young Jordanian women enjoy virtual equality with men in terms of developing their educational potential. In fact, as shown by the distribution given in Table 10.3 for individuals over 15, women outpace men in secondary schooling and the achievement of an intermediate diploma.¹³ Nevertheless, the quality of education, especially in government schools and colleges, and its appropriateness for a modern economy remain a work in progress.

Jordan’s greatest challenge, however, lies in its economy, especially in the aftermath of the global economic crisis. Although the nation’s GDP more than

¹² “Trends 1980–2010”, *Human Development Index*, accessed 19 June 2011 http://hdr.undp.org/en/media/HDR_2010_EN_Table2_reprint.pdf

¹³ Jordan Department of Statistics, website, accessed 20 June 2011 http://www.dos.gov.jo/dos_home_e/main/jorfig/2010_e/jor_f_e.htm

Table 10.3 Distribution of Jordanians over 15 years by educational level and sex (2010)

	Women (in %)	Men (in %)	Total (in %)
Illiterate	10.3	3.7	7.0
Less than secondary	48.4	57.6	53.0
Secondary	18.2	17.1	17.7
Intermediate diploma	10.3	6.3	8.3
BA and above	12.7	15.3	14.0
Total	100.0	100.0	100.0

doubled from 4.2% in 2003 to 8.6% in 2004, it dropped during the crisis to a 2009 low of 2.3%.¹⁴ As a result, the national debt increased to JD12 billion or 65% of Jordan's GDP (Mansour 2011). The nation's energy generation, particularly, is inefficient and a major challenge for a country that is rich primarily in sunshine. Rather than exploiting alternative energy sources, however, Jordan plans to leverage its uranium reserves and turn to nuclear power.

Because of Jordan's growing population, the labor market needs to absorb 50,000 new workers yearly, and since the 1970s, many well-qualified Jordanians have migrated to the Gulf countries (or more recently, to Saudi Arabia) for work. The workforce, however, is still projected to grow as much as 4% yearly for the next decade (with some estimates at least 5% higher), which poses a major challenge for the government. It is also estimated that poverty, currently at 13.3%, will increase, with a corresponding augmentation in the number of poverty pockets and a widening regional and urban-rural poverty gap (UNDP 2010a). Yet interestingly, in Jordan, unemployment and poverty are not correlated: the majority of the poor are employed and most of the unemployed are not poor. Nevertheless, were it not for the support of the extended family system, such figures would threaten the country's social fabric. The high unemployment, however, together with the low purchasing power of the majority of Jordanians, and persistent corruption and favoritism (*wasta*), has a particularly negative effect on well-educated young people, thereby providing a fertile breeding ground for social unrest.

Overall, Jordan has a low employment-to-population ratio, and the gender gap is very high for a country with such well-educated women: 40.1% of men but only 14.9% of women participate in the labor force, and females earn lower salaries than men for the same type of work. According to the latest ILO analysis for the Middle East this "large gap between male and female employment ratios, which is also evident in other labor market indicators, reflects the strong cultural, social and economic gender divisions in the Middle East" (ILO 2011).

Because of the low percentage of its working population, Jordan invariably has a very high real dependency ratio of 5:1, which implies that only 20% of Jordanians are working and providing for themselves and the remaining 80% of the population

¹⁴ "Global Finance", *Jordan Country Report*, accessed 20 June 2011 <http://www.gfmag.com/gdp-data-country-reports/246-jordan-gdp-country-report.html#axzz1TUo9u0k7>

(Higher Population Council 2009a, p. 9). Jordanians are considered to be below the national poverty line if the household income is less than JD392 per year, and income poverty, currently at 14.2%, is higher in rural areas than in the cities. Under these conditions, families just above the poverty line have little leeway to stay afloat if their main income provider falls ill or loses work.

As in the rest of the Arab world, in Jordan, youth unemployment is a major challenge: more than half of the unemployed are youth under 25, and in 2007, 52.3% of youth were unemployed. The key factors underlying this persistently high unemployment rate and low labor force participation are the labor market's limited capacity to create jobs, "the inefficiency of information channels which coordinate labor market demand and supply and also the mismatch between labor market demand and the outputs of the education and training system" (ILO 2008). The behavior and attitudes of Jordanian youth who refuse manual work and employment in the service sector also play a role. In terms of employment statistics, the large numbers of migrant workers – 20% of Jordan's workforce – are an unusual feature of the Jordanian labor market. Their presence might also explain the low national salary levels.

Since the 1970s, as the health indicators show, Jordan has made considerable progress in the health sector. Primary health care coverage is now high density and nationwide, with about 2.4 primary care centers per 100,000. Jordan's central university hospitals provide high quality secondary and tertiary health care services, and in the 2007–2008 National Maternal Mortality Study, 97% of women reported no problems of physical accessibility to health facilities (Higher Population Council 2009b). Jordan also has a large private health care sector with excellent medical expertise, the latest medical technology, and good quality service that attracts "medical tourism" from across the region. To provide such services, Jordan spends almost 9.8% of its GDP on health (one third of this for pharmaceuticals!), almost double the regional average. Currently, an estimated 65–75% of Jordanians have some form of health insurance (civil, military, UNRWA, or private), and subsidized health treatment is also available through Ministry of Health services for uninsured patients (World Health Organization (WHO) (2009)).

Having signed a peace agreement with Israel and maintained good economic and political ties with most Arab countries, Jordan is fairly politically stable, which, together with the country's pro-Western stand, has ensured it generous official development assistance (ODA). This ODA, which totaled almost US\$32 billion between 1970 and 2004, comes primarily from the Arab countries, the U.S., the EU, and Japan (Economic and Social Commission for Western Asia (ESCWA) 2007). Such a large amount of aid has, without doubt, played a role in maintaining unsustainable structures of governance, particularly in a country with such a small population.

Since 2008, however, with rising food and energy prices and the effect of the global financial crisis, social tension has been rising around key issues like corruption, tribalism, and increasing social inequity. As a result, after his accession to the throne, King Abdullah II initiated a 2005 Jordanian national agenda of social,

economic, and political reform designed to move the country from the current *rentier* system, which privileges a small elite, to a merit-based system (Muasher 2011). In the intervening years, however, this reform process has largely stalled, although under the increased public pressure, generated by the “Arab Spring”, it is currently being revised.¹⁵ Indeed, as noted by former Jordanian Foreign Minister Marwan Muasher, “[t]he choice in Jordan seems to be similar to that of other countries around it: either lead a reform process from above in a gradual, orderly, and serious way, or watch it take place in the streets below with uncontrolled consequences”.¹⁶

10.4 Fertility Trends in Yemen and Jordan

The Hashemite Kingdom of Jordan and the Republic of Yemen are both countries in early stages of a demographic transition that includes declining fertility rates (Fig. 10.3), increasing life expectancy (Fig. 10.4), and decreasing under-five mortality (Fig. 10.5). Jordan, particularly, experienced a rapid fertility decline from 1983 to 2002, since when fertility has remained constant at 3.6. Although both Jordan and Yemen show a high variance in fertility between urban and rural areas, as well as between education and income levels, in Jordan, poorer families have twice as many children as wealthier families (Jordan Department of Statistics 2010). In both countries, the population momentum is still high, and in the case of Yemen, it is very high: whereas Jordan is set to double its population in 30 years, Yemen will do so in approximately 20 years.

In addition, according to the 2010 UNDP MDG report, “Jordan has either achieved or is in the process of achieving many of [its MDG] goals” and the “overall picture” of achievement is “satisfactory” (UNDP 2010b). Yemen, on the other hand, still cannot provide the services and infrastructure needed and is unlikely to achieve the targets set (see Table 10.4).¹⁷ Likewise, Jordan on average allocates three times more for health care per person/year than Yemen, US\$499 and US\$142, respectively.¹⁸

In both countries, young women and men are better educated than their parents, and attitudes about gender roles and values are clearly changing, which may affect fertility trends. For example, surveys in Yemen show that over two thirds of young people unconditionally approve of contraception use.¹⁹ A comparison of the key MDG indicators for the two countries suggests the profile given in Table 10.4.

¹⁵ Ibid.

¹⁶ Ibid., p. 32.

¹⁷ UNDP, *Millennium Development Goals: Yemen*, accessed 25 June 2011 http://www.undp.org/ye/yemen_mdgs.php

¹⁸ WHO, *Country Profile, Jordan, 2009; Country Profile, Yemen, 2009*.

¹⁹ Madsen, *Effects*, p. 10.

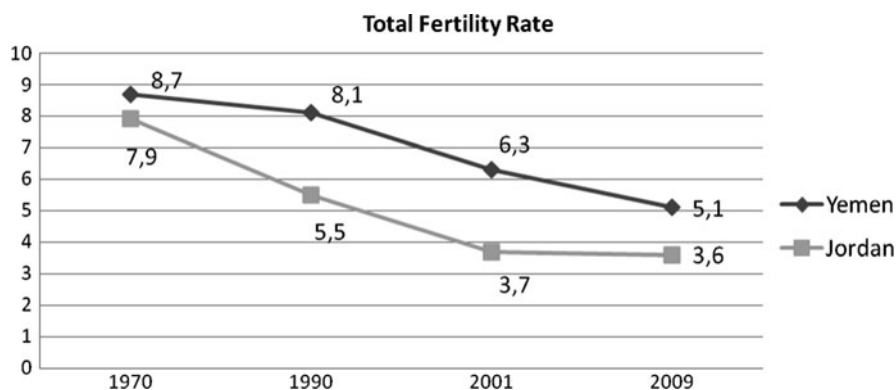


Fig. 10.3 Total fertility rate decline: Yemen and Jordan

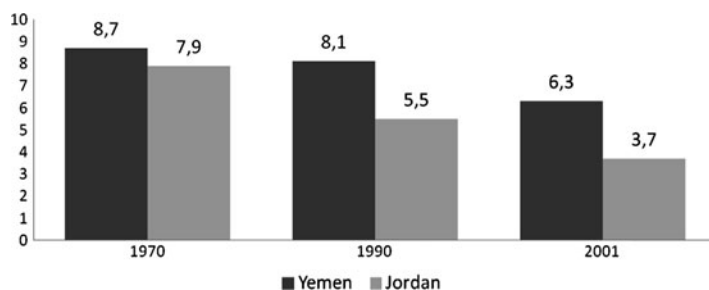


Fig. 10.4 Rise in life expectancy, 1970–2009: Yemen and Jordan

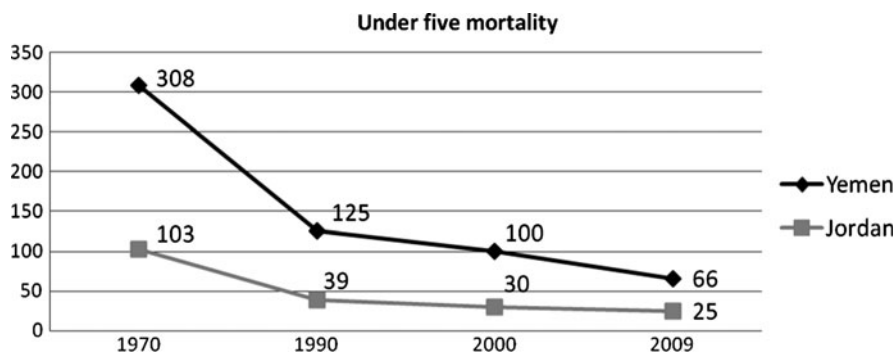


Fig. 10.5 Under-five mortality decline: Yemen and Jordan (1970–2009)

10.4.1 Fertility Trends in Yemen

As noted above, Yemen is in the earliest stages of demographic transition. According to the latest 2010 estimates, the country has a population of 23.2 million people, up from 19.7 million in 2004. With one of the highest population growth

Table 10.4 Progress toward selected MDGs in Jordan and Yemen

	Jordan	Yemen
Goal 3 A^a: Elimination of gender disparities in primary and secondary education (enrollment ratio)	Primary male: 97 Primary female: 97 Secondary male: 87 Secondary female: 90	Primary male: 79 Primary female: 66 Secondary male: 49 Secondary female: 26
Goal 4: Two-thirds reduction in under-5 mortality between 1990 and 2015	39 (1990) (MDG rep) ^b 28 (2009)	125 (1990) ^a 66 (2009)
Goal 5 A: Three-quarters reduction in maternal mortality ratio ^c		
Maternal mortality ratio	48 (1990) (MDG rep) 19 (2009)	370 (reported) 210 (adjusted) ^a
Birth attended by skilled health personnel	99.1%	22% (only 17% in rural areas) ^d
Goal 5 B: Universal access to reproductive health		
Contraceptive prevalence rate	59.3%	28% ^a
Adolescent fertility rate (birth per 1000 women aged 15–19) ^a	28	80
Antenatal care from health personnel	98%	34% (2004) ^d
Unmet need for family planning	11.9%	51% ^e

^aUNICEF figures for 2009, UNICEF website, accessed 12 June 2011 <http://www.unicef.org/infobycountry/northafrica.html>

^b*Second National Millennium Development Goals Report, 2010*

^cWorld Bank (2011)

^dWHO, *Country profile, Yemen, 2009*

^eUnited Nation Population Division, 2008, cit. in Madsen, *Effects*, p. 10

rates in the world (3.46% annually) and an average of 5.4 children born per woman, Yemen's population is expected to double in 20 years to around 40 million, which will place extreme pressure on declining government resources. This challenge is acknowledged in the 2010 UN MDG Report on Yemen: "Yemen will remain an off track country due to a number of difficulties and challenges that impede MDGs achievement. On top of these difficulties is the high annual population growth rate of 3%".²⁰ Yemen also needs to accommodate 700,000 new residents each year, a figure that excludes the 155,000 primarily Somali refugees that are currently registered with UNHCR and the up to 50,000 new arrivals expected yearly escaping the conflict and poverty in the Horn of Africa (UNHCR 2010).

In addition, Yemen's population is very young, with 45.0% below the age of 15 in 2007 and only 3.5% over 65,²¹ which makes Yemen the second youngest country in the world after Uganda. Over the last 20 years, Yemen's total fertility rate has also dropped from a very high 8.7 to 5.2, primarily because of improved access to contraceptives. Large regional differences in contraceptive access, knowledge, and use persist, however, with the lowest rates of contraceptive use in rural and

²⁰ *Second National Millennium Development Goals Report, 2010*, p. ix.

²¹ WHO, *Country Profile, Yemen, 2009, 2010*.

mountainous areas and among illiterate women. With only 13% of women reporting the use of modern contraceptives, Yemen accounts for more than 50% of the highest unmet need for family planning in the world. Under these conditions, fertility rates per woman are about two children higher in remote rural areas where more than 70% of the population live (Saxena and Rozzet 2002, pp. 16–18). As in Jordan, fertility levels in Yemen are influenced by female education level, dropping from seven children among illiterate women to three children for women with a secondary school degree or higher. Yet interestingly Yemeni's, despite their high fertility rate, desire smaller families than do Jordanians – 3.2 children per family instead of 4.2.²²

Reproductive and health services in Yemen remain very poor, with almost 90% of women giving birth at home and less than 40% doing so with a trained birth attendant, let alone medical help. This abysmal situation is reflected in the very high maternal mortality rate: 1 in 39 women dies in childbirth. Nevertheless, Yemen has made some progress in reducing maternal mortality – between 1990 and 2008, the number of maternal deaths per 100,000 births fell by 61%. The current statistics on maternal mortality, however, are still bleak, attributable, according to the 2011 UNDP Yemen MGG progress report, to early marriage and pregnancy, malnutrition, poor quality health care services and their poor distribution, and the large number of women that are anemic during pregnancy. Mortality of children under the age of 5 in Yemen is twice that of other countries in the MENA region, and half of those deaths are due to diarrhea (WEF 2009, p. 189).

Although the marriage age in Jordan (currently at 22.4²³) is rising, conservative social values and poverty often force Yemeni girls to marry young and become mothers well before the age of 18. In fact, a report by the International Centre for Research on Women (ICRW)²⁴ ranked Yemen 13 out of the 20 worst countries in terms of the prevalence of child marriage, with 48.4% of women under 18 being married. In fact, although the minimum marriage age of 15 was revoked a decade ago to allow parents to decide when their daughters should marry, according to survey data collected by university researchers and development agencies, half of all brides in Yemen are 18 or younger. Because the honor of the family in traditional Yemeni society rests on the virtue of its girls and women, many parents believe that if their daughters are married young, their honor and that of the family will be protected (Al-Jarady 2009). The husbands of child brides, on the other hand, place a premium on shaping a young bride to meet their needs.

Such early marriage and its negative consequences are recognized by the government as a serious problem. Not only are early marriage and pregnancy partly to blame for the high maternal mortality rate, but, as one study of Yemen's maternal

²² Madsen, *Effects*, p. 10.

²³ Jordan Department of Statistics, *Jordan Population and Family Health Survey, 2009*, p. xiv.

²⁴ International Center for Research on Women, *New Insights in Preventing Child Marriage: A Global Analysis in Factors and Programs*, April 2007, p. 6, accessed 25 June 2011 <http://www.icrw.org/files/publications/New-Insights-on-Preventing-Child-Marriage.pdf>

health shows, around one third of women in Yemen give birth to more than five children before their 30s. As a result, they “age fast and husbands will often seek a second wife if their first is no longer able to reproduce which can only further decrease a women’s self-worth”.²⁵

There is also a strong correlation between instances of girls’ early marriage and an increase in domestic violence, which is still a common occurrence. Most particularly, women who marry early may have little time to acquire the proper education, life skills, or even social understanding to enable them to function effectively outside of the home. Moreover, not only are there no statutes against domestic violence, but the concept of spousal rape is not recognized under the law. Not surprisingly, therefore, according to a 2002 World Organization Against Torture report, 46.3% of the female respondents had experienced violence from their spouses or other family members at some point in their lives and more than half of Yemeni women suffer from a degree of intimidation on a regular basis.

In Yemen, as in Jordan, honor crimes take place that critics argue are to some extent justified by a legal system that imposes significantly lower penalties for so-called “crimes of passion” than for murder under other circumstances. One extreme form of violence practiced against girls and women in Yemen but not in Jordan is female genital mutilation (FGM), whose prevalence rate, according to a 2003 CEDAW study, is 23% for the entire country.²⁶ This prevalence, however, varies significantly from the coastal region (69%) to the mountain, plateau, and desert regions (between 38% and 40%).²⁷

At the same time a large percentage (31.5%) of Yemeni citizens (6.8 million people) are food insecure or go hungry every day. Once a vibrant farming economy, Yemen today imports up to 80% of its food needs and is already struggling with food shortages. In fact, a recent WFP survey found that one out of every three Yemenis – that is, 7.5 million people – suffers chronic hunger. The country’s childhood malnutrition rates are also among the highest in the world: 3.2% of children aged between 6 and 59 months are “wasted” and 55.7% are “stunted”, and 9.2% of children between 12 and 59 months are acutely malnourished. Rural areas are even more affected and have double the share of food insecurity of those living in urban areas.²⁸ These problems of food insecurity and malnutrition in Yemen, as noted in a 2009 report, are exacerbated by the “low status of women in the family and society . . . [which therefore] requires particular attention”(Pelat 2006). The high rate of malnutrition also contributes to maternal and child mortality: women that do not receive the required micronutrients during pregnancy suffer a higher

²⁵ Ibid.

²⁶ CEDAW, *Consideration of reports submitted by states parties under article 18 of the convention on the elimination of all forms of discrimination against women*, sixth periodic report of States parties, CEDAW/C/YEM/6, Yemen.

²⁷ UNICEF *Factsheet*, 1997, available at http://www.childinfo.org/files/Yemen_FGC_profile_English.pdf

²⁸ WFP, *Comprehensive Food Security Survey*, p. 14.

proportion of miscarriages and birth complications. Hence, families that do not provide adequate nutrition for their women and children are effectively “mining” their future in the same manner that Yemen as a nation is mining its water resources.

Yemen also remains the only country in the world to have closed less than 50% of its gender gap, a number that deteriorated in 2009 relative to the country’s own 2008 performance.²⁹ In fact, the nation ranks a low 138 on the UNPD Human Development 2010 Gender Inequality Index, the lowest of the Arab Countries,³⁰ primarily because, owing largely to prevailing gender norms and values, gender disparities in education remain large and economic power is concentrated in the hands of men. As a result, despite significant progress in education, only two thirds of Yemeni girls have access to primary schooling (compared to 79% of boys) and only a quarter of girls and half of Yemen’s boys continue on to secondary education. According to a UNDP MDG progress report for Yemen,³¹ one major factor preventing the reduction of this pronounced gender gap in primary and secondary education is a negative attitude toward female education. Yet this low level of education of Yemeni girls has major negative repercussions for the country’s health and demographic development. Uneducated girls are married earlier (19% before age 19), give birth earlier, have a higher chance of dying in childbirth and giving birth prematurely, have lower decision-making power in their households, and generally live in households that suffer more from malnutrition, which extends the cycle of poverty and ill-health into the next generation. These figures make Yemen one of the most difficult places for women to live.

Although no empirical evidence on the impact of gender systems on fertility for Yemen could be found that confirms and quantifies the observations of development professionals, the multifaceted and long-time impact of gender systems on fertility in Yemen is well illustrated by the prevailing division of labor in the water sector. The three most time-consuming and often physically challenging tasks performed by women and girls over 10 in rural Yemen are water provision and the gathering of firewood and fodder for animals. The greatest challenge for rural women and poor households is the long distance between the home and water resources. Not only are more than a quarter of Yemeni households located over an hour’s walk from the nearest water source,³² but the massive overpumping of groundwater is lowering the water table and continually increasing the distance over which the women must perform the backbreaking task of carrying water jugs. In fact, in one recent study conducted for a technical development program, women

²⁹ WEF, *Global Gender Gap Report*, 2009.

³⁰ UNDP, “Table 4: Gender Inequality Index”, *Human Development Report, 2010*, accessed 20 July 2011 http://hdr.undp.org/en/media/HDR_2010_EN_Table4_reprint.pdf

³¹ UNDP, *MDG Progress in Yemen*, 15 March 2011, accessed 10 June 2011 http://www.undp.org/ye/MDG_Progress2.php

³² “Towards the Rise of Women in the Arab World”, *Arab Human Development Report, 2005*, p. 28, accessed 15 July 2011 <http://www.arab-hdr.org/publications/other/ahdr/ahdr2005e.pdf>

representatives of the Amran Water Basin Committees reported trips of up to 4 h each way (Augustin and Assad 2010). Research has also shown that those who spend over half-an-hour per round trip progressively collect less water and eventually fail to meet their families' minimum daily drinking-water needs,³³ which in turn has negative repercussions for nutrition, hygiene, and family health. Girls and pregnant women, particularly, are physically affected by the heavy water load: when the distance to the water source becomes too great, girls are often pulled out of school to carry out their allocated duties, thereby reducing their level of education, increasing their chances of early marriage, and negatively affecting both their own nutrition and that of their future children. In each step of this impact chain, prevailing gender norms and values determine action, resources, decision-making, allocation of roles and tasks, and finally, who benefits and who loses out.

10.4.2 Fertility Trends in Jordan

Although Jordan is a highly urbanized country whose women are well educated and whose average marriage age (currently 25) (World Economic Forum (WEF) 2010, p. 176) is on the rise, its TFR remains a high 3.8, and the process of demographic transition is stalling. Why this lack of progress, and what repercussions are likely for the country?

Jordan's demographic transition began in the 1950s when mortality rates started to decline and life expectancy began to rise to the present age of 73. Between the first population census in 1961 and the second in 1979, the country experienced a high population growth of 4.8%, due primarily to high fertility, declining mortality, and the influx of approximately 350,000 Palestinian refugees following the Israeli occupation of the West Bank and Gaza Strip. A rapid improvement in health care in the 1970s and 1980s then led to a decline in the crude death rate, from 17 per 1,000 in 1965 to 7 per 1,000 in the mid-1980s. At the same time, the infant mortality rate dropped from 115 to 46 per 1,000 live births, primarily because of intense efforts in maternal and child health care. Because these combined factors led to a significant improvement in life expectancy, by the 1980s, they had also created a demographic problem: more than 50% of the population were below 15 years of age (Metz 1989).

Jordan's fertility rate began declining in the mid-1970s; most particularly, in the 15–24 age bracket, which suggests that the decline resulted from an increase in marriage age. The decline from the mid-1980s until the early 1990s, on the other hand, primarily affected women 25–39 years of age, thus pointing to greater use of contraceptives during this period. Fertility surveys conducted in the subsequent decade, however, showed that education was the strongest determining factor affecting fertility levels, with secondary school leavers having the lowest and

³³ WHO/UNICEF. *Progress on Sanitation and Drinking Water, 2010, Update*, p. 28.

women with no education the highest fertility rates (Goujon 1997). The fertility decline in the 1970s slowed the population growth rate down to 3.2% by the late 1990s and to 2.2% by 2009, and the average household size decreased from 6.7 persons in 1979, to 6.0 persons in 1994, and to 5.2 persons in 2009. Natural population growth and frequent refugee intakes have also contributed to rapid urban growth.³⁴

The Jordanian government recognized the importance of population development in 1976 with its founding of the National Population Council. Nevertheless, the issue remained highly sensitive until the late 1980s, and no substantial policies were drafted until the early 1990s. During the interim years, it was left to the Ministry of Health and the Jordan Association of Family Planning and Protection to intervene indirectly and unofficially by providing free family planning services. The first real steps in the direction of population control were the 1993 National Health Program for Birth Spacing³⁵ and the “Amman Declaration on Population and Sustainable Development in the Arab World,” presented at the ICPD in 1994, which recognized the need for “harmony between population growth rates and available natural resource”.³⁶ This declaration was indeed a fitting conclusion to the conference, especially for Jordan, whose population grew an unprecedented 5.59% in the early 1990s due to the return of Jordanian migrants from Kuwait after the 1990 Iraqi invasion and the momentum generated by the large cohort of women of childbearing age.³⁷

This high population growth rate, together with a rise in the dependency ratio, growing unemployment, increased poverty, and growing pressure on Jordan’s scarce resources, led the parliament in 1996 to endorse a National Population Strategy 2000–2020. The endorsement and consequent implementation of this strategy, especially the goal of increasing modern contraceptive use from 27% in 1990 to 42% in 2002, resulted in a remarkable fertility decline in the same period from 5.6 to 3.7 children per women. This strategy, the first to set clear targets, was aimed at reducing the total fertility rate to 2.9 by 2010 and to 2.5 by 2017, with a further decline by 2020, affected primarily through increased contraceptive prevalence and improved methodological efficiency and family planning services. It also set ambitious goals for gender equality and female empowerment.³⁸

Nevertheless, although the National Population Strategy provided a solid framework for the envisioned fertility decline, after 2002, the decline in birthrates began leveling off (Higher population Council 2009a, p. 4), and if the current fertility rate of 3.8 persists, Jordan’s population will grow from the present 6 to 10.3 million in

³⁴ Introduction, *Jordan Population and Family Health Survey*, 2009.

³⁵ Ibid.

³⁶ *Arab Declaration to the World Summit on Sustainable Development*, p. 5, accessed 20 July 2011 http://www.escwa.un.org/rcm/editor/Download.asp?table_name=rcm_meetings&field_name=id&FileID=182

³⁷ ESCWA, *Jordan Demographic Profile*.

³⁸ Ibid.

Table 10.5 Progress in selected fertility indicators, 1990: Jordan (2009)

Indicator	1990	1997	2002	2007	2009
Total fertility rate (TFR) women aged 15–49	5.6	4.4	3.7	3.6	3.8
Intended TFR	3.9	2.9	2.6	2.8	3.0
Unintended TFR	1.1	1.5	1.1	0.8	0.8
Percentage of births reported by women as unintended	20.6	16.9	15.9	11.3	10.8
Percentage of MWRA ^a using any contraceptive method					
Any “modern” method	26.9	37.7	41.2	41.9	42.0
Any “traditional” method	13.1	14.9	14.6	15.2	17.2
All methods	40.0	52.6	55.8	57.1	49.3
Unmet need for family planning	22.4	14.2	11.0	11.9	11.2
Ideal number of children among all MWRA	4.4	4.2	4.3	4.0	4.2
First-year discontinuation rate (all reasons; in %)	44.0	48.9	42.0	39.7	45.1

^aMWRA is the abbreviation for Married Women in Reproductive Age

2030. Such growth will put tremendous pressure on Jordan’s already overstretched natural resources and services. As a result, the country will miss out on the “demographic opportunity benefits” that arise when the growth rate of the working age population (individuals aged 15–64 years) outstrips that of dependents under 15 and above 64 years. Moreover, even if the envisioned 2.1 TFR can be achieved by 2030, the population will still have grown to 8.9 million (Higher population Council 2011a, p. 1).

One useful way to identify the causes of the stall in fertility decline is to review selected fertility indicators, whose pattern, as illustrated in Table 10.5,³⁹ follows that of the 2005 Bongaart study (Bongaarts 2005).

These data show that in 2009, the contraceptive prevalence rate (CPR) stalled at 42%, whereas the use of traditional methods increased slightly to 17.2%. Not surprisingly, the lower effectiveness of traditional methods led to approximately 82,000 women per year in the country experiencing unwanted pregnancies (Higher population Council 2011b). At the same time, the unmet need for family planning remained constant at 11% of married women of reproductive age, and the number of children wanted also remained almost constant. Additional contributory factors were a high rate of contraceptive discontinuation (45.1% within 1 year of initiation) because of a fear of side effects, inadequate counseling of women clients and inadequate training of providers, and a shortage of female physicians (especially in rural areas).⁴⁰

The large number of women (71.4%)⁴¹ reporting no intention to use contraceptives in the future for fertility-related reasons also suggests that in Jordan, in contrast to Yemen, where access to contraceptives and care remains the major problem, the main impediment to balancing population growth is prevailing ideas on the ideal

³⁹ Ibid.

⁴⁰ Ibid., p. 5ff.

⁴¹ Ibid., p. 4.

(high) number of children. Likewise, although Islam, unlike some mainstream Christian beliefs, does not limit the use of modern contraceptives, prevailing sociocultural patriarchal norms and values promote women's reproductive role at the expense of their productive one and restrict their involvement in the public sphere. It is thus social values that associate women's status with motherhood instead of other productive activities. Motherhood is, as Jordanian women put it, "izwa" (security and entitlement): "If we have more children, we are stronger in the family and home. The woman who has many children, as she gets older she is stronger. If there is a fight between uncles, the one with the most boys wins" (Williamson and Eman 2009, p. 40).

The prevailing gender paradigm also limits communication between the sexes on vital matters of partnership, intimacy, and family planning: for Jordanian youth, "[l]ack of communication between young men and women, which negatively affects their understanding of each other" is a major concern.⁴² This same concept of "shame" is also an impediment to free access to information on reproductive health: women and girls from marginalized urban communities in Jordan reported a lack of both essential information on reproductive health and the confidence to ask and share. Likewise, adolescent boys seldom receive scientific advice or counseling on matters of intimacy, resorting instead to pornography and the Internet (Williamson and Eman 2009).

Declining birthrates are also closely related to a change in attitudes toward the family as a social unit. Because, as mentioned previously, Jordanians still see a family with four children or more as ideal. Newlyweds in Jordan, like those in Yemen, are under pressure to begin a pregnancy soon after marriage and produce at least one male child (Higher population Council 2011b). Hence, as a recent study on gender dynamics in marginalized urban communities noted, "[a] good wife is also one who gets pregnant very soon after the wedding – preferably within a month. Pregnancy reinforces the self-esteem of the husband, and raises [his] status in the extended family. Women are encouraged to compete with female relatives to get pregnant first. Failure to conceive is initially seen as the woman's fault and after 12 months she will have to visit a doctor. Only after she has undergone extensive tests will the husband visit the doctor" (Williamson and Eman 2009, p. 39).⁴³

The decisive role played by these sociocultural factors and the framing of the gender roles in the stalling of Jordan's fertility decline would also explain the extremely low labor force participation of women in the country and the low position of Jordan in the World Economic Forum's *Global Gender Gap Report 2010*, which ranks the nation at 120th overall and 126th on "Economic Participation and Opportunity" (World Economic Forum (WEF) 2010, p. 176). Indeed, the refined economic participation rate (the labor force attributed to the population 15 years and over) of 39.4% clearly points not only to a low level of economic

⁴² "The Youth of Jordan", *Jordan Human Development Report, 2000*, accessed 20 July 2011, http://hdr.undp.org/en/reports/nationalreports/arabstates/jordan/nhdr_2000_jordan-en.pdf

⁴³ Williamson and Eman, *Insights into Gender Dynamics*, p. 39.

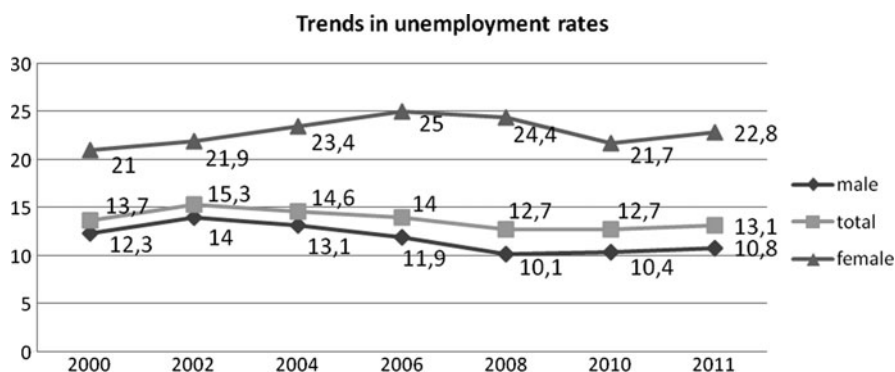


Fig. 10.6 Unemployment trends by gender, 2000–2011: Jordan

participation in Jordan but also to a resulting high dependency ratio. In fact, a gender breakdown (Fig. 10.6) demonstrates that the labor force participation in Jordan is 63.3% for men but only 14.9% for women,⁴⁴ which leads the 2005 UNDP report to conclude that “[t]he prevailing masculine culture and values see women as dependants of men. As a result, men take priority both in access to work and the enjoyment of its returns” (UNDP 2005, p. 91).

Female participation in the labor force therefore provides an interesting case study (Jordan Department of Statistics 2011) by which to increase understanding of how the dynamics and gender dimensions of these sociocultural factors impede balanced demographic growth in Jordan. Overall, the findings for Jordan match the trends in the region: unemployment is higher for women and rises with level of education. That is, illiterate Jordanians without work make up less than 1% of the unemployed, less than secondary school leavers account for 44.6%, while those with a high-school certificate and/or university degree make up the bulk (54.8%) of the unemployed. The gender gap is most pronounced for holders of bachelor’s and master’s degrees: whereas male unemployment stands at 20.9%, female unemployment is 61.5%. Thus, whereas the employment figures show a clear variation in the labor force distribution based on educational level and sex, examination of female participation specifically reveals a stark contrast. Not only do well-educated women have the highest unemployment levels, but women in the labor force are better educated than their male counterparts: 54.8% of the total male labor force has lower than secondary educational qualifications compared to only 15.3% of females. More than half the women in the labor force, 55.3%, have a bachelor’s degree or higher compared with 21.1% of the men.

One major reason for women’s low labor force participation is the low number of married women that either remain at work or return to work at a later stage: only 7% of married women in Jordan currently hold paid employment. In fact, Jordanian

⁴⁴ Ibid.

employers generally do not like to hire young women because they assume (in many cases rightly) that they will leave work as soon as they marry. The crucial effects of this gender-based assumption are clearly illustrated by the remarks of the employers themselves. As one commented, “I really prefer not to employ women. They can’t work late without their husband’s or parent’s permission and are always distracted by family problems and responsibilities” (UNDP/Ministry of Planning and International Cooperation 2011). That these prevailing societal norms and gender role perceptions are potentially a key factor in the low labor force participation of Jordan’s women is also supported by research: “The overall impression of the study is that (these) men are resistant to the idea of women working outside of the home. They place obstacles in the path of those that do work. They characterize the working space as dangerous and they recognize their own role in creating this danger. Women who chose to work there are not to be trusted” (Williamson and Eman 2009, p. 24). The productive identity of women who are self-employed or have gainful employment outside the house, therefore, is the flipside of the reproductive identity of a homemaker, wife, and mother of numerous children. Hence, even beyond the multitude of formal labor market laws and regulations that directly or indirectly discriminate against women in the labor force, prevailing patriarchal norms and values, by setting the framework for women’s roles and responsibilities, constitute the most challenging barrier to women. This gender paradigm, however, being most strictly applied in low income and marginalized communities, is somewhat mitigated by social class and level of education.

In addition, in recent years, as the economic reality in Jordan and Yemen has made it increasingly difficult for one breadwinner to support a family, the social barriers against women’s employment have begun to crumble. Many households have had no choice but to allow their women to supplement family income by working outside the home. In Jordan, where most low-income couples adopt family planning because of economic considerations,⁴⁵ this necessity has, in turn, had major implications for the number of children a family is planning.

10.5 Demographics and Prevailing Gender Paradigms in Jordan and Yemen

The release of Arab girls’ and women’s capabilities . . . would be the freshest sign of spring in the blossoming (izdiyar) of the Arab world. UNDP Report (UNDP 2005, p. 84)

Most proximate determinants used in determining fertility are influenced by individual actions, those of women, their spouses, and their extended families. That

⁴⁵ Ibid., p. 40.

is, even though government services and regulations (e.g., on health and employment) are crucial, individual action in aggregate exerts a significant effect on fertility change. Hence, gender systems play a highly significant role on both the individual and policymaking levels.

An overall gender paradigm for the MENA region, one that is also applicable to Jordan and Yemen, has been outlined by the World Bank, which notes four central elements that shape gender roles and dynamics within the household and place an emphasis on women's reproductive role⁴⁶:

1. The family (not the individual) is seen as the central unit and asset of society, one in which women and men share not equal but equivalent rights and have complementary roles.⁴⁷

For instance, the Jordanian National Charter states that "[t]he family is the basis of Jordanian society. . .".

2. This gender role allocation focuses on the man as head of household and sole breadwinner for the family and the woman as wife and mother.

Thus, in one study for Jordan, "[t]he women spoke highly of their role as mothers: they referred to it as their destiny, and it brings status . . . a good wife [has a] clean house, well behaved children, food on the table and is 'ready for her husband' [i.e. sexually available and attractive]" (Williamson and Eman 2009).

3. Interactions between the sexes and mobility for women are limited so that a "code of modesty" can be maintained, and the family honor and dignity rest on the behavior of the woman.

In the case of Yemen, women's mobility is severely restricted by law, which requires that a wife secure her husband's permission to leave her house. In fact, research by Dr. Samir al-Shamiri, professor of sociology at Aden University, found that 28.2% of Yemeni women suffer from several mobility restrictions, which effectively render them immobile (Al-Jarady 2009).

4. An unequal balance of power within the family restricts woman's decision-making ability and limits her mobility.

According to one Jordanian study, "[w]omen experience gender roles as constraints on their scope to make decisions concerning where they go, how they look, who they mix with, and their access to resources".⁴⁸ It should be noted, however, that a similar hierarchical relationship also exists between a son and his father and male elders.

Overall, the World Bank report concludes that "[t]his paradigm presumes that a woman will marry (early), that her most important contribution to the family and society will be as a homemaker and mother, that the household will be headed by a

⁴⁶ Findings from a recent study in Jordan are inserted after each paradigm criteria.

⁴⁷ National Charter, Article 3, Chapter 5, Social Field Amman, The Updated National Population Strategy, Concepts, Foundations and Goals – 2000–2020, First draft, The Hashemite Kingdom of Jordan Population Commission, General Secretariat, September 2000, p. 4.

⁴⁸ Williamson and Eman, Executive Summary, *Insights into Gender Dynamics*.

man who has a job that will allow him to provide for his family, that the woman will depend on the man for support, and that the man's responsibility for supporting and protecting his wife and family justifies his authority regarding and control over his wife's interactions in the public sphere."⁴⁹

Although this prevailing gender paradigm is introduced and reinforced through education within both the family and society, it is the family that is the first social entity to install the values, norms, and relationships of patriarchy in young children. Most particularly, it is the mother who introduces gender roles to her sons and daughters, who authorizes her sons to "enforce the rules on their sisters"⁵⁰ and who grooms girls for motherhood and marriage. The paradigm is, however, also codified through the personal status law, labor laws, and interpretation of religious texts and is further reinforced through the education systems, media, and ultimately the patriarchal, centralized political systems of Jordan and Yemen, which rely on tribal support. In fact, Jordan, whose current election law marginalizes political parties and encourages tribal voting and whose electoral zoning discriminates against urban regions, has seen a resurgence of tribal identities with all the accompanying social and gender consequences.

This interdependence between state governance and patriarchal social systems is clearly delineated in the *Arab Human Development Report 2005*: "... bureaucratic rigidity, the expropriation of different social and civic initiatives and the system of the local dignitary (a man, of course) as the sole intermediary between authority and society held women's rights hostage to the nature and vicissitudes of power. The symbiotic relationship between state authority and patriarchy saw to it that these early achievements soon became opportunities for personal gain. The position of women thus continued to deteriorate with the retreat of citizenship rights and the return of organic patriarchal rights as the final means of self-defense of a society forbidden to engage in the various forms of civic activity. Relations within the family have continued to be governed by the father's authority over his children and the husband's over his wife, under the sway of the patriarchal order" (UNDP 2005, pp. 16–17).

The norms and values that underscore this paradigm place numerous obstacles in the way of women who hope to fulfill and balance their productive and reproductive roles. Above all, women find social and family acceptance, and hence self-esteem, not in a successful career but in running a household and ultimately bearing and raising (male) children.

⁴⁹ *Gender and Development in the Middle East and North Africa*, Women in the Public Sphere, MENA Development Report, The World Bank, Washington 2004, p. 10.

⁵⁰ Williamson and Eman, Executive Summary, *Insights into Gender Dynamics*.

10.6 Conclusions

This analysis of population trends and the prevailing framework conditions of Jordan and Yemen has shown that there is more than one pathway to fertility decline. The situation of each country is unique and so are the solutions. Thus, although Jordan and Yemen lie at opposite ends of the spectrum of MDG achievement and political stability, both remain in the early stages of fertility transition.

In Yemen, much will depend on the outcome of the recent upheavals and the political system that ultimately emerges. Currently, because the country is in crisis, private and public services, including those in health and education, have been interrupted. Even when services resume, if people's needs are to be met, the country will have to make large-scale investment in basic infrastructure, health, education, water and sanitation, and transport, because, as shown above, Yemeni women, especially those in rural areas, have a major problem simply accessing reproductive health care and almost all other services.

In Jordan, fertility decline has stalled despite almost complete national coverage of reproductive health services and good progress toward MDGs. In fact, for a middle income country, Jordan is strikingly conservative, a situation that is greatly attributable to its population composition and the precarious political power balance maintained through its institutional and legal frameworks. It would therefore take political reform to break the paradigm that holds back the civic development of the country and its women.

Nevertheless, despite the many uncertainties, current political and social developments in the region offer a window of opportunity to weaken or remove the grip of the patriarchal mindset over governance and family matters. The young people that are calling for reform in the Arab World, including those in Jordan and Yemen, are rejecting any form of prevailing oppression, whether from the patriarchal hierarchy of the traditional family system or the government. Nor is it not only young women that are claiming their rights: young men also resent the authority of their fathers, political authorities, and tribal and clan authorities in all vital matters of their lives.

The revolutions in the region, and the demonstrations in Yemen and Jordan specifically, are challenging the traditional gender paradigm and creating role models that transcend a single "destiny" for women. Rather, they open up options for multiple roles as mothers, professionals, political activists and citizens. In fact, in Yemen, it is a woman, the journalist Tawakul Karman, that is widely accredited with a lead role in the initial stages of the revolution, and when the Yemeni president used a time-old tactic of recalling religious patriarchal values and calling women who mixed with men in street protests "un-Islamic", his criticism backfired spectacularly (Anteleva 2011). In Jordan, both women and men have been demonstrating together in the streets, and Reem Badram, the only directly elected women MP in the country, has joined demonstrators in calls for reform. This active participation and leadership by women in the democracy movements was

confirmed at a meeting of youth activists from eight Arab countries (including Jordan and Yemen), held in early April 2011 in Amman.⁵¹

At the only time in mankind's history when the human species can and currently does outstrip the resources of our planet, global statistics show that more girls have been killed in the last half century because of gender-based neglect, infanticide, and selective abortion than all the men killed in twentieth century battles (Kristof and Wudunn 2010). How can we live in peace with the resources of our planet if we continue to discriminate against half of our own race? The Arab Spring is a cry for justice and dignity. The region will not prosper if justice and dignity remains the right of a few and of men only.

Over the recent decades of autocratic rulers, human rights in the Arab region have been the realm of foreign-based civil rights organizations and confined to footnotes in bilateral government negotiations. Now, the people of the Arab World are gaining the courage to break through the silence and double-speak imposed on them and loudly demand their human, civil, and democratic rights. The role that demographers can play in this crucial transformation process is to state loudly, clearly, and often that the demographic challenges of the region can only be mastered if its men AND women are allowed to play an active and self-determined role.

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⁵¹ “Arab Youth Meeting: Synthesis”, unpublished document, Amman, April 2011, p. 5.

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Chapter 11

Demographic Change in Countries of the Gulf Cooperation Council (GCC): Reducing Dependence on Immigration

Ghazy Mujahid

Abstract During 1970–2010, demographic changes in six GCC countries were influenced largely by the oil boom that followed the price rise generated by the Saudi Arabian oil embargo of 1973. With increasing oil revenues, each country undertook massive development that resulted in, among other things, improvements in health and education services. As girls' education increased and modern contraception became available, fertility and population growth rates declined. As the workforces were small and lacked needed skills, this led to increasing inflows of expatriate workers. Policies were initiated in the mid-1980s but had no appreciable impact. In view of the resulting heavy dependence on expatriate workers, the GCC countries have stepped up emphasis on workforce nationalization.

During the next four decades to 2050, the GCC will face two main demographic challenges – population ageing and a slowing down of the increase in national workforces. Population ageing, the increasing proportion of persons 60/65 years and older, will necessitate identification of issues facing older persons and how to address them. The slowing down of the increase in the national workforce will call for enhanced efforts to increase the supply of national workers and reduce the rise in labour demand. Hence, to achieve targets of reducing reliance on expatriate workers, GCC countries should focus on training nationals, encouraging female participation and promoting the use of labour-saving technology.

For comments on an earlier draft, the author would like to thank Dr. Francois Farah, formerly Chief of Social Development Division, United Nations Economic and Social Commission for West Asia (UN-ESCWA) and currently UNFPA Representative in Romania and Country Director for Macedonia, Moldova and Serbia. The author alone is responsible for any shortcomings.

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11.1 Introduction

In 1981, six countries of the Gulf region – Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE) – recognizing their “special relations, common characteristics and similar systems founded on the creed of Islam”, formed the Gulf Cooperation Council.¹ One of the most significant of these characteristics was the rapid demographic and social change that had set in as a result of increased oil revenues following the oil embargo imposed by Saudi Arabia in October 1973.² Although the fortunes of the GCC states have since fluctuated as a result of movements in oil prices, as well as political upheavals, economic progress has followed an upward trend that has led to significant changes in the demographic scenario in each country.

This chapter describes these demographic changes over the past four decades (1970–2010), explains the factors underlying them and summarizes the outlook for the next four decades (2010–2050). It is divided into five sections: [Sect. 11.1](#) gives an overview of the available sources of population data in the GCC countries. [Section 11.2](#) discusses the population trends in each of the six countries during the last four decades (1970–2010), and [Sect. 11.3](#) outlines the demographic changes that can justifiably be projected over the next four decades (up to 2050). [Section 11.4](#) then summarises the findings, and [Sect. 11.5](#) provides a brief review of how issues emanating from the evolving demographic scenario could be addressed in the coming decades.

11.2 Data Sources in the GCC Countries

In general, the compilation of demographic data in GCC countries has been inadequate, and, until recently, the reliability of population figures available from national data sources left much to be desired. Most particularly, despite some recent improvements, the population estimates reported by the multiple sources of historical data vary considerably.³ It is therefore important to identify these data sources at the very outset and note their limitations. Because a detailed discussion of the national sources of demographic data is beyond the scope of this chapter, this discussion provides a brief overview of population statistics availability in GCC countries.

¹ Charter of the GCC signed by the six member states on 25 May 1981.

² Although the discovery of oil in the 1950s prompted an inflow of foreign workers (Mohammed 2003), it was the economic boom generated in GCC countries by the oil price hike that followed Saudi Arabia's 1973 oil embargo which triggered large inflows of expatriate workers. These inflows have continued to this day with only short intermittent fluctuations.

³ In the UAE, for example, the Federal National Council, the Ministry of Economy and the Ministry of Labour use differing population figures (MADAR 2011).

Table 11.1 Population censuses conducted by GCC countries

Country	Year census was conducted										
Bahrain	1941	1950	1959	1965	1971	1981	1991	2001	2010		
Kuwait	1957	1961	1965	1970	1975	1980	1985	1990	1995	2005	2010
Oman	1993	2003	2010								
Qatar	1970	1986	1997	2004	2011						
Saudi Arabia	1962	1974	1992	2004	2010						
UAE	1968	1970	1975	1980	1985	1990	1995	1999	2005	2010	

Sources: Bahrain (2010), Kuwait (2010), Oman (2010), Qatar (2010), Winckler (2008), and Dubai (2011)

Even though data collection capacity has been generally weak in the GCC countries, these nations have, by and large, conducted population censuses on a regular basis (Table 11.1). However, with the exception of Oman since 1993, they have not published information on even some of the basic demographic characteristics of the indigenous populations (Winckler 2009). This lack of data collection capacity, although it has improved somewhat over time, can be explained in large part by policies aimed at hiding the large presence of foreigners and the dependence on foreign workers. There has also been an underlying fear that disclosure of population details could harm national interests (Kapiszewski 2001; Winckler 2008). This unreliability of population figures has been further aggravated by inadequate recording of the family members accompanying foreign workers and the impossibility of keeping track of irregular migrants. As a result, despite various improvements in each country, reliable population figures from national sources are still hard to come by. Of late, the GCC Secretariat has taken the initiative for collating and publishing national statistical data and issued a comprehensive *Statistical Bulletin* (GCC 2010). The secretariat has also been successful in motivating the six countries to undertake a census, although plans to conduct a joint census (Kawach 2009) failed to materialize and each country conducted its own, Qatar in 2011 and the rest in 2010.

Problems arising in the use of population figures from national GCC sources become insurmountable when there is a need to obtain regional aggregates or make inter-country comparisons. Therefore, given its objective of providing an inter-country comparison of past trends, this chapter must be based on figures that are comparable. Likewise, to provide an outlook for the next four decades, it must draw on projections that are comparable across countries. These latter are available from international sources, of which the most recent is the *United Nations World Population Prospects*, a compilation revised every 2 years and last released in May 2011 (UNDESA 2011). This source not only reports population distribution by age and sex, it also provides estimates of fertility and mortality rates, which, when supplemented as needed and possible by national data sources, enable the building of a comprehensive picture of past trends and future projections.

Table 11.2 Population of the Gulf States, 1970–2010

Year	Bahrain	Kuwait	Oman	Qatar	Saudi Arabia	UAE	GCC
(in thousands)							
1970	212	753	732	108	5,772	232	7,809
1980	358	1,377	1,181	222	9,801	1,016	13,955
1990	493	2,088	1,868	474	16,139	1,809	22,871
1995	559	1,628	2,232	501	18,492	2,349	25,761
2000	638	1,941	2,264	591	20,045	3,033	28,512
2010	1,262	2,737	2,782	1,759	27,448	7,512	43,500
2008^a	<i>1,107</i>	<i>2,496</i>	<i>2,867</i>	<i>1,448</i>	<i>24,807</i>	<i>4,765</i>	<i>37,490</i>

Source: UNDESA (2011)

^aFigures for 2008 are from GCC (2010)**Table 11.3** Increase in total population in the Gulf States, 1970–2010

Year	Bahrain	Kuwait	Oman	Qatar	Saudi Arabia	UAE	GCC
(average annual percentage increase)							
1970–1980	5.4	6.2	4.9	7.5	5.4	15.9	5.9
1980–1990	3.2	4.2	4.7	7.9	5.1	5.9	5.1
1990–1995	2.5	–4.9	3.6	1.1	2.8	5.4	2.4
1995–2000	2.7	3.6	0.3	3.4	1.6	5.2	2.0
2000–2010	7.1	3.5	2.0	11.5	3.2	9.5	4.3
1970–2010	4.6	3.3	3.4	7.2	4.0	9.1	4.4

Source: Table 11.1 above

11.3 Demographic Changes: 1970–2010

The population data for the six countries for 1970–2010 (Table 11.2) show that in 1970, the total population of the Gulf States was around 7.8 million, ranging from 108,000 in Qatar to 5.8 million in Saudi Arabia, which accounted for 70% of the region's population. By 2010, the combined population of the six countries had increased to more than five times its 1970s level, accounted for in large part by immigration. To show how UN figures compare with figures from national sources, the table also includes the latest population estimates for each country as published by the GCC Secretariat in 2008. There are differences but not as much as of 25% and more as has been suggested in some researches (MADAR 2011).

In terms of the average annual rate of population increase in the Gulf countries during each decade (Table 11.3), each nation experienced large population increases during the 1970s, which are attributable to the very high fertility in the early part of that period combined with a sharp increase in the inflow of expatriate workers following the 1973 oil boom. During the 1980s, except in Qatar, the rate of population increase declined, which may be explainable by a growing population base and (in large part) a relative slowing of immigration. The first half of the

Table 11.4 Fertility and mortality trends in the Gulf countries, 1970–2010

Country	1970–1975				1990–1995				2005–2010			
	TFR	CBR	CDR	e^o	TFR	CBR	CDR	e^o	TFR	CBR	CDR	e^o
Bahrain	6.0	35.2	6.5	65.5	3.4	26.3	3.3	72.7	2.6	20.7	2.8	74.6
Kuwait	6.9	47.6	5.2	67.6	2.2	18.0	2.7	72.8	2.3	18.7	3.1	74.2
Oman	7.4	49.1	14.5	53.2	6.3	33.1	4.0	72.1	2.5	19.1	3.7	72.6
Qatar	6.8	34.8	5.2	67.5	4.0	22.8	2.2	74.7	2.4	14.1	1.6	77.9
S Arabia	7.3	46.4	13.4	54.9	5.5	33.5	4.9	69.6	3.0	22.1	3.8	73.1
U.A.E.	6.4	32.6	6.4	64.0	3.9	23.0	2.5	72.5	1.9	14.0	1.4	75.9
GCC	7.2	45.9	12.2	56.7	5.0	30.8	4.5	70.2	2.8	20.5	3.4	73.6

Source: UNDESA (2011). Figures for GCC are calculated as a weighted average

1990s⁴ saw a significant drop in the pace of population increase in the aftermath of the Iraqi invasion of Kuwait in August 1990 and the subsequent First Gulf War, and there was again a decline in the rate of population increase in each country because of slowed immigration. In Kuwait, there was an exodus of a large number of expatriates, which resulted in an absolute reduction in total population.

After 1995, immigration picked up, rising significantly in Oman, Kuwait and Saudi Arabia, although not to pre-war levels. In Bahrain, Qatar and the UAE, on the other hand, the rate of population increase exceeded the pre-war levels seen in 1980–1990. Overall, because of large inflows of expatriates, the region experienced a high rate of population increase during the 1970–2010 period, at an average of 4.4% per annum, with the rates in the UAE and Qatar being the highest at a time when fertility rates had been declining in some countries (UAE and Kuwait) to replacement or below replacement levels.

11.3.1 Trends in Fertility and Mortality, 1970–2010

As shown in Table 11.4, all six countries experienced significant changes in fertility and mortality during 1970–2010, with each experiencing sharp declines in both the total fertility rate (TFR) and the crude birth rate (CBR). The average TFR for the region fell from 7.2 to 2.8, a decline of over 60% that was most marked in the UAE where TFR fell by more than 70% dropping to below replacement level. The crude birth rate also declined in each country, with the average for the region going down from 46 to 21 births per 1,000 population. These sharp fertility declines are attributable to several factors, including the rising age at marriage for women, delayed childbearing, increased availability and use of contraception, higher levels

⁴The 1990s are broken down into two 5-year periods to highlight the impact of Iraq's 1990 invasion of Kuwait and the subsequent First Gulf War.

of female education, increased female labour force participation and the improving status of women (Mirkin 2010).⁵ To some extent, they could also be the result of outside influences, such as the interaction with foreign cultures that resulted from the growing presence of expatriates and increasing foreign travel.

At the same time, the average crude death rate (CDR) for the whole region fell from 12.2 to 3.4 deaths per 1,000 population, a decline of over 70% to which the young age structure of the population in GCC countries contributed. A decline in infant mortality,⁶ particularly, contributed significantly to the decline in overall mortality rates and to an improvement in life expectancy at birth (e^0), which increased from an average of 57 years in 1970 to 74 years in 2010, reaching over 70 years in each country. The decline in mortality can also in large part be explained by the rapid increase in the availability of and access to quality health services. As growing oil revenues enabled governments to increase allocations to the health sector, massive campaigns aimed at awareness creation played a crucial role in promoting utilization of the expanding health services provided by the public sector. Progress in women's education, especially, played a key role in achieving almost 100% participation in child immunization programmes, which resulted in the drastic lowering of infant and child mortality (UNICEF 2011).

11.3.2 *Immigration*

In proportion to the national populations in GCC countries, the inflows of immigrants have been among the highest in the world. The magnitude of the immigration inflows over the 1970–2010 period is reflected in the excess of the annual rate of total over natural increase in population, estimated as the difference between the CBR and the CDR (Table 11.5). There was a particularly large inflow of immigrants in the years following the 1973 oil boom, when the labour supply in the GCC economies fell increasingly short of the growing needs of the development fuelled by rising oil revenues. This influx slowed down, however, as the demand for additional immigrant workers declined to some extent after the national economies, particularly that of Saudi Arabia, adjusted to a productive absorption of the initial large post-oil immigration flows of the preceding years. During the 1990s, in the aftermath of the First Gulf War, there was a net exodus of foreigners, the largest from Kuwait, followed by Saudi Arabia, Oman and Qatar. Immigration into

⁵ Singulate mean age at marriage in years for females: Bahrain – 1971: 20.4, 2001: 25.9; Kuwait – 1970: 19.6, 1995: 27.0; Oman – 1993: 20.7, 2003: 24.8; Qatar – 1986: 22.7, 2004: 25.8; Saudi Arabia – 1987: 21.7, 2007: 24.6; and the UAE – 1975: 18.0, 1995: 24.4; from national sources cited in UNDESA (2009).

⁶ The average IMR for the region declined from 97 to 16 per 1,000 live births, with the most marked decline in Oman, where it fell from 114.7 to 9.4 per 1,000 live births (UNDESA 2011).

Table 11.5 Immigration and population increase in GCC countries, 1970–2010

Year	Bahrain	Kuwait	Oman	Qatar	Saudi Arabia	UAE	GCC
(excess of average annual % rate of total over natural increase in population)							
1970–1980	2.5	2.3	1.1	4.4	2.0	13.3	2.5
1980–1990	0.4	1.3	0.7	5.2	1.7	3.3	1.8
1990–1995	0.2	–6.4	0.7	–1.0	–0.1	3.3	–0.3
1995–2000	0.7	1.5	–2.0	1.7	–0.9	3.6	–0.4
2000–2010	5.3	1.9	0.4	10.0	1.2	8.1	2.5
1970–2010	2.1	0.7	0.4	4.9	1.1	7.0	1.6

Source: Tables 11.3 and 11.4 above

Bahrain and the UAE, in contrast, remained largely unaffected. In the region as a whole, there was net out-migration during the 1990s, but then immigration picked up and reached pre-Gulf War levels, particularly in Qatar and the UAE.⁷

11.3.3 *Magnitude of Immigration and Dependence on Expatriate Workers*

According to the GCC Information Centre (GCC 2010), the GCC economies have become heavily dependent on expatriate workers: in 2008, the proportion of expatriates in the population of the Gulf countries ranged from 27% in Saudi Arabia to 81% in the UAE. This source, however, gives no breakdown for Qatar's population, implying an official policy of keeping national population figures confidential. Nevertheless, estimates from external sources put the proportion of expatriates at around 90% (Lawson 2010). In 2008, in all GCC countries except Qatar, expatriates made up 37.6% of the total population, and for 2009, the EIU (2009) puts the figure in all six countries at 41.4% of the region's total population. Although the numbers vary from country to country, all the evidence points to the overwhelming importance of expatriates in the region's population, even exceeding 80% in Qatar and the UAE.

Since most immigration is work related, expatriates constitute an even larger proportion of the labour force in each GCC country, which is broken down in Table 11.6 by the nationality of employees in the government and private sectors in 2008. According to this outline, dependence on expatriate workers has been far greater in the private sector than in the government sector, accounting for 54% of government and private sector employees in Saudi Arabia and 94% in Qatar. In each country, however, the dependence on expatriate female workers in the female workforce has been far less, probably because of the increasing number of educated women for whom employment has been restricted to specified sectors such as government, education, health and banking.

⁷ For a brief review, see Winckler (2010).

Table 11.6 Dependence on expatriate workers in the GCC, 2008

Employee category	Bahrain	Kuwait	Oman	Qatar	S.Arabia	U.A.E.
(percentage of expatriates in employee category)						
Govt. sector: Males	15.3	31.5	14.6	62.6	5.3	<i>n.a.</i>
Govt. sector: Females	9.8	19.3	14.4	47.4	5.1	<i>n.a.</i>
Govt. sector: Both sexes	12.8	25.6	14.5	57.9	5.3	<i>n.a.</i>
Private sector: Males	85.1	98.4	85.6	99.3	78.8	<i>n.a.</i>
Private sector: Females	40.6	84.5	74.6	97.4	89.7	<i>n.a.</i>
Private sector: Both sexes	80.9	97.3	84.4	99.2	80.3	<i>n.a.</i>
Both sectors: Males	81.5	90.9	78.0	95.9	53.4	92.6
Both sectors: Females	31.2	45.6	54.3	79.8	55.9	85.5
Both sectors: Both sexes	75.2	84.0	74.6	94.2	53.8	91.6

Source: GCC (2010)

Table 11.7 Age structure of population in the Gulf countries, 1970–2010

Country	1970			1990			2010		
	<15	15 to <65	65+	<15	15 to <65	65+	<15	15 to <65	65+
(percentage of population in age group)									
Bahrain	44.5	52.6	2.9	32.7	65.1	2.2	20.0	77.9	2.1
Kuwait	43.8	54.4	1.8	35.6	62.9	1.5	26.7	70.8	2.5
Oman	46.4	50.5	3.1	45.6	52.1	2.3	27.1	70.3	2.6
Qatar	36.1	62.0	1.9	28.3	70.7	1.0	13.5	85.5	1.0
Saudi Arabia	44.8	51.8	3.4	42.7	54.6	2.7	30.3	66.7	3.0
U.A.E.	35.1	63.2	1.7	31.1	67.8	1.1	17.0	82.5	0.5
GCC	44.4	52.4	3.2	40.9	56.8	2.2	26.6	71.0	2.4

Source: UNDESA (2011)

11.3.4 Changes in Population Age Structure

The impact of falling fertility rates, improving life expectancy and continuing large inflows of expatriates, mostly of working age, on the age structure of the population is illustrated in Table 11.7. As a result of falling fertility rates, the proportion of the child population (aged less than 15 years) declined in each country, and in the region as a whole, it fell from 44.4% in 1970 to 40.9% in 1990 and to 26.6 in 2010. At the same time, the continuing large inflows of immigrants resulted in an increasing proportion of the working-age population (15–64 years), which increased in every country but above all in Qatar and the UAE. The share of population aged 65 years and over dropped during 1970–1990 but increased in some countries and rose marginally in the region as a whole as the impact of increasing life expectancy began to work its way through the generations. It should be noted, however, that because Table 11.7 includes the expatriate population in which the proportion of older persons is likely to be very small, the actual proportion of older persons in the

indigenous populations in each country is likely to be much higher than shown.⁸ Nevertheless, it is still accurate to say that the population in the GCC has to date remained overwhelmingly youthful.

11.4 Demographic Prognosis for the GCC to 2050

Over the past 40 years, the GCC countries have witnessed significant demographic changes: not only have fertility levels dropped, but there have been substantial improvements in life expectancy. Moreover, although the population in all the six countries has remained youthful, fertility declines and life expectancy improvements have started to have an impact on the population age structure. As a result, large inflows of expatriates have been needed to sustain the development efforts fuelled by oil revenues, which, as previously mentioned, has made the GCC countries heavily dependent on expatriate workers. It is therefore important to investigate whether these trends will continue over the next 40 years or whether the evolving demographic scenario will be significantly different from that of the past. It is in the light of such understanding that population-related issues can be identified and recommendations put forward on how to address them.

11.4.1 *Fertility and Mortality Trends for the GCC to 2050*

The decline in fertility is projected to continue during the next four decades in each of the six countries (Table 11.8). Both the total fertility rate (TFR) and the crude birth rate (CBR) will decline further, although, because present fertility levels are already well below those in 1970, their rate of decline will be much lower than in the past. The CBR, on the other hand, is expected to decline by 30–50%, and by 2050, the TFR will fall to below replacement level in all six countries except Kuwait, where it is expected to remain marginally higher at 2.1. Declines in fertility are also expected as a result of the continuing expansion of both female education and employment, which will result in a rise in the singulate mean age at marriage, and the growing use of modern contraception.

As a result of further improvements in the availability of and access to health care services, life expectancy at birth should also continue to improve in all six countries, reaching the high 70s and exceeding 80 years in Qatar and the UAE. The

⁸ Because expatriates enter the GCC countries on work visas only and, irrespective of the period of stay, do not become eligible for permanent residence or citizenship, some workers and a very small number of dependents of highly paid expatriates would be the only non-citizens over 65.

Table 11.8 Projected fertility and mortality in the GCC countries to 2050

Country	2005–2010				2025–2030				2045–2050			
	TFR	CBR	CDR	<i>e</i> ^o	TFR	CBR	CDR	<i>e</i> ^o	TFR	CBR	CDR	<i>e</i> ^o
Bahrain	2.6	20.7	2.8	74.6	2.0	11.0	5.9	77.2	1.8	10.2	3.1	79.1
Kuwait	2.3	18.7	3.1	74.2	2.1	14.7	3.7	76.4	2.1	13.0	7.0	78.4
Oman	2.5	19.1	3.7	72.6	1.6	10.9	5.5	75.8	1.5	8.7	10.5	78.7
Qatar	2.4	14.1	1.6	77.9	1.8	6.3	2.2	80.2	1.6	6.2	6.4	82.4
S Arabia	3.0	22.1	3.8	73.1	2.0	15.3	4.2	76.7	1.7	11.5	6.7	79.3
U.A.E.	1.9	14.0	1.4	75.9	1.5	7.8	3.3	78.6	1.6	7.5	9.8	82.7
GCC	2.8	20.5	3.4	73.6	1.9	14.0	4.1	76.9	1.7	10.9	7.2	79.7

Source: UNDESA (2011). Figures for GCC are calculated as a weighted average

CDR, however, is projected to increase as the population age structure shifts more towards the older age groups.

11.4.2 Projected Population to 2050

The annual rate of natural increase in population for the region as a whole is expected to decline from the current 1.7% to 0.4% by 2050. In Oman, Qatar and the UAE, the annual rate of natural increase will have declined to below zero, although only marginally; in the other three countries, it will be less than 1%. Nevertheless, because it is impossible to predict net immigration, which has to date been a very significant factor in the demography of the GCC countries, it is very difficult to predict what course the total GCC population in the GCC will take in the years to come. Any estimate of future immigration would have to be based on assumptions and would therefore be subject to challenge. Nonetheless, the data sources used for our investigation of past trends do provide projections of population based on the future path of international migration, projections “set on the basis of past international migration estimates and consideration of the policy stance of each country with regard to future international migration flows” (UNDESA 2011, p. 12).⁹ These projections of total population in each GCC country (Table 11.9), however, are based on a constant level of net migration over the period to 2050. Even more problematic, the assumed numbers of net in-migrants projected to enter each country annually – which take into account past attempts by GCC countries to drastically reduce immigration and current government beliefs that immigration levels must be brought down – are so much lower than past migration levels that they seem highly improbable.

⁹The assumed constant number of net in-migrants into each country per annum is as follows: Bahrain: 3,000; Kuwait: 20,000; Oman: 300; Qatar: 8,000; Saudi Arabia: 30,000; and the UAE: 40,000 (UNDESA 2011).

Table 11.9 Projected population and age structure in the GCC, 2010–2050

Country	Projected population			Age structure								
	2010	2030	2050	2010			2030			2050		
	Total population (in thousands)			<15	15 to <65	65+	<15	15 to <65	65+	<15	15 to <65	65+
				(percentage of population in age group)								
Bahrain	1,262	1,653	1,801	20.0	77.9	2.1	17.2	73.8	9.0	15.5	59.1	25.4
Kuwait	2,737	4,012	5,164	26.7	70.8	2.5	20.1	74.6	5.3	18.8	65.1	16.1
Oman	2,785	3,604	3,739	27.1	70.3	2.6	17.6	74.1	8.3	13.6	63.9	22.5
Qatar	1,760	2,369	2,611	13.5	85.5	1.0	11.1	84.6	4.3	10.7	68.2	21.1
S Arabia	27,447	38,482	44,939	30.3	66.7	3.0	23.2	70.4	6.4	17.1	67.8	15.1
U.A.E.	7,514	10,488	12,154	17.0	82.5	0.5	12.5	81.2	6.3	11.3	60.7	28.0
GCC	43,505	60,608	70,408	26.6	71.0	2.4	20.2	73.4	6.4	15.7	66.0	18.3

Source: UNDESA (2011)

11.4.3 Key Emerging Demographic Issues

The projections summarized in Table 11.9 reveal three significant emerging trends:

- A slowing down of the increase in indigenous population: the average annual rate of increase in population will gradually decline to 0.8% by 2050, ranging from 0.4% in Bahrain to 1.2% in Kuwait.
- A rapid decline in the average annual rate of increase in the working population: by 2050, the average annual rate of increase in the working population will have declined to 0.2% in the overall region, ranging from 0.6% in Kuwait and Saudi Arabia to negative rates in the other four countries.
- A rapid increase in the proportion of those aged 65 years particularly after 2030. By 2050 the proportion of persons aged 65 and older in the population will exceed 15% in all countries and constitute over 25% of the population in Bahrain and the UAE.

It is evident that the future different demographic scenario in the GCC countries will represent a significant break from the past resulting in unprecedented challenges that their governments must prepare to address.

11.5 Summary

Over the last four decades, the GCC countries have experienced significant demographic changes, the most striking of which have been declining fertility, improving life expectancy and an increasing dependence on expatriate workers for the development fuelled by rising oil revenues. All six countries have been characterized by a high proportion of young people and a very low, but growing, population of older persons. Projections for the next four decades, however, show a significantly different scenario. That is, because of significant change in family formation

patterns, including delayed or declining marriages and a delayed and reduced number of births, GCC countries will be faced with two key issues: (a) an increasing proportion of older people and (b) shrinking increments in the working-age population.

The unprecedented nature of the increase in the 65+ population is clearly shown by the marked differences between past and projected changes in the population age structure. From 1990 to 2010, those 65 and over accounted for only 2.6% of the increase in the region's total population. This share, however, is projected to increase to 17% during 2010–2030 and to 92% during 2030–2050.

The resulting decline in the working-age population will be a priority issue for GCC countries if they are to avoid adverse effects on the development momentum. Compared to an increase of about 18 million in the region's working-age population during 1990–2010, the projected increase will be 14 million during 2010–2030 and only 2 million during 2030–2050. This reduction will make it increasingly difficult for the GCC countries to effectively adhere to their declared goal of lowering immigration and their implementation of measures to reduce the inflow of expatriate workers.

11.6 Addressing the Major Issues

If GCC countries are to meet these challenges through the formulation and implementation of effective policies, they must first improve their collection of population data. More specifically, reliable information on population by age, gender and citizenship should be collected periodically on a regular basis and made available to policy makers, planners and researchers. In addition, because all six GCC countries are faced with similar issues and have close economic, social and cultural links, they should coordinate their collection, analysis and dissemination of population data, the usefulness of which would be enhanced by cross-country comparability.

11.6.1 Population Ageing

The population in all GCC countries is projected to age at an increasing rate, with those 65 years and over increasing to 11 times their 2010 levels by 2050. This increase will be most marked in Qatar and the UAE where the 65+ population will have increased by 2050 to 23 and 55 times its 2010 size, respectively. Such increases will require, among other things, that health services be restructured to cater to the needs of an older population,¹⁰ that their income security be assured

¹⁰ Health services in the GCC countries must be adjusted to handle the *epidemiological transition* that accompanies population ageing; for details, see Ghannem (2007).

and, above all, that they be provided suitable living arrangements. This last, particularly, needs emphasizing because of the considerable cultural adjustment it will entail. That is, although traditional inter-generational bonds will remain strong because of the predominance of Islamic values in the GCC culture, the joint family system, which has historically been the mainstay for elder care, will come under severe strain as a result of the demographic shift. It is therefore encouraging that population ageing is being increasingly recognized as an issue in the GCC countries and has been identified as a cause of major concern by the governments of Qatar and the UAE (UNDESA 2010).¹¹ The GCC governments should therefore begin immediate planning to address ageing-related issues and establish a regional dialogue to coordinate their efforts and also learn from the experience of other Arab countries.

11.6.2 The Growing Labour Shortage

The GCC countries present a labour market paradox, high rates of unemployment among the indigenous labour force (Salama 2010), particularly the youth, on the one hand; continuing inflows of expatriate workers, on the other. Given this reality, the declining rate of increase in the working-age population in GCC countries should not be an insurmountable problem, particularly in the next few years. It does need to be recognized, however, that neither economic growth nor a shortage of indigenous labour is any longer the key factor underlying the continuing influx of foreign workers. Rather, the explanation lies more in the aversion of nationals to a wide range of jobs they consider menial and fit only for expatriates. It is because of these attitudes that attempts towards “Saudization”, “Omanization”, “Emiratization” and “Qatarization” of the workforce, which have been in place for quite some time, have met with very limited success.¹² Despite some impact in the government sector, the effect of these policies in the private sector has been negligible.

Instead, to boost the supply of indigenous workers, GCC countries should make serious efforts to tap into female participation, which has remained low in all GCC nations despite the increasing out-turn from universities of qualified women.¹³

¹¹ The media has also begun drawing attention to the looming inevitability of population ageing in the coming years; see Diala (2010).

¹² For a regional overview of the measures taken by GCC governments to promote nationalization of the workforce, see Kapiszewski (2006). For examples of the increasing emphasis placed by GCC countries on effective implementation workforce nationalization, see Al-Shaiba (2008), Al-Imadi (2010), Das and Gokhale (2010), Al-Maena (2011) and Saleh (2011).

¹³ Female enrolment exceeds male enrolment in GCC universities, and girls account for more than 50% of the annual outturn of graduates; see, among others, Al-Yousef (2009) and Oxford Strategic Consulting (2010).

Although surely the result of social attitudes towards working women and policies restricting the sectors in which they can be employed, research has shown that “relatively low participation rate of women in economic activity in Muslim countries” cannot be validly attributed to Islam alone (Baden 1992, p. 23). Further, a more recent study based on evidence from oil-producing economies concludes that “oil, not Islam, is at fault” and that “oil production also explains why women lag behind in many other countries” (Ross 2008, p. 107).

Overall, to achieve lower immigration levels, the GCC countries need to narrow the gap between the manpower requirements of development and the supply of indigenous workers. To do so, they should (at minimum) take the following six steps:

1. Raise awareness of the importance of a number of professions to encourage a change in public thinking on what tasks are menial and should be left exclusively to expatriate workers.
2. Focus development policy on increasing the adoption of capital intensive technology that requires fewer but more highly skilled workers and provide nationals with appropriate education and training to equip them to meet this demand.
3. Increase female participation rates in the labour market, which although not solely attributable to Islam, does require that GCC countries, particularly Saudi Arabia, facilitate progress from orthodox to mainstream Islam.¹⁴
4. Reduce the large number of expatriate workers employed in personal and domestic services by introducing such schemes as pre-school kindergartens and community care for the increasing older population.
5. Ensure expatriate workers’ commitment by liberalizing policy to grant permanent residence and citizenship on a selective basis.¹⁵
6. Promote dialogue and cooperation within the GCC and with other Arab countries to improve understanding of the emerging demographic challenges and formulate joint policies if necessary.

Adopting such measures should help narrow the gap between labour requirements and the supply of indigenous workers – thereby reducing the need for expatriate workers – and the size of the reduction in migrant in-flows will depend on the extent to which this gap can be narrowed.

¹⁴ The thinking in Saudi Arabia is gradually changing. Whereas women continue to be banned from driving, despite their movement against the ban (Murphy 2011), they have been granted permission to run for local office and serve on the Shura Council, the King’s Advisory Board, (Saudi Arabia 2011). See also, Martin (2011).

¹⁵ For a discussion of measures being taken to liberalize integration of non-nationals by granting, on a very limited basis, the rights of residence or citizenship to non-nationals in GCC countries see, Shah (2006).

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Chapter 12

Indonesia's Demographic Mosaic

Terence H. Hull

Abstract Indonesia is both the home of the largest population of Muslims in any nation, and the most complex mosaic of Islamic sects, organizations and belief systems of any majority Muslim population. The impact of this variety on demographic structures and trends was long regarded as inconsequential because there were few differentials of vital statistics that could be associated with religious beliefs. Under the New Order government of President Suharto Islamic leaders were enlisted into the causes of fertility control and national development, both of which promoted demographic homogeneity. Islamic teachers who opposed these forces were suppressed. The 2010 Population Census has revealed some serious challenges to government's efforts to reduce fertility. From around 2005 the average age at marriage reversed a trend of increase that prevailed over half a century, and declined by almost 1 full year according to the Census and national surveys. This in turn reduced the age at which women began childbearing, and raised the total fertility rate from 2.3 children per woman according to the 2007 Demographic and Health Survey to 2.4 in the 4 year period prior to the Census. Growing influence of fundamentalist Islamic teachings, as reflected in popular media, encourages young people to marry at young ages and subsequently to have children earlier than recent generations. Whether this will slow the rate of decline of population growth in the coming century is an open question, but it does appear to signal a major shift in Indonesia's socio-religious behavioral make-up.

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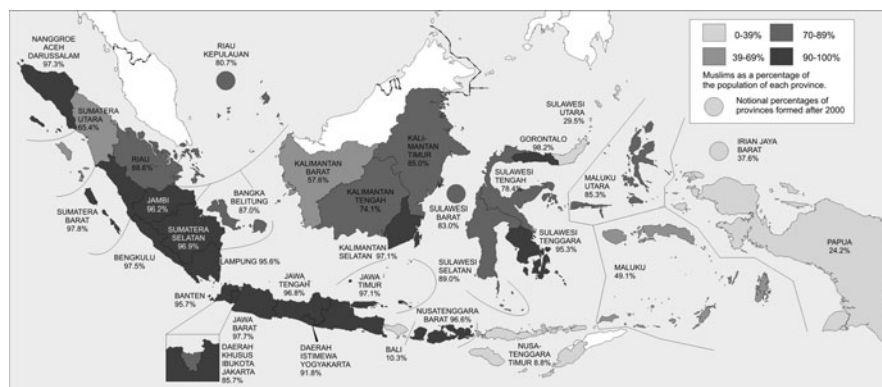
12.1 Background

Indonesia, although a secular state with a range of religions, is home to the largest Islamic population of any country in the world numbering 207 million (87%) of the 238 million people recorded in the 2010 census. This generalization oversimplifies the religious mosaic by failing to take into account the many different sects and organizations within the Muslim faith, and the degree to which many Muslims maintain syncretic adherence to traditional beliefs rooted in pre-Islamic animistic cultures. Hence, despite numerous studies on Muslim influences in Javanese mysticism and animism it is very difficult to pin down the demography of belief across Indonesia (Geertz 1960; Hefner 2000). Indonesia is also characterized by some of the basic cleavages of Islam around the world. For example although the majority of believers are Sunni, there is a substantial population of Shi'ites (perhaps one to two million), Sufi traditions have been fostered since the entry of the first Islamic teachers and many Indonesian Muslims have integrated meditational and mystical elements in their worship.

The two major groups with particular political influence are the notionally traditional Nahdlatul Ulama (NU) with a claimed following of 30 million, and the modernist Muhammadiyah numbering around 29 million. In recent years as development assistance from the Gulf States has promoted the construction of mosques and religious schools across the nation, growing attention has been paid to the Wahabi or Salafi influences on Indonesian communities. It is virtually impossible to attribute population numbers to the groups associated with such activities since the donors often eschew formal organizations (Fealy and Hooker 2006).

The minority group Ahmadiyya Muslim Jama'at in contrast has been present in Indonesia since the start of the twentieth century and has established distinctive communities and institutions. Although it is impossible to make precise estimates of this group's size, given the persecution and forced conversions they have experienced in recent years, they probably number fewer than half a million. Not only have there have been violent actions against the Ahmadis by militant orthodox Sunni groups across the country, but government-sponsored religious officials have also called for disbanding of the group.

In fact, tensions have been flaring up between these different groups and between Muslims and non-Muslims since the nineteenth century, with colonial and later independent governments usually acting as arbiters when open conflict erupted. Nonetheless in general Indonesians avoid discussion of differences among Muslim adherents, preferring to talk of Islam in terms of homogeneity in much the same way that some Western politicians refer to general 'Christian values' rather than specifying particular denominational texts. In part this strategy is intended to reduce open conflict but it also serves to reinforce the idea of the "*umat*" (believers) whose shared social bond provides them with personal strength and security. It is therefore not unusual for an Indonesian Muslim to pray in a Wahabi-funded mosque, read Shi'ite published religious tracts, and watch morning religious programs in which Islamic presenters apply techniques adapted from foreign



Map 12.1 Geographic spread of Muslims as a proportion of provincial populations, based on the 2000 Population Census of Indonesia (Robert Cribb, 2010. *Digital Atlas of Indonesian History*. NIAS Press: Copenhagen)

televangelists. Rather than picking away at the differences they are content to regard themselves as simply ‘Muslims’.

Aspinall (2011) has pointed to fragmentation as both a key characteristic and a crucial organizational principle of Indonesian society. Just as the apparently unified religion of Islam is notable for its underlying fragmented nature, so too political parties, government departments, and large universities tend to be fragmented in their structures and organizations. Yet fragmentation ironically does not preclude members of smaller units from having strong feelings of identity with the larger organization. Ultimately, whatever the nature of the sub-group, 87% of Indonesians regard themselves as Muslim.

As Map 12.1 shows, in 2000 the spread of Muslims across the archipelago could be seen as an issue of variations in the relative concentration, with some provinces having over 90% adherence to the faith, while over half the population of others was non-Muslim. This variation forced the government and commentators to describe the nation in terms of multi-cultural and multi-religious polities, as reflected in the national motto of “Unity in Diversity”. The diversity in the slogan, though, is not meant to refer to any divisions in Islam.

Under President Suharto’s New Order regime the *pancasila*, or five principles, was promoted as the primary foundation of the state. Formulated at the time of Independence in August 1945, it comprised five precepts including Belief in One God, Humanity, National Unity, Democracy, and Social Justice for all Indonesians. Interestingly, Belief in One God refers to all religions, with even Hindus and Confucianists in Indonesia formally adopting a single deity in their belief systems. In an early draft of the document, this principle of monotheism even included a clause, known as the Jakarta Charter, which stipulated that Muslims must adhere to Islamic *shari’a* law. In the final version the drafting committee led by Indonesia’s

first president Sukarno dropped this clause, but since then, many Muslim politicians have campaigned for a 'restoration' of the Jakarta Charter.

Although not necessarily in conflict with Islamic principles, the politics of the day during Suharto's time stressed the secular and pluralistic values of the *pancasila* rather than its religious interpretation. Public servants were all forced to undergo *pancasila* training, as were all school students. This instruction was not an alternative to religion, which remained a compulsory subject in school curricula at all levels of education, but rather a counter balance to Islamic groups involved in rebellions and anti-government protests. When Suharto was deposed in 1998, his vice president, B.J. Habibie, stepped into the presidency and ushered in a 'reform' era of various democratic initiatives. As a result, latent Muslim political groups were unleashed, religiously based political parties were formed and secular parties worked to appeal to religious voters. Under Habibie's presidency the foundations were also laid for more democratic elections, which took place in 1999. With democracy, however, came appeals to demography, with many Muslim politicians arguing that 'their' followers' population majority (by which they encompassed all forms of Islam) justified the application of Islamic legal and moral precepts, at least with regard to all nominal Muslims, and perhaps including all Indonesian residents.

Under the New Order, there were only five official religions – Islam, Catholic, Christian (non-Roman Catholic), Hindu, and Buddhist – and all citizens had to belong to one of them. This list was then expanded to include Confucianism by the fourth president of the Republic, Abdurrahman Wahid, himself a prominent cleric associated with Nahdlatul Ulama. Wahid, who frequently called for the separation of religion from the functioning of the state, was active in inter-faith dialogue and opposed the notion of applying Islamic law in the secular state of Indonesia. After only 2 years in office he was impeached by the legislature and replaced in 2001 by Vice President Megawati Sukarnoputri, the daughter of President Sukarno. At least some of the animus against his presidency arose from Islamic politicians unhappy with his openness to other religions.

Habibie's brief period in office also ushered in one of the most dramatic changes in Indonesia's history: the radical decentralization of government functions from central to district level administrations, largely bypassing provincial governments. The president thought that it would be dangerous to place too much power in the hands of provinces in which cultural homogeneity might provide a reason for secessionist urges. Religion was a key factor in this fear. For years Muslims in Aceh had campaigned for greater autonomy and the adoption of stronger Islamic principles in the land they called the 'Veranda of Mecca' for its reputation as the first area of Southeast Asia to be converted to Islam. In contrast, at the other end of the country, largely animist or Christian residents of Papua were drawn to separatism as a means of pulling away from a regime they see as Muslim dominated. Were provinces like Aceh, Papua, Maluku, or Nusatenggara Timor to conduct serious efforts to leave the nation, Indonesian unity would be irreparably harmed and it is anyway inconceivable that district level governments would ever consider secession because they could never form a viable alternative national government.

Today leaders of many Muslim groups increasingly talk of the need to promote Islamic beliefs in the structures of law, education, celebration and sensibility. Such discussion sets up two poles of thought and behavior: contrasting tolerance and acceptance of pluralism on the one hand and fundamental promotion of officially accepted Muslim doctrine on the other. Most particularly there is a strong sense that Indonesia is not simply majority Muslim and an increasing belief that national identity should be seen in terms of Muslim dress, ceremonies and symbols. Many Muslims also associate the other religions of Christianity, Hinduism, Buddhism and Confucianism with foreign sources and references. Not surprisingly, open discussion of such tensions is discouraged, and for many Indonesians and most government officials, questions of religion are labelled 'sensitive'.

Habibie's radical decentralization, although it protected the nation from division, inadvertently opened the way for religious groups to challenge the nation's secular foundations. Many local governments have introduced Shari'a based regulations that are not always the product of religiously-based parties winning power in the local legislature. Often such regulations have been passed by members of the secular Golkar party as a means of attracting Muslim votes away from more overtly religious parties. Because Indonesia is a nation with over 1,000 identified ethnic groups and as many languages, religion has become a primary unifying form of identity for many Muslim citizens who increasingly respond to symbolic regulations on the veiling of women, the banning of alcohol, and campaigns against apostasy. At the same time the increasing fundamentalism of Islamic teachers and groups has also affected population growth by impacting the determinants of the major demographic engine of fertility.

12.2 Fertility Levels and Trends

In Indonesia organised family planning over the last 40 years has produced a decline in fertility from 5.6 births per woman on average in 1970 to 2.4 in 2010. Prior to the publication of the 2010 census projections assumed a steady decline over the next 40 years to well below replacement fertility. This assumption, however, may be too simple, and simply premature, given some of the complexities recently unearthed in Indonesia's demographic profile.

To illustrate, Table 12.1 shows both the proportion of Muslims in provincial populations and the census-based calculations of trends in the average lifetime number of births per woman (i.e. the total fertility rate or TFR). Looking first at the pattern of religion, less than half of Indonesian provinces have a 'universal' measure of Islamic adherence defined by over 90% of the population professing to be Muslim. Seventeen of 33 provinces have substantial non-Muslim populations, and in six of these, Muslims make up half or less of the total count. This situation already represents a very complex mosaic of beliefs, but if we consider the variations in sects, groups and the syncretic orientation of those under the banner of Islam, the pattern becomes all the more fragmented. What is most important is

Table 12.1 Proportion of population Muslim and estimates of total fertility trends

Region	Proportion Muslim	Total fertility rate ^a		
	2010	1990	2000	2010
Indonesia	87.2	3.4	2.6	2.4
Aceh	98.2	4.1	2.8	2.8
Sumatera Utara	66.1	4.2	3.0	2.9
Sumatera Barat	97.4	3.8	3.1	2.8
Riau	88.0	4.3	3.1	3.0
Jambi	95.4	3.9	2.8	2.6
Sumatera Selatan	96.9	4.3	2.8	2.6
Bengkulu	97.3	4.2	2.9	2.6
Lampung	95.5	4.1	2.7	2.5
Bangka Belitung	89.0	4.0	2.4	2.7
Kepulauan Riau	79.3	3.4	2.3	2.8
DKI Jakarta	85.4	2.4	1.8	1.9
Jawa Barat	97.0	3.5	2.8	2.5
Jawa Tengah	96.4	3.2	2.4	2.2
DI Yogyakarta	92.0	2.1	1.8	1.9
Jawa Timur	96.4	2.6	2.1	2.0
Banten	94.7	4.4	3.0	2.4
Bali	13.4	2.4	2.2	2.2
Nusatenggara Barat	96.5	4.6	3.1	2.7
Nusatenggara Timur	9.1	4.4	3.8	3.7
Kalimantan Barat	59.2	4.3	3.0	2.7
Kalimantan Tengah	74.3	4.1	2.9	2.7
Kalimantan Selatan	96.7	3.3	2.6	2.4
Kalimantan Timur	85.4	3.5	2.8	2.8
Sulawesi Utara	30.9	2.7	2.4	2.4
Sulawesi Tengah	77.7	4.3	3.2	3.0
Sulawesi Selatan	89.6	3.3	2.8	2.5
Sulawesi Tenggara	95.2	4.8	3.5	3.2
Gorontalo	97.8	3.2	3.0	2.7
Sulawesi Barat	82.7	3.9	2.1	3.3
Maluku	50.6	4.4	3.8	3.4
Maluku Utara	74.3	4.8	3.7	3.4
Papua Barat	38.4	4.9	3.3	3.3
Papua	15.9	4.7	3.5	(2.8)

The shaded rows are provinces with over 90% of the population being categorized as Muslim in the 2010 Population Census of Indonesia. Sulawesi Selatan has been included in this group because 89.6 would normally be rounded to 90

^aTotal fertility rates are calculated using the Rele regression method based on reported child-woman ratios

The 2010 TFR for Papua is seen as unreliable because of data collection problems in the census. Statistics Indonesia, the agency responsible for the census is investigating the estimates for a number of provinces and will be issuing analytical papers throughout 2012

the lack of any discernible link between religion and the levels and trends of fertility. Rather, nationally the last three censuses have shown declines in TFR everywhere except Yogyakarta where in 2010 there was a slight increase from the below-replacement fertility recorded in 2000. In 2010 the highest fertility rates tended to be found in the Indonesia's Eastern provinces where there are high proportions of non-Muslims but also high levels of poverty. Some of these provinces are also notable for having Melanesian populations with very different cultural traditions than those found in the Malay islands to the West.

12.3 Religion and Fertility Control

In the 1970s the use of contraceptives was limited to less than one in ten married women. By the Demographic and Health Surveys of 2002/2003 and 2007 the proportion had risen to a steady figure of around 60% (Hull and Mosley 2009). Nevertheless, the uniform fertility decline that has seen national rates approach the replacement level of 2.1 children per woman on average has not been the result of a passive national consensus supporting the New Order-initiated family planning program. Rather, from its establishment in 1978 this program has faced criticisms from Muslim clerics who questioned the government's involvement in birth control and dissatisfaction with specific family planning methods, especially the IUD, condoms and abortion.

First, in the 1980s as the government pushed Islamic political parties into a single, largely powerless conglomerate political grouping (PPP or the United Development Party) the major Islamic religious groupings (Nahdlatul Ulama and Muhammadiyah) withdrew from formal political activity. As a result the National Family Planning Coordinating Board (BKKBN in the Indonesian acronym) became more influential in the rural and isolated regions where religious complaints shifted from a general questioning of a presumption to thwart God's will regarding childbearing to the propriety of specific actions or policies. Indications of this shift were contained in articles in the widely distributed Islamic magazine *Panji Masyarakat* in 1983 (Issues 408 and 413) which made serious allegations of coercion against the BKKBN and charged that the birth control technologies being promoted were immoral. In one article, Ahmad Tohari objected to the "Smile Safari" campaign, which used various techniques of bureaucratic mobilisation to attract large numbers of potential family planning acceptors. Under the title 'Hunting', Tohari compared the treatment of Indonesian women with the fate of bison, African slaves, and Native Americans "hunted" by Europeans in "safaris" of a different age.

In response, the BKKBN organized clerics supportive of government-provided family planning to undertake training on the nature and purpose of contraception (Fathuddin 1993). Government also funded pro-family planning religious groups,

and sponsored prayer and Quran reading sessions in local communities. Critics fought back, citing textual concerns about the immorality of birth control. By focussing on issues of the family, where clerics were widely acknowledged to have authority, they avoided the accusation that they were making anti-government political statements. Nevertheless, as they pushed the government to address religious sensitivities (Aidid 1987) they did not always avoid confrontation. For instance, in 1984, in the so-called 'Priok affair' the military shot down street demonstrators whipped up by critical sermons that attacked, among other things, the implementation of the family planning program (Hull and Hull 1997).

Likewise, Panji Masyarakat reports of decisions of the November 1983 Congress of Islamic Scholars (Majelis Ulama Indonesia – MUI) included condemnation of sterilisation and pregnancy termination except in emergency cases. Such condemnation directly challenged the government's financial support for the former and tacit acceptance of menstrual regulation techniques of abortion in private clinics. In a reversal of a decision made in the mid-1970s the MUI did accept the IUD as a method of birth control (Panji Masyarakat Issue 412, pp. 22–24); however, in doing so, they attached the condition that the insertion should be made by a female doctor, or, in emergencies, by a male doctor in the presence of the woman's husband or another woman. Such concerns not only served to shape public attitudes about the family planning services, they also put limits on the BKKBN and prevented official acceptance of sterilisation (Hull and Hull 1997, pp. 402–403).

After the 2001 decentralization of government functions, the top-down control characteristic of the New Order was replaced by a system in which local authorities became responsible for managing local budgets, including budgets for the contraceptives used by the government and the increasing number of private health providers based in their districts. Proponents of family planning therefore claim that the new system has had a deleterious effect on contraceptive availability, even though as already pointed out, the contraceptive prevalence rate has actually remained steadily high across the nation, with only a small number of districts reporting difficulties in maintaining supplies for their population. In part, this steadiness results from the national government and the central office of the BKKBN having maintained funding for birth control logistics, and having arranged special budget allocations to encourage districts to keep up their family planning work. As Fig. 12.1 shows the range of contraceptive options available to women has changed dramatically over the past 16 years. One striking feature of the 2010 contraceptive mix is the high prevalence of injectables a method heavily promoted by private health services and private midwives, whose enthusiasm may be partly motivated by the fact that injectables are more lucrative for providers compared to other methods.

Indonesia also is assumed to have a high rate of abortion despite the legal restrictions embedded in a number of laws which provide a weak foundation for the prosecution of unsafe abortions and a confusing framework for the assurance of medically safe procedures for women seeking legal terminations (Hull and Widyananto 2010). It is very difficult to gather data on this sensitive issue.

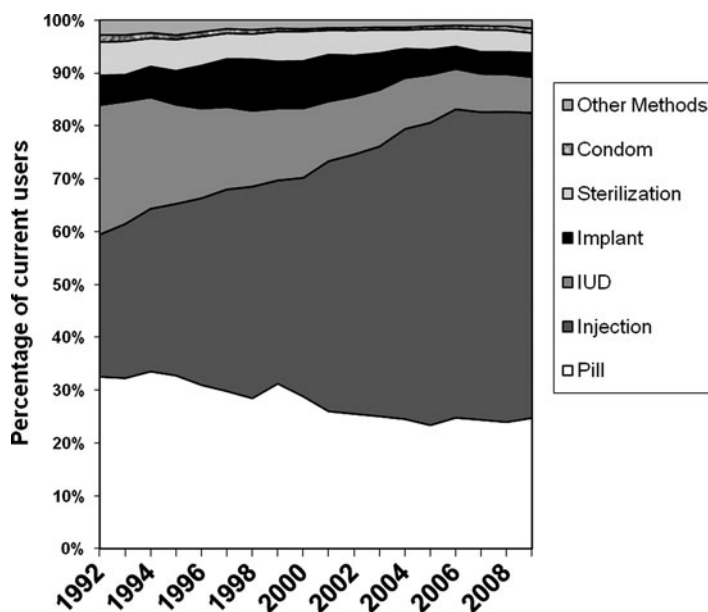


Fig. 12.1 Changing pattern of contraceptive mix, Indonesia, 1992–2009 (Source: Data from the annual National Social and Economic Survey (SUSENAS), stored at the Australian Data Archives, The Australian National University, Hull and Mosley 2009)

The most cited study providing estimates of the incidence of abortion in Indonesia is usually misinterpreted. Utomo and colleagues (2001) visited a sample of abortion providers and recorded all forms of pregnancy termination over a period of a few weeks. When the statistics were blown up to a national figure, they produced a total annual number of two million. This has been picked up by commentators as the Indonesian experience, but they fail to indicate that this estimate includes 800,000 spontaneous abortions and 1.2 million induced abortions. This latter number compares to the estimated annual 4.5 million live births. However interpreted, these numbers indicate that a substantial number of women resort to pregnancy termination each year. While there are many religious leaders who condemn the practice of induced abortion, the religious legal interpretations they cite are often unclear about the propriety of terminations in the first 120 days of a pregnancy. In Bangladesh such terminations are allowed under the Menstrual Regulation law, and the term MR is often used in Indonesia for the promotion of traditional herbs which are said to bring on late menstrual periods.

Whether considering the 60% contraceptive prevalence rate or the substantial numbers of induced abortions conducted annually, it seems that Indonesian women of all religions are controlling their fertility with little concern about any anti-birth control rhetoric that a minority of religious leaders might release.

12.4 Marriage Trends: Signs of Reversal

Although the general trends in fertility and contraceptive use might appear to be on track for continuing fertility decline and dampening of population growth, the annual National Social and Economic Survey (SUSENAS) over the past decade has shown a disturbing reversal in the age at marriage for both men and women. Because Indonesia does not compile reliable vital statistics on fertility, mortality and marriage, demographers tend to rely on survey reports of marital status, including those who are single (meaning never married), currently married, currently divorced or currently widowed. Couples who are not legally married, but whose cohabiting relationship is recognized by the local community, are recorded as married (Jones et al. 2011). It is then possible to use the proportions of people reported as single in each age group to calculate the singulate mean age at marriage (SMAM) as an indicator of the timing of entry into a likely reproductive union.

As Fig. 12.2 shows, the SMAM began a reversal in 2005: not only is the age of marriage now younger for both men and women, but the gap between husbands' and wives' average ages, after years of convergence, shows a slight widening.

For Indonesia the SMAM rose steadily from the late 1960s through 2005, in part because the BKKBN conducted strong campaigns promoting later marriage, and discouraging parents from marrying off their adolescent daughters. Their arguments were well accepted by communities, and female enrolment in education and participation in the formal labour force rose in concert with the delay in marriage. These behaviour changes were based on the rationale of modernization, much as the call for smaller families used images of healthier better-educated children to convince parents to have fewer babies and invest more resources and attention in each child.

With the opening up of political space for Islamic parties, however, the logic of family planning messages came under increasing scrutiny in the parliament, in the meetings of mass Muslim organizations, and in the flourishing range of pamphlets and magazines sold around mosques after Friday prayers. After the BKKBN was criticised in the mid-2000s for its slogan 'Two children are enough', posters and images carrying this message began to disappear and the slogan was replaced by 'Two children are better', although no specification was made of what the 'better' referred to. Even this change did not satisfy some Muslim leaders, who said that the BKKBN should stop referring to numbers and leave childbearing planning up to the parents – and up to God. Likewise, the advice that couples should prioritize education and work ahead of marriage met with increasing challenges. In 2007 the head of BKKBN published a book on the ideal family (later translated into English and published as Syarif 2011) which encouraged early marriage based on the claim that "Allah SWT suggests [that] a young man who is biologically and economically ready [should] get married soon" (p. 14). In 2010 the congress of the NU proclaimed that under Shari'a law there is no minimum age at marriage and encouraged good Muslims to marry "rather than commit a sin" (Nafik and Hairamurni 2010).

While these changes in government messages about family formation took place in the between 2001 and 2006, it is unlikely that women would have paid so much

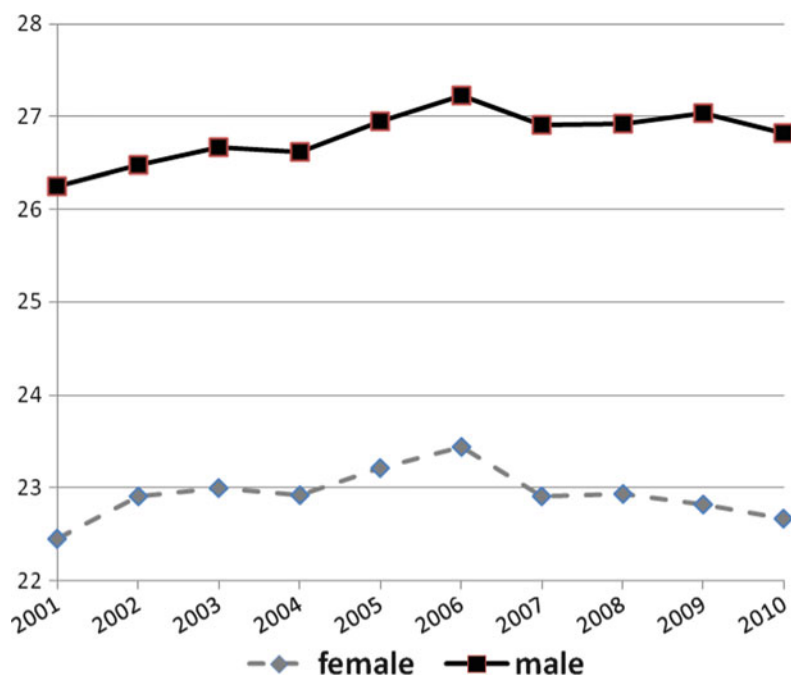


Fig. 12.2 Trends in average age of first marriage (SMAM), Indonesia, 2000–2010

attention to billboards and government screeds as to change their marriage plans and behaviors. There must have been more widespread changes taking place in society that effectively reached most women in ways that deeply moved them. Winn ([forthcoming](#)) has noted that the last decade has seen a surge in membership of local groups involved in religious discussion, chanting and activities. Among women in particular millions are joining *majelis taklim* – local study groups that adopt distinctive uniforms, participate in group recitation and discuss religious teachings – and that these groups are particularly attentive to televised evangelical shows that provide models for their local activities.

Interestingly, as Table 12.2 documents for a sample of young people in Jakarta, television is more popular than either radio or print products as a source of religious information, and all three sources tend to be tapped more by educated than unschooled people.

Likewise, anecdotal evidence of small but influential Islamic groups working on university campuses indicates that there are many pressures on group members to marry young, and to marry within the group, with great effort being put into matchmaking and affordable wedding arrangements (Savitri and Faturrochman 2011, pp. 70–71). The popular magazine *Aulia*, which has a focus on marital advice and Islamic clothing styles, hit the newsstands in November 2011 with the English language headline: *Good Muslims, Happy Marriage, Great Sex*. While the titillating messages of such publications would disturb many conservative Muslims,

Table 12.2 Communication sources and selected content among young Jakartan adults by level of education, 2010

	Primary school or less	Junior high school	Senior high school	Certificate	Bachelors	Total
Males, N=	110	189	698	90	158	1,245
Regular readers	68	86	93	99	99	91
Newspapers	15	30	45	63	69	44
Religious tracts and texts	14	24	26	33	29	26
Regular TV watchers	85	86	94	94	97	92
Documentaries and news	31	36	47	59	60	46
Religious programs	32	37	39	30	43	38
Regular radio listeners	87	92	97	98	99	95
National and international news	60	64	76	85	88	75
Religious programs	14	18	19	17	18	18
Females, N=	297	321	773	169	196	1,756
Regular readers	64	74	90	98	97	84
Newspapers	4	8	24	38	52	22
Religious text	18	25	32	36	38	30
Regular watchers	95	97	98	98	97	97
Documentaries & news	35	32	45	50	51	42
Religious programs	47	44	51	51	41	48
Regular listeners	86	91	96	96	98	94
National and international news	65	76	76	79	81	75
Religious programs	8	15	17	18	18	15

it obviously struck a chord and inspired the attention of many young people, Muslim and non-Muslim alike. The message that comes through in both images and stories is the centrality of marriage in any attempt to build a good life. Again, youthful marriage is portrayed as a ‘modern’ Muslim option, so long as the husband is able to support the household. In that context it is not surprising that women across Indonesia (see Table 12.3) are marrying earlier.

12.5 Conclusions: Choosing Among Demographic Futures

The latest population projections for Indonesia (see Fig. 12.3) published by the United Nations Population Division in their 2010 edition of *World Population Prospects* take into account a variety of assumptions about trends in fertility and mortality; most particularly no change in fertility (constant at the UN’s assumption of current fertility of 2.1 births per woman on average), an assumption that fertility will drift down from 2.1 to 1.7 between now and mid century, and a low fertility assumption that would see family sizes shrink from 1.8 in 2015 to 1.2 in 2050.

Table 12.3 Female singulate mean age at marriage for censal and intercensal data

Province	1990	1995	2000	2005	2010
INDONESIA	21.6	22.2	22.3	23.4	22.3
Aceh	22.6	23.5	23.2	–	23.1
Sumatera Utara	23.3	24.0	24.0	24.9	21.8
Sumatera Barat	22.8	23.5	23.1	24.4	22.9
Riau	22.0	22.7	22.5	23.7	22.5
Jambi	20.8	21.4	21.5	22.3	21.2
Sumatera Selatan	21.7	22.1	22.9	23.7	22.2
Bengkulu	21.0	21.2	21.6	23.0	22.2
Lampung	20.8	21.4	21.7	22.9	22.0
Bangka Belitung	–	–	22.2	22.0	21.2
Kepulauan Riau	–	–	–	24.6	24.4
DKI Jakarta	23.9	25.4	24.5	26.4	23.5
Jawa Barat	20.2	21.3	21.5	22.9	22.2
Jawa Tengah	21.3	22.1	22.5	23.4	22.1
DI Yogyakarta	24.1	24.1	23.5	25.9	24.3
Jawa Timur	21.0	21.2	21.8	22.7	22.0
Banten		–	21.5	22.9	21.5
Bali	22.7	22.7	22.8	23.2	22.4
Nusatenggara Barat	21.0	21.0	21.8	22.4	22.1
Nusatenggara Timur	23.8	23.5	23.8	24.0	23.5
Kalimantan Barat	21.4	21.9	22.1	23.7	22.1
Kalimantan Tengah	20.8	21.8	20.7	22.0	21.0
Kalimantan Selatan	21.5	21.6	21.6	22.2	21.2
Kalimantan Timur	21.6	22.1	22.0	23.4	22.2
Sulawesi Utara	22.4	22.4	22.4	23.9	22.5
Sulawesi Tengah	21.3	21.3	21.3	22.4	21.8
Sulawesi Selatan	23.6	24.0	23.7	24.4	23.2
Sulawesi Tenggara	21.5	21.5	21.8	23.2	22.3
Gorontalo	–	–	21.4	21.9	21.6
Sulawesi Barat	–	–	–	–	22.0
Maluku	22.4	22.3	22.9	23.7	23.6
Maluku Utara	–	–	22.0	23.2	22.8
Papua Barat	–	–	–	–	23.0
Papua	20.4	20.7	20.8	21.9	22.3

Data for 1990, 2000 and 2010 are taken from decennial population censuses, while those for 1995 and 2005 are taken from the intercensal surveys

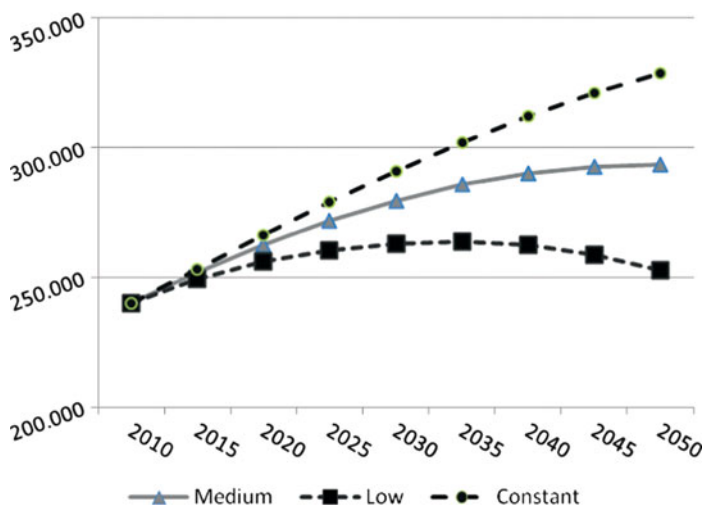


Fig. 12.3 Population futures for Indonesia (in thousands) (Source: United Nations Population Division (2011). *World Population Prospects: The 2010 Revision*. Available at <http://esa.un.org/unpd/wpp/index.htm>)

Before the release of the 2010 Census on 1 November 2011 some analysts believed that the likely fertility scenario would be steady decline following the medium trend (including Hull 2009; 2010). Such a scenario would imply population numbers topping off at 293 million citizens in 2050 before starting a downward trend to finish the century at 254 million, more than the present population but much less than the 380 million implied by an unchanging fertility rate.

Unfortunately the 2010 Census challenges these assumptions and the implications of the projections. First, the census based fertility estimate of 2.4 children is higher than the previous UN baseline of 2.1, and it will be some years before fertility falls below the replacement level of fertility that had been the BKKBN target for 2010. Second, there is no evidence that average age at marriage will continue to fall, particularly since women's enrolments in secondary and higher education are continuing to climb (Suharti 2011). This means that the rise in fertility may be small and temporary to be followed by a return to the long term decline seen over the preceding three decades.

The changing religious behavior seen in the post-Suharto period has sapped much of the confidence that demographers had in making population projections. While calculations had always been based on "what if" statements, the range of possibilities has greatly expanded as citizens espousing contradictory religious norms clash in the democratic arenas of the world's fourth most populous country, and largest national collection of umat. Nevertheless, fertility trends in most Muslim populations around the world have been declining, so it is unlikely that Indonesia would see a major reversal. The uncertainty makes it all the more important for the government to improve the data systems used to monitor the nation's demography and religious trends.

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Chapter 13

Africa's Growing Giant – Population Dynamics in Nigeria

Muhammad Ali Pate and Joel Schoppig

Abstract Nigeria, the giant of Africa, is a country of great potential and great challenges. Its population of over 150 million is growing fast and will likely double by the middle of this century. Anyone who has ever visited the country cannot but be impressed by the creativity, ingenuity, and character of its people but saddened by the hardship too many face. That is, despite its great oil wealth, a majority lives off less than USD1.25 a day. Yet Nigeria's current demographic development could open a window for accelerated growth: its young, healthy, and educated workforce has the potential to become an asset to the country far greater than the natural resources lying abundantly in its soil. Millions could be lifted out of poverty, and Nigeria could find its true position in the global economy. If this potential is not realized, however, if Nigeria fails to create the necessary opportunities for its people, if no more is invested in human development, Africa's most populous country could face demographic disaster.

To examine this potential, this chapter describes the current demographic and human development indicators for Nigeria, looks at the underlying roots of its high fertility, discusses its previous population policy, and looks into what future challenges and opportunities lie ahead.

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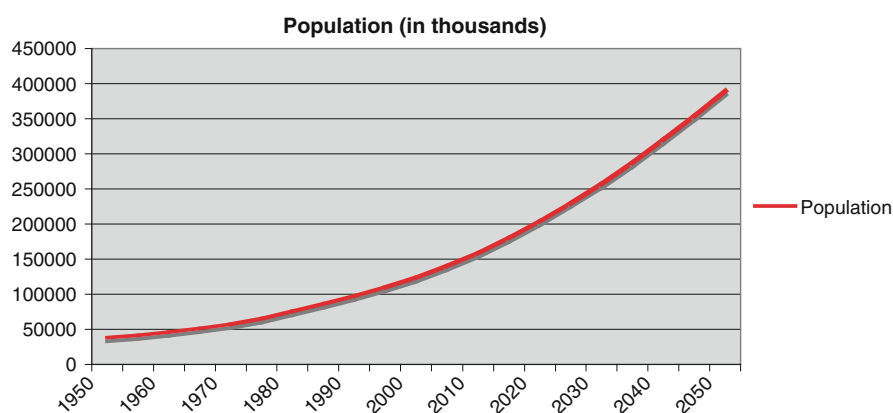
13.1 Overview

The Federal Republic of Nigeria borders Benin, Cameroon, Chad, Niger, and 853 km of coastline on the Gulf of Guinea, covering 910,768 km² of land. The northern plains contrast with the southwest lowlands, the southeast mountains, and the central hills and plateaus. The capital Abuja is located in the country's center, while Lagos, Nigeria's economic and financial capital and a major port city, sits on the coast.

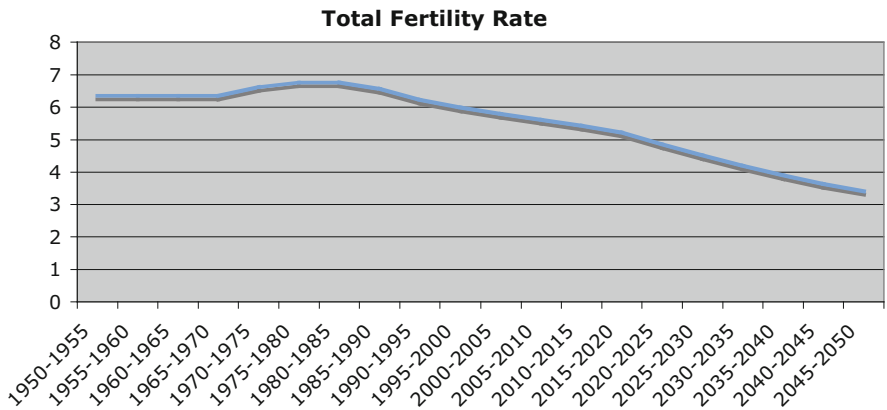
With a population of around 154 million, Nigeria is the undisputed giant of Africa. Every fifth sub-Saharan African is Nigerian, and the population is growing at an annual rate of 3.9% (World Bank 2009). In 1960, when Nigeria gained its independence from Britain, the country had about 45 million inhabitants, a number that has since almost quadrupled. In fact, despite a noticeable decline in the total fertility rate, the UN projects that the population will rise to 210 million by 2025 and reach over 300 million by 2050.

Nigeria's population is highly diverse and consists of over 250 ethnic groups and 500 distinct languages. The largest ethnic groups are the Hausa-Fulani in the north, the Igbo in the southeast, and the Yoruba in the southwest. Religious affiliations, split between 50% Muslim, 47% Christian, and 3% adherents of indigenous beliefs, follow no clear geographic or ethnic lines, although Islam is the dominant religion in the north while the majority of southerners are Christian.

Nigeria's highly fragmented geographic, ethnic, and cultural identities, however, are balanced by a highly federalized structure of governance: the country is divided into six geopolitical zones, 36 states plus the Federal Capital District, and 774 local government areas. After gaining independence from Britain in 1960, Nigeria was in and out of military rule until 1999, but since then it has moved steadily toward genuine democratic rule. For example, the 2011 elections that confirmed Goodluck Jonathan as President of the Republic are recognized to have been relatively free and fair.



Source: UN (2010) Population online: http://esa.un.org/unpd/wpp/unpp/panel_population.htm



Source: UN (2010)

Although the current fertility rate of 5.7 (National Population Commission 2008) is more than double the world’s average rate, on a very high level, fertility has been declining since the mid-1980s and is projected to fall below 4 by the year 2035. Nevertheless, fertility rates vary significantly across the country. Women in rural areas have on average two more children than urban women (6.3–7.4), and women in northern Nigeria have a higher fertility rate than those in southern and central Nigeria. Fertility rates are also strongly determined by education and socio-economic position: women with no formal education and women in the lowest wealth quintile have an average of seven children compared to women with more than secondary education and those in the wealthiest quintile who have an average of four.

The average population density is 150 people per square mile but varies significantly across the country. For example, large areas in the Chad Basin, the middle Niger Valley, and the grassland plains, among others, are sparsely populated. The most densely populated states are found in the southeast, and Kano state, with an average density of 442 persons per square kilometer, is the most densely populated state in the north (National Population Commission 2008).

Background characteristics	Total fertility
Residence	
Urban	4.7
Rural	6.3
Zone	
North Central	5.4
North East	7.2
North West	7.3
South East	4.8
South South	4.7
South West	4.5

Education

No education	7.3
Primary	6.5
Secondary	4.7
More than secondary	2.9

Wealth quintile

Lowest	7.1
Second	7
Middle	5.9
Fourth	5
Highest	4
Total	5.7

Source: NDHS (2008).

Nigeria's large population makes the provision of basic public services like health and education very challenging, and many of the country's indicators are weak, even for sub-Saharan Africa. For instance, Nigeria's Human Development Index ranks the country 142nd in the world (UNDP 2011). Infant mortality is also high, with 87 deaths per 1,000 live births, and 171 in 1,000 children die before completing their fifth year of life. Maternal mortality is at 545 per 100,000 (National Population Commission 2008). Health care access is also a major problem: there is one registered doctor for about 3,900 people, and one registered nurse per 1,235 people. In addition, although a large population is by no means the sole determinant of Nigeria's low level of human development, population size and social heterogeneity make change anything but simple. To compare, Botswana, often lauded for its high level of development, has measles immunization coverage among 1-year-olds of 94%, whereas the rate in Nigeria is a mere 41% (WHO 2009). The population of Botswana, however, is only around two million, little more than Nasarawa, Nigeria's second least populous state.

Although education has been improving in recent years, low completion rates are indicative of poor learning environments and low teaching standards. Nearly 9 out of 10 children, 88.8%, are now enrolled in school. In urban areas, 75.9% of men and 72.2% of women have attended primary school compared to 60.3% and 53.5% among the rural population. Nevertheless, regional differences are stark, with primary completion rates per state ranging from 2% to 99%. In the South West and South East zones, average secondary school attendance is 68.7%, while only 26.7% attend secondary school in the North West zone. Moreover, the rapid improvement in youth literacy, from 64.1% to 80% between 2000 and 2008, appears to have reached a plateau (UNDP 2010).

In addition, despite Nigeria's strong economic performance in the last 10 years – economic growth averaged 7.6% between 2003 and 2011 – a majority of Nigerians still live in poverty, 62.2% below the national poverty line. Moreover, although growth in the agricultural sector has reduced the proportion of underweight children, from 35.7% in 1990 to 23.1% in 2008, oil and natural resource wealth has

made Nigeria an extremely unequal society. The lowest 40% of households receive 15% of the total income, while the wealthiest quintile earns 49%.

13.2 Urbanization

Nigeria is particularly affected by a trend experienced by most developing countries – massive urbanization. Between 1952 and 1991, the number of urban areas in Nigeria increased from 56 to 359 (Onwuka 2005), and 49% of the population now lives in cities. In fact, Nigeria has more cities with over a million inhabitants than any other country in Africa. Lagos, which currently has about ten million inhabitants, is already Africa's second most populous city and sees myriads of newcomers every year. One of the greatest problems associated with this rapid urbanization is concentrated poverty: low-income households make up 70% of the urban population but live on only 30% of the land. In fact, the city of Lagos is so crowded that, in a remarkable display of Nigerian ingenuity, inhabitants have started building new islands out of the garbage floating in the lagoons. Such urban slums, however, pose a significant health hazard, as only a small part of the waste generated can be collected. Building infrastructure in cities, therefore, is essential to accommodating an ever-growing population. On the other hand, there is a noticeable difference between the levels of human development in urban and rural areas. Human resources for health and education are also much more easily accessible in Lagos and Kano than in the remote areas of the Lake Chad basin, as are drugs and vaccinations. In fact, even though urbanization brings many new challenges to the table, Lagos consistently outperforms all other states on most development indicators. The high concentration of people in urban areas, therefore, presents not only a great challenge but also a valuable opportunity.

13.3 Underlying Causes of Population Growth

It is essential to any debate on population growth in Nigeria to understand the socioeconomic and deeply rooted cultural causes of high fertility. According to Nigerian demographer Isiugo-Abanihe (Isiugo-Abanihe 1994), individual fertility behavior takes place within a context of complex social organization and under the influence of multiple social cultural and ideological realities. Family life, therefore, is not only a private matter but one guided by normative principles and social norms. In addition, as Isiugo-Abanihe shows in his study on the family size preferences of Nigerian men, besides the socioeconomic determinants of fertility discussed above, there are significant cultural determinants of family size. For example, monogamously married men have smaller families and want fewer children than do men in polygamous unions, and men who have discussed family size with their wives have lower family-size goals. Likewise, family size preference is significantly lower among the Yoruba and Igbo than among the Hausa-Fulani and

the Ishan ethnic groups, and Nigerian's of Muslim and indigenous faith have a higher family size preference than Christians, partially because of the higher prevalence of polygamy among the former. Among Christians, Catholics have more children and a higher preference than Protestants, and religion remains a significant determinant even when education is included as a control variable.

Caldwell and Caldwell see a strong ancestral belief system at the heart of sub-Saharan Africa's high fertility: "The essence of the traditional belief system is the importance attributed to the succession of the generations, with the old tending to acquire even greater and more awe-inspiring powers after death than in this world and with the most frequent use of those powers being to ensure the survival of the family of descent" (Caldwell and Caldwell 1987). They therefore posit that this belief in ancestral spirits' influence over people's fate leads to a perception that childlessness and infertility are omens of misfortune generated by bad behavior. They also find that even though most Nigerians today are of the Muslim or Christian faith, a majority still believe that barrenness is a punishment or evidence of evil, whereas fertility is proof of good moral standing.

The desire to ensure linear succession plays another important role in the high number of births in Nigeria: every man sees it as his duty to ensure societal continuity and carry his lineage on to the next generation. Indeed, Caldwell and Caldwell describe the prevalence of the fear that an entire family might vanish. Exploring the social reaction to couples in Ibadan that voluntarily limited their family size, they find strong condemnation of this choice by the couples' extended families, who see such voluntary restrictions as irresponsible because even families with several surviving children can quickly be wiped out. In fact, childlessness is one of the most dreaded fates in Nigeria's patrilineal society.

This patriarchal social structure has a strong effect on reproductive behavior. The fact that the man is the key decision-maker within the family means that women have only limited influence on family planning, and discussions between spouses on matters of family planning are rare, particularly in rural areas and among the Muslim population. Policies in Nigeria's north that forbid women from receiving family planning services without their husband's consent further accentuate this trend. Therefore, although Westernization has changed gender dynamics to some degree, conventional relationships and gender roles have never been completely abandoned. Men take much of their social pride from the number of their children, sons in particular, because of the expected future benefits, and Isiugo-Abanihe explicitly describes the high sense of satisfaction or success a man associates with his children, even if he is materially poor.

From an economic perspective, children provide help around the house or on the farm and are the single most important source of old age support in the absence of social security programs. Hence, another major reason for high fertility is the separation between the decision-making and the consequent burden, which is borne not only by the man but also by his wife and children. Or as a Nigerian proverb puts it, "Birth is the only remedy against death".

High fertility in Nigeria, therefore, cannot be explained simply by underdevelopment or a lack of education: it is so deeply embedded in the culture that any

policy addressing population growth must consider these cultural causes. So far, however, the Nigerian government's attempts at a national population policy have had only a limited effect.

13.4 Population Policy

The first attempts at active population policy in Nigeria were made during British colonial rule: for example, in 1946, the Legislative Council approved a 10-year development plan that focused on encouraging rural urban migration. Based on the assumption that a concentrated labor force is beneficial but a scattered population is a hindrance to development, this effort forms the initial background for Nigeria's current imbalance in population distribution (Obono 2003). Post-independence, although the first development plan of 1962–1968 recognized the negative effects of rapid population growth, the discovery of oil and a period of prosperity in Nigeria meant that policy makers were no longer concerned about demographic pressures. The Second National Development Plan (Federal Republic of Nigeria, Ministry of Economic Development and Reconstruction 1974), in contrast, explicitly proposed the setting up of a National Population Council and suggested that voluntary family planning schemes be integrated into national health programs. Little to that effect was actually done, however. The Third National Development Plan of 1975 (Federal Republic of Nigeria, Ministry of Economic Development 1981a) said little on population policy, but the period finally saw the establishment of the National Population Council. In 1981, a Fourth National Development Plan did acknowledge the strong effect that rapid population growth had on sustainable economic growth and stipulated that “in order to bring the overall growth rate of the population down to a level that will not impose excessive burden on the economy, the fertility rate must decline” (Federal Republic of Nigeria, Ministry of Economic Development 1981b).

The first explicit population policy was developed in 1988 when the government under Ibrahim Babangida saw a “dire need” to “formulate a policy on population for development, unity, progress and self reliance” (Federal Republic of Nigeria, Ministry of Health/Department of Population Activities 1988). Nevertheless, because of poor governance and implementation, the policy had little effect. In the following years, the fertility rate dropped only marginally, a small change that Obono attributes not to the population policy but to structural adjustment policies that made having children more expensive. Obono also criticizes the policy's disregard for societal patterns and its one-size-fits-all approach. That is, the policy focused all family planning efforts on women in total disregard of Nigerian society's patriarchal structure. This monocultural approach also disregarded the large variations between the different ethnic groups in the country, which any successful population policy must take into account.

The current population policy, established in 2004 (Federal Government of Nigeria 2004) during the Obasanjo administration, has the following aims:

- To achieve sustained economic growth, poverty eradication, protection of the environment, and provision of quality social services.
- To achieve a balance between population growth rate and available resources.
- To improve the productive health of all Nigerians at every stage of the life cycle.
- To accelerate the response to HIV/AIDS epidemics and other related health issues.
- To achieve a balanced and integrated urban and rural development.

Unlike the earlier version, the 2004 policy does take into account the importance of cultural behavior and societal structure: “Certain cultural practices over time have tended to contribute to growth of population of different areas of the country in ways militating against the interest of national development in contemporary times. A serious attitudinal change is therefore required in such circumstances”. With regards to Nigeria’s patriarchal structure, the policy states that “[. . .] men play a dominant role in decision making about reproductive and sexual matters in the family and community settings. There is, therefore, urgent need to involve them in all reproductive health programs”. Current government policy also identifies the empowerment of women and the strengthening of their role in society as key to reducing high fertility rates and aims at eliminating the gap between male and female school enrollment by 2015.

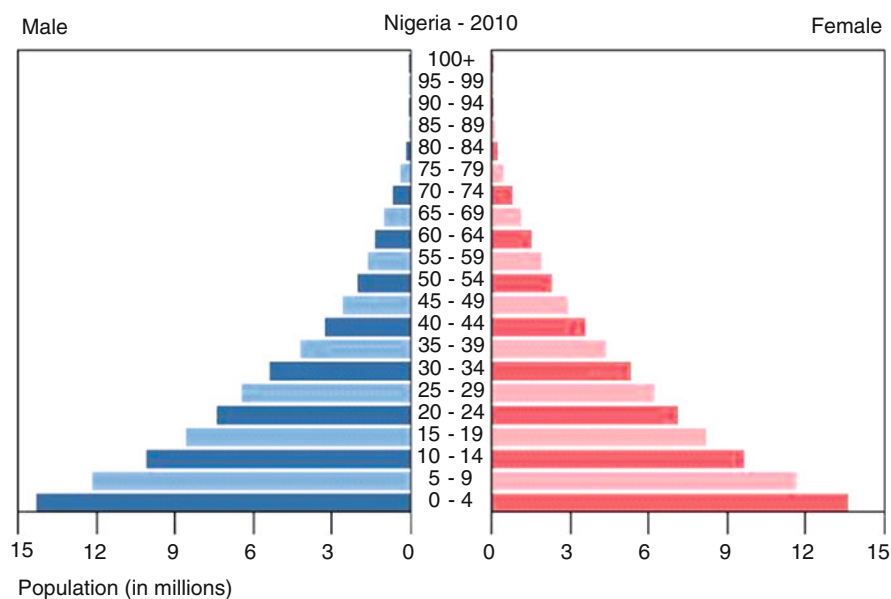
In fact, the government has identified several crucial points in tackling population growth, including empowering and educating women, improving access to reproductive care, changing cultural attitudes, and improving the welfare of the population. Yet, although the government has put all these aims into its national policy, there is as yet no real commitment to tackling the demographic question. Admittedly, fertility rates are decreasing, but a more active commitment is still necessary to tackle the rapidly growing population. Nigeria, already the world’s seventh most populous country, could be number three by 2100, with a projected 700 million people. With its population most likely doubling in the next 40 years, Nigeria needs to double its infrastructure for health, education, water, housing, and other services. The nation can therefore benefit from its demographics, but much needs to be done to avoid disaster.

13.5 Demographic Challenges: Dividend or Disaster

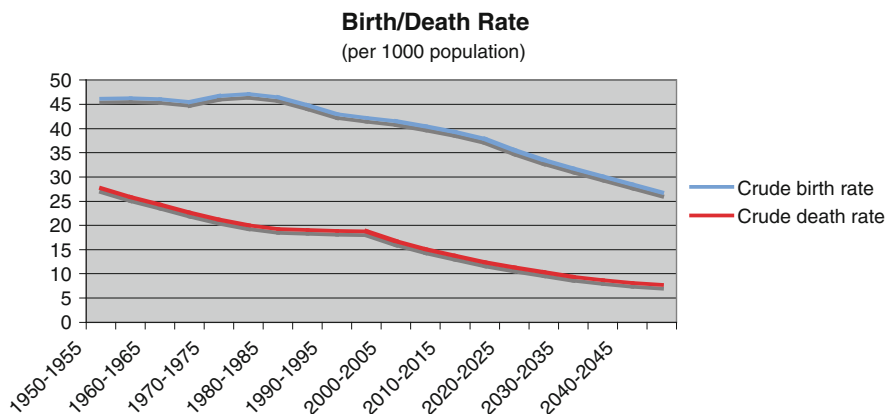
Nigeria is at a crossroads. For the last decades, demographics have been disadvantageous and have significantly restricted economic development. GDP per capita has stagnated, from \$422 (constant = \$2,000) to \$439 in 2008 (World Bank 2010). Constant population growth means that dependency ratios remain high but with fewer adults to care for many children. The case of an impoverished Koran teacher in the northern state of Borno sadly illustrates the consequences of this high dependency rate. The man, living off the charitable support his community provided him with in exchange for religious instruction for their children, had no less than 50 children of his own. Living in a traditional polygamous

family, he was the sole provider for all his wives and children. This man forbade his wives to take their children to the nearest health facility for immunization on the pretext that he condemned the practice. The brutal truth, however, was that he could not afford the cost for transport. As a result, one of his children became infected with polio, a disease that could have been prevented with a simple drop of vaccine.

In Nigeria, poor families with many children are the norm. Today, over 40% of Nigerians are under 15 years old (UN 2010), which means just a little over one working-age adult to take care of one dependent. Nigeria is currently in what demographic theorists call the second phase of demographic transition; that is, after a first phase of high death and birth rates, which keep the population relatively stable, there is a period of population explosion. Consistently high fertility has kept Nigeria in this second phase for the last 50 years, and Nigeria's population pyramid does indeed show the typical characteristics of the second phase. More specifically, over time, the age structure of the population is becoming increasingly youthful, and more of these children are entering the reproductive cycle of their lives while still maintaining the high fertility rates of their parents.



For the first time, however, the tide may be turning, and Nigeria could be entering the third phase of demographic transformation in which fertility rates go down and a demographic window of opportunity opens. This demographic dividend occurs when falling birth rates change a country's age distribution, increasing the ratio of working population to dependents (Ross 2004).



Many countries have been able to benefit from this demographic change and turn it into a period of rapid economic growth. For example, Bloom et al. (2010) find that this demographic shift might have accounted for as much as one third of the East Asian economic miracle. In Nigeria, as population growth slows, a “baby boom” generation is emerging that, although it will put a substantial burden on the society trying to feed, educate, and house it, also has important economic potential. That is, as these “boomers” enter the workplace and the number of dependents declines, Nigeria will have an opportunity for accelerated growth and development because fewer investments will be needed to meet the needs of the youngest age group, thereby releasing resources for economic development and family welfare (Ross 2004). In fact, according to Bloom et al. (2010), if this demographic dividend is reaped, Nigeria could benefit from an almost 29% increase in GDP per capita over the default scenario by 2030. These authors further estimate that the Nigerian economy could be three times larger by 2030 instead of only twice as large as it would be without the demographic dividend.

Nevertheless, although a large, young labor force could become Nigeria’s greatest asset, the demographic dividend is by no means automatically realizable: it is only collectible if the young people entering the workforce are healthy, educated, and productively employed. Yet, as discussed earlier, the level of human development in Nigeria is very low even for sub-Saharan Africa, and despite some improvements over the last few years, much more needs to be done. For instance, access to basic health care remains unavailable for large segments of the population, and many children still die of diseases that are easily preventable. Access to education is improving but is still not universal, and there are great disparities between the south and north. Not only are teaching levels poor at a primary and secondary school level, but Nigeria’s universities, once well respected internationally, are dysfunctional. As a result, parents that have the money send their children to private schools and to universities abroad. Given that the basis of any positive development is a healthy and educated population, Nigeria will have to invest far more in human development if it is to benefit from its demographic dividend.

Human development, however, is only part of the story. A healthy and educated population needs productive jobs to turn potential into economic growth: to benefit from changing demographics, Nigeria must create 24 million new jobs in the next decade and about 50 million new jobs between 2010 and 2030 (Bloom et al. 2010). Creating employment opportunities for an ever-growing work force, therefore, will be one of Nigeria's most important challenges.

Currently, the country's economy is highly dependent on natural resources, above all, oil. The country is the seventh largest producer of petroleum in the world, and petroleum production contributes about 15% of GDP and 76% of government revenue (Federal Republic of Nigeria 2010). At the same time, although the non-oil sector has been growing steadily over the last few years, manufacturing only contributes around 4.2% to the GDP (Federal Republic of Nigeria 2010), and the share of manufacturing halved from 8.4% in 1980 to 4.6% in 2005. Hence, reviving manufacturing and decreasing the country's dependence on volatile natural resources must be at the heart of any serious job-creation policy. Yet overall, Nigeria faces an adverse investment climate because provision of public services is poor, infrastructure is inadequate, the financial system is costly, and investors face a high level of political uncertainty (Malik and Teal 2008). Of these four major issues, the World Bank's *Investment Climate Assessment* found the lack of infrastructure to be the largest concern (World Bank 2002), with the power supply being by far the most pressing problem. Not only is access to electricity limited to an estimated 40% of Nigerians, but the supply is unsteady and daily power outages are the norm. Of the 6,113 MW of installed generating capacity, only 3,300 are actually available, whereas demand is currently estimated to be in excess of 10,000 (Tallapragada and Abdebusuyi 2008). The Jonathan government has therefore made power sector reform one of its top priorities, one probably achievable through new electricity laws, regulatory mechanisms, and privatization efforts. Nevertheless, whereas the inadequate power supply is by far the most pressing infrastructure concern in manufacturing sector development, it is by no means the only one. Roads, a water supply, and telephone lines are often lacking or nonfunctional, making poor infrastructure a particularly bad problem for small and medium enterprises that lack the means to build needed roads or a water supply themselves.

Limited access to finance is another pressing problem for those trying to start a business in Nigeria. Although there is plenty of opportunity and no lack of good ideas, securing the funding to start a company is difficult. Banks are generally reluctant to engage in long-term lending, demand high interest rates, and require high collateral. Although ongoing financial sector reform is trying to address many of the problems that make banks in Nigeria reluctant to lend, as with infrastructure, enduring commitment to the reform is of great importance.

Poor government and corruption also places significant costs on doing business in Nigeria. Changing patronages and rent-seeking behavior still determine much of the country's politics and economic activities. At the same time, despite a move toward better governance, corruption remains so widespread as to present one of the country's major challenges. Even though it has been taken off the World Bank's Financial Action Task Force on Money Laundering list of non-complying countries

and is implementing the Extractive Industries Transparency Initiative, Nigeria is nonetheless ranked 134 of 178 on Transparency International's Corruption Perception Index (Transparency International 2010). Hidden payments to secure contracts are the norm, judicial processes are slow, and companies suffer from crime and weak law enforcement. Corruption hinders productive economic activities and makes economic activities highly inefficient. Reforms will therefore need to be pushed further if Nigeria is to attract investment and create the necessary job opportunities to reap its demographic dividend.

Besides human development and new productive employment opportunities, demographic pressures require changes in the agricultural sector, which, although it currently contributes as much as 40.9% of the GDP, consists primarily of subsistence farming. In fact, Nigeria, despite having large areas of very fertile land, currently relies on food imports to satisfy its domestic demand. To provide food security for its growing population, Nigeria must increase its agricultural productivity and address the problems of small production units, backward production techniques, poor infrastructure, environmental problems, and rural urban migration that cause underproduction.

If human development improves, employment opportunities are created, and food is secured, Nigeria could be on the path to realizing its true potential and becoming one of the great economies of tomorrow. Failure to do so, on the other hand, could be disastrous. Nigeria's population will be further impoverished, and as competition over the few existing jobs increases, young people will become frustrated with the lack of opportunities. Ethnic and religious conflicts, which already erupt regularly, could then intensify and spread across the country. In fact, the radicalization that results from such a lack of opportunity is already exemplified by the emergence of the radical Boko Haram sect in the north, which advocates a radical approach to Islam and rejects all non-Islamic education. Boko Haram has been blamed for a series of bombings in 2011, including an attack on police headquarters and the United Nations offices in Abuja. This connection between youth grievances and domestic armed conflict looms large over a country as ethnically diverse as Nigeria. Hence, failure to react to the immense demographic challenges the country faces could mean the failure of Nigeria as a state.

13.6 Conclusion

The demographics of Africa's most populous country could be a blessing or a curse. For decades, Nigeria's population has grown continually while its welfare stagnated. As birth rates slowly come down, however, a window of opportunity is opening, an opportunity for accelerated growth driven by a large, young workforce. Yet benefiting from this demographic dividend is by no means automatic: it requires significant investment in human development and employment opportunities. Not only must the large number of new workers entering the labor market be healthy,

educated, and able to find jobs, but Nigeria must also invest in infrastructure, power, and political reform if it is to create industries and attract the foreign investments needed to keep its population employed. Should Nigeria not live up to this challenge, the growing extremist tendencies in the country's north portend a bleak picture of things to come. Impoverishment and conflict in what the United Nations estimates will be the world's third most populous country by 2100 would not only be a tragedy for the people of Nigeria, but a problem for Africa and the world. It is therefore now Nigerians' responsibility to determine whether their country will take its true place as the giant of Africa or whether it will fall into decay.

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Chapter 14

Maghreb Past and Present

Rainer Muenz

Abstract The Maghreb has experienced several waves of immigration and colonization, for example, by Greeks, Romans, Vandals, Arabs, Turks, Spanish, French, and Italians. After World War II, in the course of decolonization, nearly all parts of the Maghreb became successively independent, and Christians as well as Jews emigrated from the region. As a result, the Maghreb is today one of the most homogenous regions in the world with 97% of its domestic population being Sunni Muslims. Due to proactive recruitment of labor force by Western European countries in the twentieth century, however, the Maghreb has been and still is characterized by mass emigration – completely reversing migration pattern over history from immigration to emigration. Today, the Maghreb Diaspora may well encompass eight million people.

Despite a negative migration balance and a spectacular decline of fertility from 6–7 to slightly over 2 children per woman during the last decades, Maghreb's population has nearly quadrupled within the last 60 years. This is solely resulting from an excess of births over deaths and reflects the demographic transition from high to low (infant) mortality and an increase in life expectancy from 43 to 73 years within a period of only 30 years. As a result, the Maghreb has a youthful growing population with currently nearly 60 million people of working age, however, coupled with one of the lowest employment rate in the world – especially among women, young adults and well educated people. Political priority will therefore have to be given to job creation that reduces unemployment and absorbs first-time entrants into the labor market and an education system that focuses on skills required by the private sector rather than the public sector offering too few jobs.

The author would like to thank Bernadett Povazsai-Roemhild for her valuable support.

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The Western part of North Africa known as the Maghreb (from the Arabic *al maghrib*, ‘country where the sun sets’)¹ today comprises the five sovereign nations of Algeria, Libya, Mauritania, Morocco, and Tunisia, as well as, two Spanish enclaves, Ceuta and Melilla, and the Western Sahara, a disputed territory which is entirely administered by Morocco.²

14.1 Brief History of the Maghreb

This part of Africa has experienced several waves of migration, colonization, and empire building. Berbers, the descendants of Middle Eastern pastoralists who moved westward in Neolithic times, have been living in the region for over 10,000 years. Some 2,900 years ago, Phoenicians and Greeks began settling in the Western Mediterranean and along the Atlantic coast, and Carthage, originally a Phoenician colony, became the most powerful player in the region before being defeated by Rome in 146 B.C. As a result of this defeat, the entire Western Mediterranean became part of the Roman Empire, which 400 years later led to the Christianization of its population. In the fifth century, during the decline of the Roman Empire, the Vandals, a Germanic tribe, conquered the Western part of North Africa. In the sixth century, the Byzantines took control of the region.

In the seventh and early eighth centuries, the Arabs expanded into the Western Mediterranean, first conquering large parts of the Maghreb and later most of the Iberian Peninsula. As a result, Islam became the dominant religion in the Maghreb and Arabic a widely used language. With the Spanish *reconquista* in the fifteenth century, however, Arab rule in Andalusia ended and parts of the Maghreb subsequently came under Ottoman Turkish rule.

European colonial expansion into North Africa began briefly in the fifteenth century with Castile conquering the Canary Islands in several military campaigns between 1402 – the start of the Age of Discovery – and 1496.³ Ceuta was occupied by Portugal in 1415,⁴ and Melilla became Spanish in 1497.⁵ This expansion regained momentum in the nineteenth century when France ended Ottoman rule

¹ Conversely, Egypt and the Middle East are called the Mashreq, the ‘country of the rising sun’. The English equivalents for Maghreb and Mashreq would be ‘occident’ and ‘orient’ although they do not refer to the same regions.

² The Western Sahara is represented by a government in exile: some 150,000 Sahauri people live as refugees in Western Algeria.

³ As a result of Castilian/Spanish occupation, the native Guanche population of (most likely) Berber origin perished and was replaced by Iberian settlers.

⁴ Ceuta became a Spanish territory in 1640.

⁵ Spain also held Mers El Kébir (1505–1708, 1732–1792), Oran (1509–1708, 1732–1792), Algiers (1510–1529), and Bugia (1510–1554).

and occupied Algeria in several military operations between 1830 and 1848.⁶ Subsequently, almost one million Europeans – mainly migrants of French, Italian, Maltese, and Spanish origin – settled in Northern Algeria (House 2008).⁷ In 1881, France extended its colonial empire by invading Tunisia, which had remained under Ottoman rule until that year. In 1884, Spain seized control of the Western Sahara and in 1912 established a protectorate in Northern Morocco, which also led to some immigration from Europe. Between 1903 and 1912, Mauritania gradually became a French colony, in 1911–1912, Libya was occupied by Italy and made into a colony,⁸ and in 1912, after several less successful attempts, France established its colonial rule in large parts of Morocco. In the immediate vicinity, Malta and Cyprus were controlled by the UK, and Gibraltar still is.

14.2 Political Change Since 1945

After 1945, the course of events forced Europe's colonial powers to give up most of their colonies and overseas territories. Libya became independent in 1951, Morocco and Tunisia in 1956, Mauritania in 1960, Algeria in 1962, Malta in 1964, and the Western Sahara in 1975 (although immediately occupied and annexed by Morocco and Mauritania). Ceuta, Melilla, the Canary Islands, and a few small islands off the Mediterranean coast of Morocco⁹ are the only Maghreb territories remaining under European control. Independence from European powers, however, did not lead to regional integration or intense cooperation between Maghreb countries (Brunel 2008).

14.2.1 *Algeria*

After 8 years of warfare between Algeria's National Liberation Front (FLN) and the French Army, the country became independent in 1962. FLN leader Ahmed Ben Bella became Algeria's first president, establishing an authoritarian single party

⁶ From 1848 until independence in 1962, the whole Mediterranean (i.e., Northern) part of Algeria was considered an integral part of France. As early as the late nineteenth century, people of European descent, as well as native Jews, living in Algeria became French citizens, while native Muslims remained colonial subjects. As an integral part of France, in 1952, Algeria became a founding member of the European Community of Coal and Steel (ECSC) and in 1957, a member of the European Economic Community (the predecessor of the European Union).

⁷ At the same time, some 0.5 million Algerians lost their lives as a result of harsh colonial rule.

⁸ This colonialization came at a high price: as a result of colonial rule, Libya's total population fell from 1.2 million at the time of the Italian invasion to just 0.8 million in the mid-1930s.

⁹ Alborán, Chafarinas, Isla de Mar, Perejil, Peñón de Alhucemas, and Peñón de Vélez de la Gomera.

rule and a collectivized economy. In 1965, he was overthrown by his defense minister, Houari Boumédiénne, who shifted the power base to the army. Over time, the Algerian military establishment and the economy as a whole became increasingly dependent on oil and gas revenues. Boumédiénne died in 1978 and was succeeded by Chadli Bendjedid, whose government aroused mass protests that resulted in constitutional changes which abolished single party rule and eventually led to parliamentary elections.

In 1991, however, after the Islamic Salvation Front won round one of the country's first multiparty parliamentary election, the military saw the victory as a threat to its role as the main political power broker, declared a state of emergency, and cancelled the second round of elections. The military junta forced President Bendjedid to resign and banned all political parties with a faith-based background (including the Islamic Salvation Front). It then persuaded former FLN leader Mohamed Boudiaf to return from exile and become president. Boudiaf was assassinated in 1992. The resulting political conflict soon led to civil war, and over 160,000 people, mostly civilians, are believed to have been killed in the decade between 1992 and 2002.¹⁰ In 1999, the army installed Abdelaziz Bouteflika as president. The civil war ended formally in 2002 with the signing of a general amnesty, but it was only in response to massive protests in the wake of popular uprisings in Tunisia, Egypt, and Libya, that Algeria officially lifted its 19-year-old state of emergency in 2011.

14.2.2 *Libya*

In 1951, independent Libya became a monarchy ruled by King Idris al-Senussi, head of the Sanussiyya movement, an influential Islamic Sufi brotherhood. In 1969, the king's rule was ended by a military coup led by Muammar el-Gadhafi who established himself as autocratic leader of the oil and gas rich country for 42 years.¹¹ During the Arab Spring of 2011, the Gadhafi regime was toppled by a revolutionary movement led by a transitional council chaired by Mustafa Abdul Jalil. Forces organized by this council took control of the country during a civil war that lasted from February to October 2011 and ended with the death of Gadhafi. The military struggle of the revolutionary movement was supported by NATO naval and air forces. In November 2011, the transitional council elected Abdel Raheem al-Keeb as new premier.

¹⁰ Many massacres were undoubtedly carried out by Islamic extremists, but there is some evidence that the Algerian regime used the army to conduct attacks on its own civilian population in order to blame the attacks upon Islamic militants.

¹¹ The extraction of Libyan oil and gas started in 1962.

14.2.3 Mauritania

After Mauritanian independence, President Moktar Ould Daddah, originally installed by the French in 1960, set up an authoritarian regime, which by 1964 had resulted in Daddah's own PPM party (Parti du Peuple Mauritanien) becoming the dominant organization in a single-party system. In 1978, Ould Daddah was ousted by a military coup that paved the way for several short-lived military governments from which Maaouya Ould Sid'Ahmed Taya finally emerged as president and dominated Mauritanian politics between 1984 and 2005. His rule was ended by another military coup. After a return to civilian rule, the first fully democratic presidential election was held in 2007. Sidi Ould Cheikh Abdallahi won the election but was ousted in 2008 by yet another military coup, whose junta organized new presidential elections in 2009 in which military strongman Muhammad Ould Abd el-Aziz became the duly elected civilian president. According to independent observers, these elections were manipulated in his favor, and the military establishment still dominates political life.

14.2.4 Morocco

In Morocco, Sultan Mohammed V of the Alaouite dynasty¹² was declared king in 1956 and succeeded first by his son Hassan II (1961–1999) and then by his grandson Mohammed VI, who became king in 1999. Over time, Morocco developed from an absolute monarchy to a type of multiparty democracy within the framework of a semi-authoritarian monarchy. In early 2011, pro-reform protests broke out across Morocco, which led to constitutional reform. The changes adopted in a popular referendum give more executive power to the prime minister, strengthen the judiciary, and recognize Berber as a national language. Yet the new constitution falls short of transforming Morocco into a European-style constitutional monarchy because the king retains full control of domestic security and foreign policy. Parliamentary elections in November 2011 led to a clear victory of the Islamist Justice and Development party. Its leader Abdelillah Benkirane was appointed as prime minister.

14.2.5 Tunisia

Independent Tunisia was originally conceived by the French as a constitutional monarchy ruled by Muhammad VIII al-Amin, the then-Bey of Tunis.¹³ After elections

¹² The Alaouite dynasty has ruled Morocco since the days of Mulai ar-Rashid (1664–1672).

¹³ The Beylik as an institution dates back to the early Ottoman era.

were held in 1956, Habib Bourguiba, leader of the Neo Destour party, the main movement fighting for national independence, became prime minister. In the following year, the monarchy was abolished, and Bourguiba became Tunisia's first president, immediately establishing single-party rule. In 1987, he was ousted by Zine el-Abidine Ben Ali, then interior minister. Ben Ali continued both the autocratic regime of his predecessor and the dominant role of the Neo Destour. In late 2010, the Arab Spring began in Tunisia and Ben Ali's government was the first Arab regime to implode in confrontation with the rebellion, which was led at first by middle-class youth. The first free parliamentary elections in decades were held in October 2011. These led to a landslide victory of the mildly Islamist En-Nahda party (41% of the votes) led by Rachid Ghannouchi, who had spent almost two decades in exile in the UK. The secular CPR party became a distant second (14%). In November 2011, Moncef Marzouki (CPR) was nominated as new interim president, since December 2011 Hamadi Jebali (En-Nahda) has served as prime minister.

14.3 Religious and Ethnolinguistic Composition

Decolonization had a distinct sociodemographic impact on the region. In Algeria and Libya, the armed conflicts preceding independence took a considerable death toll. After independence, European military and civilian personnel returned by the tens of thousands to their respective motherlands. In the case of Algeria, the Évian peace treaty between France and Algeria's national liberation front FLN included a clause that forced virtually all people of European descent – the so-called 'pieds noirs' – to leave the country in 1962. The end of European colonial rule and the repercussions of the Arab-Israeli conflict also led to an exodus of Jewish people, mostly of Sephardic origin, to Europe and Israel.

As a result, the Maghreb – in religious terms – is one of the most homogenous regions of the world, with 97% of its domestic population being Sunni Muslim, although this figure also includes large groups of heterodox followers of Marabout cults. Among the remaining 3%, the non-Sunni Muslims are mainly Ibadis,¹⁴ the remaining Jewish communities are very small,¹⁵ and, although Roman Catholics of Spanish origin are still a majority in Ceuta and Melilla, in all other places, Christian communities consist mostly of expatriates and other labor migrants. Hence, in

¹⁴ Ibadism is distinct from both Sunni and Shia Islam and is the dominant religious denomination in Oman and Zanzibar.

¹⁵ For example, in Bejaia (Algeria), Tunis, on the island of Djerba (Tunisia), and in a few Moroccan cities.

Maghreb countries, unlike Egypt, Lebanon, or Syria, native Arab Christian communities are either very small¹⁶ or nonexistent.

Despite this religious dominance, however, the region does display some ethnolinguistic diversity. Although the dominant language is Arabic, spoken both by Arabs and linguistically assimilated Berbers and sub-Saharan Africans, several groups in the Maghreb still speak Berber languages: Kabyle, Chaouia, Tamahaq, Chenoua, and Tumzabt in Algeria; Riff, Shilha, and Tamazight in Morocco; Tamahaq and Zenaga in Mauritania; and Shelha, Ghadamès, Nafusi, Sened, and Djerbi in Tunisia and Libya. Berber languages are also still widely used in Morocco and to a lesser extent in Algeria but play only a small role in Libya, Mauritania, and Tunisia.

Some native inhabitants of the Maghreb are of sub-Saharan African origin. Their numbers are considerable in Mauritania, but small in Algeria, Morocco, and Libya. In Mauritania, many native inhabitants of sub-Saharan African origin speak Arabic, but Pulaar, Soninke, and Wolof are dominant West African languages along the Senegal River in Southern Mauritania. Likewise, in Southern Algeria, some people speak variants of Songhay and Hausa; while in Libya, Tebou people living in the southeast of the country speak a Nilotic language.

In all Maghreb countries except Libya, French serves as an unofficial language that is widely used in education, government, and external relations, although most inhabitants of Ceuta and Melilla, some Moroccans in the northern part of the country, and many Sahauris – including refugees in Algeria – speak Spanish.

Arabs and Berbers living along the Mediterranean and Atlantic coasts, as well as in the Riff Atlas and the fertile plains of Morocco, have a sedentary lifestyle. Many of those living in the mountain ranges and the Sahara desert are nomads or semi-nomads, the Tuaregs being the most prominent example.¹⁷ In Algeria, Libya, and Tunisia, a large majority of people now live in cities and urban agglomerations that stretch along the Mediterranean coast. In Morocco, the degree of urbanization is lower but already above 50%. Mauritania is the only Maghreb country in which more than half the population still lives in rural areas (see Appendix Table A1).

Until early 2011, Libya was the only Maghreb country with a considerable legal foreign resident population whose largest groups were from other African nations – primarily Egypt, Tunisia, and sub-Saharan Africa – but which also included, to a smaller extent, people from South and Southeast Asia. Most of these migrants left the country during the civil war of 2011 (DiBartolomeo et al. 2011).

¹⁶ In Libya and Tunisia.

¹⁷ Tuaregs also live in a few sub-Saharan countries: Mali, Niger, and Burkina Faso.

14.4 Population Change Since 1950

In 2010, the Maghreb had some 88 million inhabitants – almost four times the 23 million people living in the region in 1950 (Table 14.1).¹⁸ Today, Algeria has the largest population (2010: 35.5 million),¹⁹ followed by Morocco (32.0)²⁰ and Tunisia (10.5). In 2010, some 6.4 million people were living in Libya, but the country lost about a million in 2011 during the civil war as a result of labor migrants returning to their home countries. Mauritania had 3.5 million and the two Spanish enclaves Ceuta and Melilla, some 140,000 inhabitants.

The annual population growth in the region was around 2% in the 1950s, peaked in the early 1980s (2.5–4.5%), and has been declining over the last three decades (Courbage 1996). Today, Mauritania has the highest annual population growth (+2.2%), followed by Algeria (+1.4%), while Morocco and Tunisia are down to +1% per year (Fig. 14.1). Libya is in an exceptional case in that it lost most of its foreign resident population during the civil war of 2011, which resulted in a population decline. In terms of the absolute numbers, however, the picture is slightly different: the population of the Maghreb grew by 0.5 million annually during the early 1950s, by 2.1 million annually during the early 1980s and by 1.1 million annually between 2005 and 2010. In Algeria, Morocco, and Tunisia, absolute growth peaked during the 1980s, while in Mauritania annual population growth is still increasing (Table 14.2). Overall, population growth in the Maghreb has been and still is almost solely the result of an excess of births over deaths (i.e., natural population growth) and a negative migration balance.²¹ The former therefore reflects the demographic transition from high to low mortality and fertility.

Death rates have been falling in the Maghreb since the end of World War II, and birth rates began declining after 1960, with the most rapid decline in Tunisia and slowest in Mauritania (Fig. 14.1). According to UN forecasts, the population of the Maghreb will reach 103 million by 2025 and 115 million by 2050, by which time, the demographic transition and natural population growth in the region (except Mauritania) are expected to come to an end (UNPD 2011a).

Life expectancy in the Maghreb was around 43 years in the early 1950s, with women on average living some 1.5–2.0 years longer than men. Today, people in the region have a life expectancy of 73 years – an increase of 30 years over the last six decades – although the gap between men and women has widened to 3–6 years.

¹⁸ Local population data and vital statistics in parts of the Maghreb are incomplete. Most population data and estimates in this article are taken from the 2010 Revision of the World Population Prospects provided by the Population Division of the United Nations.

¹⁹ Algeria is also Africa's largest country. However, the Algerian population figures do not include the approximately 100,000–150,000 Sahauri refugees living in camps near Tindouf (Western Algeria).

²⁰ This figure includes some 350,000 Sahauris living under Moroccan administration.

²¹ Most Maghreb countries have been sending emigrants to Europe and overseas destinations. Until 2010, Libya was the only Maghreb country with a positive net migration balance.

Table 14.1 Population (in millions), Maghreb countries, 1950–2010

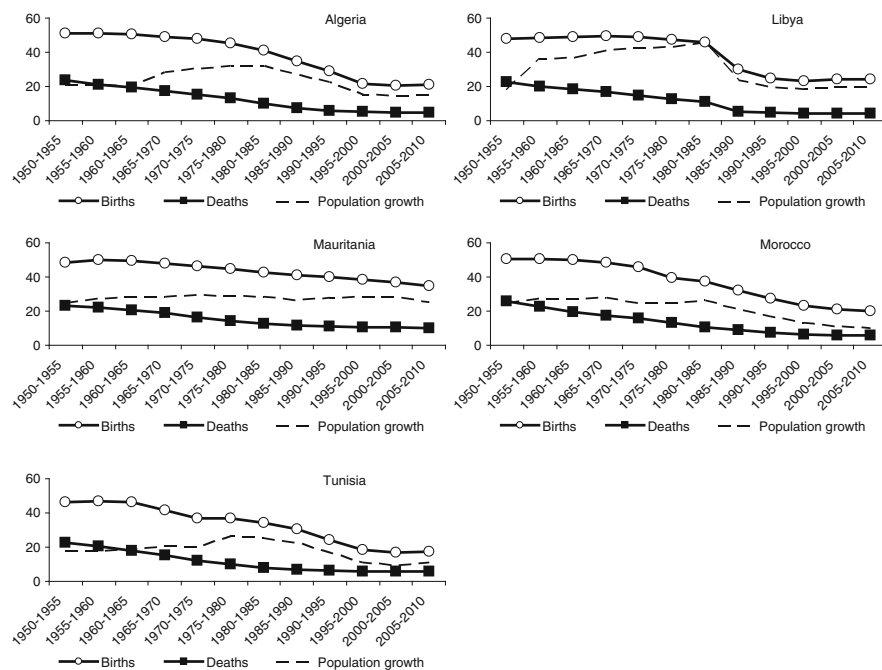
	Algeria	Libya	Mauritania	Morocco	Tunisia	Total Maghreb
1950	8.8	1.0	0.7	9.0	3.5	22.9
1970	13.7	2.0	1.1	15.3	5.1	37.3
1990	25.3	4.3	2.0	24.8	8.2	64.6
2010	35.5	6.4	3.5	32.0	10.5	87.7

Source: UNPD (2011a)

Table 14.2 Annual population growth (in thousands), Maghreb countries, 1950–2010

	Algeria	Libya	Mauritania	Morocco	Tunisia	Total Maghreb
1950–1955	192	19	17	236	66	530
1955–1960	217	45	22	299	72	655
1960–1965	225	55	26	339	82	727
1965–1970	365	74	30	397	99	965
1970–1975	454	94	36	399	108	1,091
1975–1980	559	119	41	452	158	1,329
1980–1985	657	157	46	545	175	1,580
1985–1990	640	97	50	498	177	1,462
1990–1995	598	88	59	429	144	1,318
1995–2000	448	91	70	373	104	1,086
2000–2005	471	108	81	320	91	1,071
2005–2010	516	117	83	312	114	1,142

Source: UNPD (2011a)

**Fig. 14.1** Annual births, deaths and population growth (per 1,000), Maghreb countries, 1950–2010 (Source: UNPD 2011a)

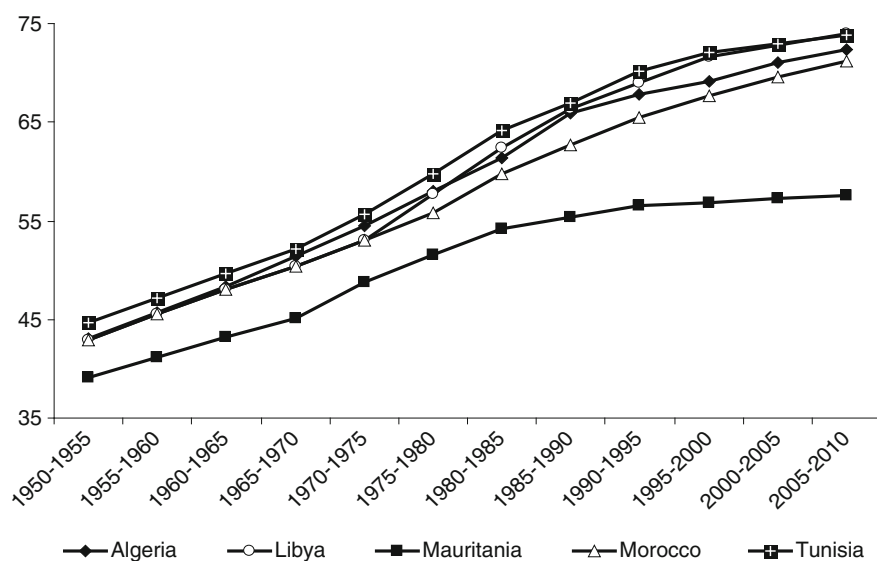


Fig. 14.2 Life expectancy at birth (in years), Maghreb countries, 1950–2010 (Source: UNPD 2011a)

Life expectancy is lowest in Mauritania (men: 57.4 years, women: 61.0 years) and highest in Tunisia (men: 72.6 years, women: 77.1 years) with Algeria, Libya, and Morocco being close to Tunisian levels (Fig. 14.2). As in other developing regions, declining mortality – in particular, declining infant mortality – in Maghreb countries has been and still is only partially linked to general socioeconomic progress. Rather, the spread of modern sanitation, general immunization through vaccination programs, and the promotion of public health have played a more important role than GDP growth. This fact is clearly illustrated by a comparison of Morocco and Libya: people in both countries have almost the same life expectancy, but GDP per capita in 2010 was more than four times higher in Libya than in Morocco (Appendix Table A1). At the same time, it is evident that both famines and infectious diseases are no longer relevant for today's mortality levels: as in Europe and North America, cardiovascular diseases and cancer have become the main causes of death.

14.5 Fertility and Family Planning

During the 1950s and 1960s, women in the Maghreb – as in many other parts of Africa and the Middle East – gave birth to an average of 6–7 children. Total fertility peaked in the 1950s in Morocco (7.2 children per woman); in the early 1960s in Algeria (7.4 children per woman), Mauritania (6.8 children per woman), and Tunisia (7.3 children per woman); and during the early 1970s, in Libya, which had the highest fertility (1970–1975: 7.6 children per woman) so far recorded in the Maghreb. Since the 1980s, fertility has fallen below replacement level in Tunisia

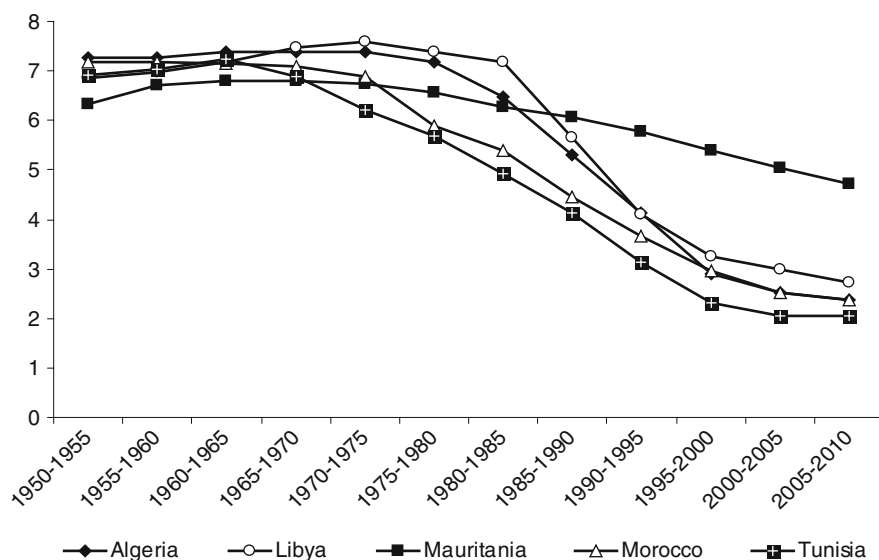


Fig. 14.3 Total fertility rate (children per woman), Maghreb countries, 1950–2010 (Source: UNPD 2011a)

Table 14.3 Births per year (in thousands), Maghreb countries, 1950–2010

	Algeria	Libya	Mauritania	Morocco	Tunisia	Total Maghreb
1950–1955	471	52	34	481	171	1,209
1955–1960	521	60	40	548	189	1,358
1960–1965	573	73	45	625	206	1,522
1965–1970	628	90	51	690	204	1,663
1970–1975	714	109	57	744	200	1,824
1975–1980	791	131	63	726	222	1,933
1980–1985	844	158	70	780	234	2,086
1985–1990	824	123	77	752	236	2,012
1990–1995	770	113	86	706	206	1,881
1995–2000	635	115	94	651	169	1,664
2000–2005	657	134	104	619	163	1,677
2005–2010	711	145	113	629	178	1,776

Source: UNPD (2011a)

(1.9 children per woman),²² are close to replacement level in Algeria (2.1 children per woman) and Morocco (2.2 children per woman), but remained fairly high in Mauritania (4.4 children per woman) (Fig. 14.3). Nonetheless, this spectacular decline in fertility during a period of only four decades has not yet led to a considerable lowering in the annual number of births (Table 14.3) as the high

²² Tunisia and Lebanon are the only predominantly Muslim countries with a total fertility rate below 2.0 children per woman.

Table 14.4 Contraceptive prevalence, any method and modern methods among couples aged 15–49 (in %), Maghreb countries, 1980–2010

	Algeria		Libya		Mauritania		Morocco		Tunisia	
	Any method	Modern method	Any method	Modern method	Any method	Modern method	Any method	Modern method	Any method	Modern method
1980–1985	n.a.	n.a.	n.a.	n.a.	0.8	0.3	25.5	21.2	41.1	34.2
1985–1990	35.8	31.3	n.a.	n.a.	2.5	0.8	35.9	28.9	49.8	40.4
1990–1995	50.9	43.2	n.a.	n.a.	4.1	1.2	41.5	35.5	60.0	51.0
1995–2000	64.0	50.1	45.2	25.7	6.1	4.1	58.4	48.8	65.5	56.7
2000–2005	57.0	51.8	n.a.	n.a.	8.0	5.1	63.0	52.0	62.6	53.1
2005–2010	61.4	52.0	n.a.	n.a.	9.3	8.0	n.a.	n.a.	60.2	51.5

Source: UNPD (2011b)

fertility of the past and a drop in infant mortality have both resulted in much larger numbers of potential parents. Fertility and mortality analysis in this article largely relies on published UN data which are partly based on available vital statistics, partly on estimates. These data seem to underestimate a surge in total fertility which apparently took place in the early 2000s.

In the past, the power of clans depended on the number of their male members, so the role of women was essentially linked to marriage and reproductive behavior. For women, becoming a mother and giving birth to sons was, and in some strata of Maghreb society still is,²³ the main path out of the lowest position in the social hierarchy. This led until the 1980s to very high fertility levels (Lacoste-Dujardin 1987; McDougall 2003). Over the past decades, however, this pattern has become less relevant as a growing number of girls enroll in primary and secondary education (Appendix Table A1) and more women actually graduate from schools. At the same time, most governments in the Maghreb have begun to promote family planning and reproductive health (PBR 2007), which, in combination with high unemployment and significant delays for young adults wanting to enter the labor market, has led to a delay in marriages and first births. In addition, over the last 40 years, fertility has dropped to a relatively low number of children per family, most probably influenced by the decrease in infant mortality. This shift to smaller nuclear families can also be interpreted as a response to the restricted living conditions that result from a lack of employment opportunities and a shortage of affordable housing (Courbage 2002; Lewis and Chowdhury 2010; McDougall 2003).

Until the late 1980s, contraception was not available for a majority of adults in the region and only 35–50% of all couples living in the Maghreb used some form of family planning (Lacoste-Dujardin 1987). Today, with the exception of Mauritania, contraception has become the norm in the Maghreb with some 60% of all couples using at least one method of family planning (Table 14.4); most commonly, the pill in Algeria and Morocco, and the IUD in Tunisia (UNPD 2011a, b).

²³ This is particularly true for rural areas and those maintaining a nomadic lifestyle.

14.6 Migration

European immigration to the Maghreb began in the early nineteenth century when Algeria became France's main colonial settlement and drew migrants from mainland France, Italy, Malta, and Spain. This settlement, however, involved the expropriation of land formerly used by the indigenous Arab and Berber population, a policy that gradually wore down the traditional economic, social, and cultural structures of the Algerian peasantry (House 2008). In other Maghreb countries, the immigration patterns were different: Europeans arrived in smaller numbers and established themselves primarily in cities along the coast.

Emigration from the Maghreb developed during and after World War I and consisted primarily of young North Africans who had been serving in the French army and labor migrants from Algeria recruited by France after 1918. Until 1939, therefore, migration from the Maghreb was not only almost exclusively male but circular: workers who went abroad provided vital economic support to their impoverished village communities back home, maintained ties with these communities, and usually returned after a couple of years.

After World War II, however, this pattern fundamentally changed as the momentum shifted from Kabyle-Berbers, who had dominated Algerian emigration during the interwar period, to Arabs from coastal regions, whose networks in France were less well established. France also recruited (mostly male) workers from Tunisia, who in some cases migrated with their entire families and in other cases were followed after a certain period of time by dependent family members. As many intended to stay for longer periods or forever in France, migrants tended to be less focused on their communities back home, which eventually led to a higher degree of integration into French society (House 2008). These migrants from the Maghreb worked in coal mining, iron, steel, and car manufacturing but also in the agricultural sector.

Colonial ties played an important role in shaping migration patterns: the reforms introduced under the Statute of Algeria (1947) granted Algerians full citizenship in mainland France and instituted free movement between Algeria and France. This lack of regulation remained in place after Algerian independence and was only abolished in the early 1970s in line with the cessation by other Western European countries of the proactive recruitment of labor. At the same time, the Algerian government also decided to halt mass emigration in order to become less reliant on France (DiBartolomeo et al. 2010). During this same period, the discovery of oil and gas reserves made Algeria less reliant on migrant remittances.

Both these developments led to a sharp drop in Algerian emigration after 1973 and to a few years with a positive migration balance due to returning labor (Table 14.5). During the late 1990s, migration from Algeria again regained some momentum after cautious steps toward economic liberalization; the figures, however, also reflect refugee flows related to a low intensity civil war between the government and various opposition groups (DiBartolomeo et al. 2010; Giubilaro 1997). Algerian independence in 1962 also led to the expulsion of virtually all

Table 14.5 Annual net migration balance (emigration minus immigration; in thousands), Maghreb countries, 1950–2010

	Algeria	Morocco	Tunisia
1950–1955	–58	0	–22
1955–1960	–87	–3	–35
1960–1965	–330	–41	–45
1965–1970	–40	–44	–29
1970–1975	–31	–89	–26
1975–1980	1	–34	–3
1980–1985	17	–10	–5
1985–1990	–14	–50	–5
1990–1995	–10	–90	–9
1995–2000	–28	–100	–11
2000–2005	–28	–123	–16
2005–2010	–28	–135	–4

Note: Reliable data for Libya and Mauritania are unavailable; data for Algeria 2000–2010 are based on estimates

Source: UNPD (2011a)

‘pieds noirs’ (people of European descent)²⁴ and the evacuation of the so-called Harkis, locals who had been recruited to support the French side during the struggle for independence (House 2008).²⁵

Emigration from Morocco, on the other hand, only began after independence when labor was recruited in the 1960s and early 1970s by France, Belgium, and resource rich Arab countries. After an initial peak during the early 1970s, however, Moroccan emigration dropped to low levels and only regained momentum after 1985 (Table 14.5). Since then, Italy and Spain have become important destinations for Moroccan emigrants (DiBartolomeo et al. 2009). A similar shift happened in the case of Tunisia, whose emigrants also began moving toward Italy, although Tunisia is also the only Maghreb country to send labor migrants to Germany (DiBartolomeo et al. 2010b; Marchetta 2009).

One outmigration often overlooked by analyses of emigration from the Maghreb is the exodus of the Sephardic Jews, who had made up between 2% and 3% of the total population in Algeria and Morocco and had maintained sizeable and well-integrated communities in the region since antiquity. In the 1960s, the end of European colonial rule and the repercussions of the Arab-Israeli conflict led to the exodus of these people toward Europe and Israel, leaving only very small communities in the Maghreb. A final wave of emigration took place after anti-Jewish riots in the wake of the 1967 Six-Day War between Israel and its Arab neighbors.

²⁴ In 1962–1963, some 1,025,000 ‘pieds noirs’ had to leave Algeria within a period of a few months.

²⁵ It is believed that out of 150,000 Harkis serving on the French colonial side, some 50,000 left in 1962. Others followed as the victorious FLN movement began killing tens of thousands of the remaining Harkis and their family members in retaliation for their role during the struggle for independence.

Until early 2011, oil and gas rich Libya was the only net receiving country in the region with up to one million regular and irregular migrants, ranging from members of the Western, Russian, and Chinese expatriate communities to migrant labor from neighboring Arab and sub-Saharan countries and South and Southeast Asia (Atieno and Mitullah 2010). Immigration to Libya began in the 1960s after the discovery of oil and gas reserves prompted the country to compensate for a lack of native labor and skills by recruiting large numbers of immigrants from other Arab countries, particularly Egypt, Tunisia, Morocco, and the Sudan. At the same time, violent conflicts in the Sahel region led to genuine refugee flows into Libya, in particular from Chad, Nigeria, and the Sudan (DiBartolomeo et al. 2011; de Haas 2008). Following the 1992 UN embargo, the Libyan government switched to an open-door policy toward potential migrants from neighboring sub-Saharan Africa. Only in 2007, at the request of the European Union, did Libya reinstate visa requirements for both travelers and potential migrants of Arab and sub-Saharan origin (DiBartolomeo et al. 2011; Bredeloup and Pliez 2011). During the Libyan civil war of 2011, however, most of these migrants left the country.

During the past 20 years, all Maghreb countries have become part of various transit routes for irregular migrants trying to enter the EU via Ceuta and Melilla or hoping to reach Malta, the Italian Isle of Lampedusa, Sardegna, Southern Spain, or the Canary Islands by boat. Most of these people come from the Middle East and sub-Saharan Africa, although a minority also come from Western Asia (Atieno and Mitullah 2010; Bredeloup and Pliez 2011). As a result, the EU has mounted pressure on all Maghreb countries to intensify border controls, accept readmission, and repatriate both transit migrants and refugees entering their territories (Fargues 2008; de Haas 2008; Middle East Institute 2010).

Around 2007–2008, there were at least 5.5 million people born in the Maghreb living abroad,²⁶ out of which by far the largest number – 3.3 million – were from Morocco, i.e. 1 in 10 Moroccans was living overseas. Second in line was Tunisia with 1.1 million, also about 1 in 10 of its citizens. Relative to population size, the stock of emigrants of Algerian (0.9 million) and Mauritanian origin (250,000) was smaller. France was home or host to almost one in two of these migrants (2.5 million), followed by Spain (0.6 million), Italy (0.5 million), the Gulf States (0.5 million), and the U.S. (0.2 million), although until recently, Libya was also a prime destination country for migrants from Morocco and Tunisia (Table 14.6). Taking into account the children born in the destination countries, the Maghreb diaspora may well encompass eight million people.²⁷

France, as a former colonial power, is the most important single destination country hosting a total of 2.3 million Maghreb-born people, including three out of four Algerian, one in two Tunisian, and one in three Moroccan emigrants. The second most important destination country is Spain (0.6 million), followed by Italy

²⁶ See note to Table 14.6.

²⁷ It should not be overlooked that there is some return migration from European destination countries to the Maghreb (Cassarino 2008).

Table 14.6 Stocks of emigrants by destination and source country, Maghreb countries, most recent data

	Algeria	Libya	Mauritania	Morocco	Tunisia	Total Maghreb
France	679,000	1,811	20,000	1,131,000	578,000	2,409,811
Spain	56,201			547,000		603,201
Italy	24,387	1,468		379,000	141,900	546,755
Other Europe	54,617	40,367		780,654	154,000	1,029,638
Arab countries	29,406	6,928	41,500	281,631	153,200	512,665
Sub-Saharan Africa			128,000			128,000
North America	45,619	7,985		160,000	27,600	241,204
Others	6,021	2,962	60,500	13,314	3,100	85,897
Total	895,251	61,521	250,000	3,292,599	1,057,800	5,557,171

Note: Because these data refer to 2004 (for Mauritania), 2007 (for Morocco), 2008 (for Algeria and Tunisia), and 2010 (for Libya), they do not reflect the return migration from Libya during the civil war of 2011. Nor do they cover the Maghreb-born people of European origin who left during decolonization or the Jewish emigrants who left (primarily) between 1949 and 1969

Source: The data are based on various sources quoted in DiBartolomeo et al. (2009, 2010a, b) and DiBartolomeo et al. (2010, 2011)

(0.5 million), and – until early 2011 – Libya. Only Mauritania deviates from this pattern: prime destinations for its emigrants are the countries of sub-Saharan Africa, including Senegal, Nigeria, Côte d'Ivoire, Mali, Gambia, and the Congo (DR) (Di Bartolomeo et al. 2010b; Table 14.6).

In 2010, more than five million emigrants²⁸ sent remittances of about USD 8.6 billion to the Maghreb. With USD 6.4 billion in 2010, Morocco recorded by far the largest inflows of remittances, followed by Algeria and Tunisia, both with USD 2.0 billion (World Bank 2011).²⁹ Over time, remittances sent to Morocco and Tunisia have almost doubled, while remittances to Algeria have remained stable (Fig. 14.4). In 2010, remittances accounted for 4.7% of the Algerian, 10.7% of the Moroccan, and 5.1% of the Tunisian GDP. In 2011, the flow of money must have been smaller because many migrants of Maghreb origin working in Libya had to leave that country.³⁰

14.7 Age Structure, Working-Age Population, and Employment

Between 1955 and 1985, over 40% of the total population in the Maghreb was younger than 15, and 60–65% was younger than 25. Today, children below age 15 still represent more than a quarter of the total population, while the share of

²⁸ The World Bank (2011) estimates that 5.2 million Maghreb-born migrants were living abroad in 2010; similarly, data published by the CARIM project give a figure of 5.5 million for the 2005–2008 period (DiBartolomeo et al. 2009, 2010a, b; DiBartolomeo et al. 2010, 2011).

²⁹ No reliable data are available for Mauritania.

³⁰ Libya reported remittance outflows of USD 1 billion for 2009 (World Bank 2011).

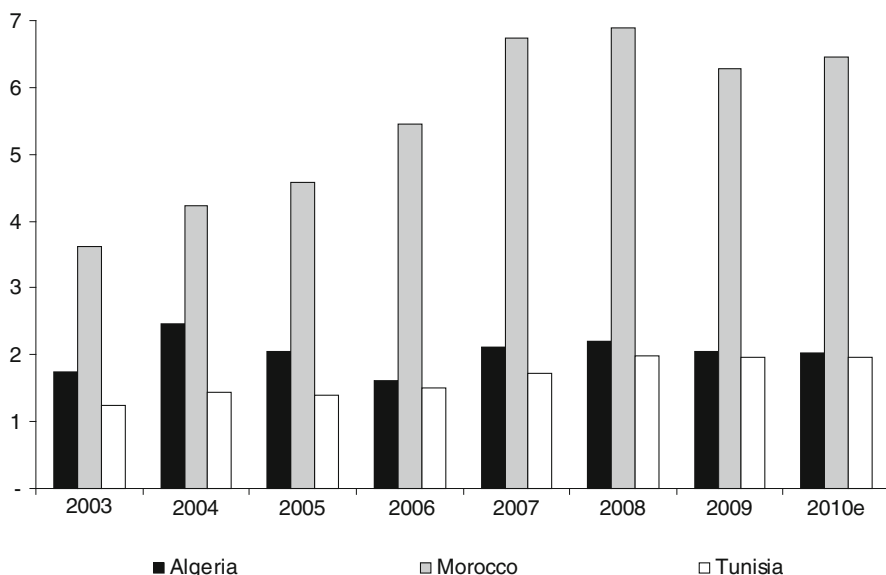


Fig. 14.4 Remittance flows to Maghreb countries (in billions USD), Maghreb countries, 2003–2010 (Note: Reliable data for Libya and Mauritania are unavailable. Source: World Bank 2011)

adolescents and young adults aged 15–24 is around 20%. The share of those aged 65 + is very small, varying between 2.7% in Mauritania and 7.0% in Tunisia (Table 14.7). Overall, despite declining fertility, the Maghreb still has a youthful growing population, primarily because the high fertility of past decades and declining infant mortality translate into large cohorts of potential parents. As a result, the annual number of births remains high (Table 14.3), and the number of people reaching adulthood is still growing.

Because of rapid population growth, the working-age population (15–64) of the Maghreb grew from 12.5 million in 1950 to 25.7 million in 1980 and to 58.8 million in 2010, and this number is expected to increase to 74 million by 2050. Total employment in the region grew from 13.6 million in 1980 to 35.1 million in 2010 (Table 14.8), but by international comparison, employment rates in the region are still relatively low: only one in two adolescents and adults (aged 15+) is economically active. Rates have increased since the early 1980s in Algeria, Libya, and Mauritania but have remained stable in Morocco and Tunisia. Today, Mauritania (70.2%)³¹ and Algeria (58.8%) have the highest and Tunisia (48.1%) the lowest labor force participation in this age group (Table 14.8).

³¹ The data for Mauritania do not fully compare with those for other Maghreb countries because Mauritania remains a rural and agrarian society, so all adults involved in some farming activities are counted as economically active.

Table 14.7 Population by age groups (in thousands), Maghreb countries, 1950–2050

	Age groups in thousands			Age groups in % of total population		
	0–14	15–64	65+	0–14	15–64	65+
Algeria						
1950	3,513	4,857	383	40.1%	55.5%	4.4%
1980	8,623	9,432	756	45.8%	50.1%	4.0%
2010	9,593	24,246	1,629	27.0%	68.4%	4.6%
2050	7,525	30,132	8,865	16.2%	64.8%	19.1%
Libya						
1950	431	549	49	41.9%	53.4%	4.8%
1980	1,441	1,554	68	47.0%	50.7%	2.2%
2010	1,933	4,148	274	30.4%	65.3%	4.3%
2050	1,532	5,712	1,530	17.5%	65.1%	17.4%
Mauritania						
1950	288	360	9	43.8%	54.8%	1.4%
1980	693	788	37	45.7%	51.9%	2.4%
2010	1,380	1,987	93	39.9%	57.4%	2.7%
2050	2,057	4,560	469	29.0%	64.4%	6.6%
Morocco						
1950	3,974	4,722	257	44.4%	52.7%	2.9%
1980	8,312	10,440	815	42.5%	53.4%	4.2%
2010	8,949	21,247	1,755	28.0%	66.5%	5.5%
2050	6,549	25,720	6,930	16.7%	65.6%	17.7%
Tunisia						
1950	1,372	1,956	202	38.9%	55.4%	5.7%
1980	2,711	3,504	242	42.0%	54.3%	3.7%
2010	2,459	7,294	729	23.5%	69.6%	7.0%
2050	2,003	7,943	2,703	15.8%	62.8%	21.4%

Source: UNPD (2011a)

Table 14.8 Economically active population (in thousands and in % of age group 15+), Maghreb countries, 1980–2010

	Algeria	Libya	Mauritania	Morocco	Tunisia	Total Maghreb
Economically active population: in thousands						
1980	4,550	739	557	5,846	1,865	13,557
2000	11,107	1,831	1,030	10,217	3,179	27,364
2010	15,196	2,418	1,435	12,190	3,850	35,089
Economically active population: in % of 15+ age group						
1980	44.7	45.6	66.5	51.9	49.8	49.1
2000	55.2	50.5	68.5	53.4	48.1	53.8
2010	58.8	52.9	70.2	52.3	48.1	55.3

Note: The data for Mauritania do not fully compare with those for other Maghreb countries because Mauritania remains a rural and agrarian society, so all adults involved in some farming activities are counted as economically active

Source: ILO (2011)

Three groups are characterized by particularly low employment and high unemployment rates: women, young adults, and well educated people. One reason is that demand from the public sector no longer absorbs the cohorts of young people leaving secondary schools and universities. At the same time, the private sector provides too few jobs to offset the shortfall. As a result, unemployment rates are highest for young new entrants to the labor market with intermediate and higher education, partly because the positions offered do not meet the high job and salary expectations of young adults with over 10 years of formal education. At the same time, the education system continues preparing students for public sector employment, rather than building the skills required by the private sector. In addition, the historically dominant role of government as employer has introduced rigidities in the wage structure that distort labor market incentives and promote expansion of the informal sector (Achy 2010; Benhassine et al. 2009; Dyer 2005; European Commission 2010).

It was these low employment levels among young and educated people – in combination with authoritarian rule, high levels of corruption, and a general climate of stagnation – that led ultimately to the popular uprising which began in Tunisia at the end of 2010 and has since spread across the Muslim Arab world. As of 2011, three authoritarian governments in North Africa (Egypt, Libya, and Tunisia) have collapsed, a constitutional reform has been initiated in Morocco, and the state of emergency in Algeria has been lifted.

14.8 Outlook

The Maghreb has a youthful population that has been growing since the 1950s and will continue to do so for at least another four decades. Because of low fertility and emigration, however, the number of children and young adults (age group 0–25) has already begun shrinking. By 2050, in contrast, the number of people aged 65+ will have grown fivefold, making ageing an important social, economic, and demographic issue.

The Maghreb is also characterized by a growing working-age population coupled with low real employment rates. The labor force growth in Maghreb countries is expected to continue at an annual rate of 2.5% between 2010 and 2020, meaning an increase of nearly ten million jobs for new labor force entrants.³² Given the estimated 20% unemployment in the region, if these countries are to absorb both the unemployed and new labor market entrants, they will have to create some 16 million jobs by 2020, this is 50% of the current number available. Hence, policy makers must give high political priority to job creation that reduces unemployment and absorbs first-time entrants into the labor market. Labor market reforms and an institutional change that promote the private sector growth are necessary to reach these goals. Higher female labor force participation would also require changes in

³² This projection assumes that all persons entering the 15–24 age group will eventually require a job.

gender roles and attitudes. No matter what the challenges, however, there is no doubt that higher employment is the key to the further development of Maghreb societies because reduced economic opportunities for the young and educated reduce potential growth and remain a politically and socially destabilizing factor (see also World Bank/UAE Ministry of Labor 2011).

Appendix

Table A1 Basic indicators for Maghreb countries

	Algeria	Libya	Mauritania	Morocco	Tunisia
Total population (thousands), 2010	35,468	6,355	3,460	31,951	10,481
Population annual growth rate (%), 1970–1990	3.0	3.9	2.7	2.4	2.4
Population annual growth rate (%), 1990–2000	1.9	2.0	2.7	1.5	1.4
Population annual growth rate (%), 2000–2009	1.7	2.3	2.9	1.3	1.0
Annual no. of births (thousands), 2005–2010	711	145	113	629	178
Life expectancy at birth (years), 1970–1975	54.5	53.0	48.8	53.0	55.1
Life expectancy at birth (years), 1990–1995	67.8	69.0	56.5	65.5	70.1
Life expectancy at birth (years), 2005–2010	72.3	74	57.5	71.2	73.9
Total fertility rate (no. of children per woman), 1970–1975	7.38	7.59	6.75	6.89	6.21
Total fertility rate (no. of children per woman), 1990–1995	4.13	4.10	5.78	3.66	3.13
Total fertility rate (no. of children per woman), 2005–2010	2.38	2.72	4.71	2.38	2.04
Contraceptive prevalence (%), 2005–2009	61	45	9	63	60
Infant mortality rate, under 1 year (%), 1990–1995	42.2	28.3	76.7	63.3	34.4
Infant mortality rate, under 1 year (%), 2005–2010	25.0	15.0	77.3	34.1	20.8
Share of infants with low birth weight (%), 2005–2009	6	7	34	15	5
Estimated adult HIV prevalence rate, 15–49 years (%), 2009	0.1	–	0.7	0.1	<0.1
Share of population urbanized (%), 2009	66	78	41	58	67
Total adult literacy rate (%), 2005–2008	73	58	57	56	78
Youth, 15–24 years, literacy rate (%), 2004–2008, male	94	100	71	85	98
Youth, 15–24 years, literacy rate (%), 2004–2008, female	89	100	63	68	96
Primary school net enrollment/attendance ratio (%), 2005–2009, total	95	–	57	89	98
Primary school net attendance ratio (%), 2005–2009, male	97	–	56	91	95
Primary school net attendance ratio (%), 2005–2009, female	96	–	59	88	93

(continued)

Table A1 (continued)

	Algeria	Libya	Mauritania	Morocco	Tunisia
Secondary school net attendance ratio (%), 2005–2009, total	61	–	19	37	–
Secondary school net attendance ratio (%), 2005–2009, male	57	–	21	39	–
Secondary school net attendance ratio (%), 2005–2009, female	65	–	17	36	–
GDP per capita, 2010	8,110	18,810	1,860	4,690	8,660

Source: EIU, UNICEF, UNPD, WHO

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- Population Reference Bureau, <http://www.prb.org/>
- United Nations Population Division, <http://esa.un.org/unpd/wpp/index.htm>

Chapter 15

Changing Demographics in the MENA Region: The Need for Social Policies to Drive Opportunities

Nabil M. Kronfol

Abstract The demographic transitions in the MENA region – which result from the low proportion of children (0–14 years), the high proportion of working-age citizens (15–64 years), and the relative stability of the proportion of elderly (65 years and above) – may open a demographic window for countries to benefit from increased savings and investment. At the same time, the growth in the number of young people suffering from unemployment and social exclusion within some segments of the population may lead young people to aspire to change, sometimes by non-peaceful methods, which could lead to instability.

The UN population division has defined the demographic dividend as the period in which the proportion of children under 15 falls below 30% and the proportion of people 65 years and older is still below 15%.

Nonetheless, despite major improvements in health and education over the past decades, the political, social, and economic systems in the region have not evolved in a way that effectively meets the changing needs of this rapidly growing young population, most especially the need for employment. Hence, the extent to which this large group of young people will become productive members of their societies depends on how well governments and civil societies invest in social, economic, and political institutions that meet their current needs.

The demographic change, combined with persistent poverty and unemployment, is a source of conflict, and the failure of governments to meet the youths' needs may prompt them to rioting and violence. Frustrated expectations may also prompt an exit response of emigration. Surveys of Middle Eastern youth reveal that the proportion of young people who wish or intend to emigrate ranges from one quarter to an enormously high three quarters of an age group.

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15.1 Introduction

Understanding the relationship between population change and economic growth has taken on added importance in recent years because the world's developing countries – home to the vast majority of the world's population – are in varying stages of a demographic transition from high to low rates of mortality and fertility. This transition has produced a “boom” generation that is gradually working its way through each nation's age structure. As this boom generation enters working age, there is a valuable opportunity to unleash an economic growth spurt (Bloom 2003; [Egyptian Centre for Women](#)).

In the Middle East and North African nations (MENA), where birth rates remained high until the 1980s and then declined sharply, the proportion of young, active, working-age individuals in the current population is exceptionally large. Young people entering the labor market today do not have to mortgage the future benefits of their work to support either numerous children (as they did in the recent past) or the elderly (as they will in the near future). This situation, because it is favorable to savings and investment, can theoretically yield a dividend, a “gift”, for the entire population. This gift, however, is only temporary, and seizing the opportunity requires that critical policy areas be addressed. Most particularly, policymakers must plan for the future health care and pension-income needs of this baby-boom generation when it ages.

This paper reviews the demographic situation in the MENA region and the impact of education, employment, migration, health status, participation on the region's further development, including the impact on ageing and issues of gender. However, rather than presenting new data or findings,¹ it draws on published reports and studies by international organizations and researchers. The intent is to draw attention to the importance of these demographic changes and highlight the need for action to maximize the potential benefit to the regions' population.

15.2 Demography

The population of the Arab countries increased between 1980 and 2010, moving from 170 millions (3.8% of the total world population) to roughly 366 millions in 2010 (about 6%) (UN Projections 2008 revision-medium variant). Although the population has grown rapidly in all countries in the region, the rate of expansion has been most dramatic in the Gulf Cooperation Council (GCC) states, where the number of residents has increased nearly sevenfold since 1960 (United Nations

¹ Nabil M. Kronfol, *The Youth Bulge and the Changing Demographics in the MENA Region: Challenges and Opportunities?*, WDA-HSG Discussion Paper No. 2011/8.

Table 15.1 Urban population

Urban population (millions)	1970	2010
Arab region	<1/3	>1/2
Cairo (millions)	5.6	11.0
Sana (Yemen)	0.1	2.0
Riyadh, Saudi Arabia	0.4	5.0

2007), partly because of the unique migration patterns prevailing in the area (Khalifa 2006; United Nations 2007).

The annual population growth reached a peak of 3% around 1980, which equaled 2% of the world population growth. However, for the region as a whole, the rate of population growth is expected to decline to 2.04% during 2000–2020 (ESCWA 2009), whereas the world as a whole reached its peak of population growth of 2% per year in the mid-1960s and is currently growing at only 1.2% a year (Byblos Bank 2011). Hence, in spite of the reduction in population growth rates, the population of the Arab world will grow significantly for several more decades.

Overall, the Arab countries are experiencing an unprecedented “youth bulge” with over 30% of the population in the age group 15–29 representing over 100 million people. As of 2010, the pool of young people in this age group was estimated to be about 74 million. At the same time, as shown in Table 15.1, most Arab countries have also experienced large population movements from rural areas to urban centers as youths gravitate for urban employment.

15.3 Definition of Youth

Although the United Nations defines youth as people aged between 15 and 24 years (UN, World programme of action for youth to the year 2000 and beyond), the meaning of the term varies in different societies around the world. For instance, the results of a survey conducted by ESCWA indicate that only 7 (Bahrain, Lebanon, Oman, Palestine, Qatar, Saudi Arabia and Yemen) of the 13 member countries that completed the questionnaire define youth as the 15–24 year age cohort: the others give definitions in which ages range from 10 to 35. Whatever the exact definition, youth can be seen as a socio-demographic group. Nonetheless, it is useful to distinguish between “adolescents”, whose ages range from 15 to 19 years, and “young adults” whose ages range from 20 to 24 years, because these two sub-groups have distinct needs and face distinct challenges.

Youth, whose features distinguish it markedly from other phases like childhood, adulthood, and old age, is without doubt a very important phase in the human life cycle. Economically, youth are in transition from economic dependency to economic productivity. In terms of family formation, they are often at the stage of identifying a partner, marrying, bearing children, and establishing an autonomous family. Above all, youth is the stage of personality formation and self-realization.

Table 15.2 Priorities of the World Programme of Action for Youth to the Year 2000 and Beyond

Priorities within the cluster “Youth and the global economy”	Priorities within the cluster “Youth and civil society”	Priorities within the cluster “Youth and their well-being”
Globalization	Leisure-time activities	Health
Poverty and hunger	Full and effective	HIV/AIDS
Education	participation of youth in the	Substance abuse
Employment	life of society and in	Juvenile delinquency
Environment	decision-making	Girls and young women
	Intergenerational issues	Armed conflict
	Information and communications technology	

Shakoori proposes four basic methodological approaches to youth (Shakoori 2008): youth as a phase in the human life cycle, youth in the context of development philosophy, youth in the context of demographic transformation, and youth in the context of the size of population and the size of natural resources. This latter approach, especially, builds on the idea that rapid population growth may eventually lead to government inability to meet the needs of youth, a situation that could result in young people creating problems and engaging in violence while demanding their rights. Given such a situation, Shakoori argues, the increase in the number of youth to 20–30% of the total population, in a context of deprivation and lack of social and economic equity, may make young people a source of instability and violence, which could lead to terrorism.

The United Nations has been giving priority to youth issues for decades, and in 1995, it adopted the *World Programme of Action for Youth to the Year 2000 and Beyond* (Population Division, World population prospects: The 2008). This program, which focuses on 15 priority areas within three clusters (see Table 15.2), is an unprecedented initiative by the international community to recognize the value of young people. The effective implementation of the program, however, will require a significant expression of commitment by the organizations and institutions responsible for its adoption and implementation and the involvement not only of these organizations but of youth from all sectors of society.

15.4 Demographic Dividend

The UN population division has defined the demographic dividend as the period in which the proportion of children under 15 year falls below 30%, and the proportion of old people 65 years and older is still below 15%. Simply stated, the demographic dividend occurs when falling birth rates change the age structure, so that fewer investments are needed to meet the needs of the youngest age groups and resources are released for investment in development. The dividend is not only characterized by delivery during a limited time span, it is also irreversible.

Table 15.3 Demographic dividend

Category	Definition and countries
Have already reached or will reach the peak of the demographic dividend before 2020	Tunisia, Algeria, Qatar, Lebanon, Morocco
Reaching their peak in 2020–2030	Jordan, Bahrain, Libya, Syria, Egypt
Reaching their peak after 2030	Comoros, Djibouti, Iraq, Mauritania, Yemen, Oman, Somalia, Palestine, Saudi Arabia

However, as Table 15.3 implies, some countries take better advantage of these characteristics than others.

The current situation is characterized by many complicated interrelated factors that may lead young people to participate in activities that undermine social peace and stability. Most particularly, because of the region's youth bulge and the expansion of higher education, growing numbers of young people can barely find gainful employment, which may increase the risk of political unrest. Government failure to meet such needs may prompt young people to rioting and violence, which may be further fueled by the more open flow of information and ideas enabled by the Internet and easier access to expanded media sources.

The exit response to frustrated expectations may also take the form of emigration. For example, surveys of Middle Eastern youth reveal that the proportion of young people who wish or intend to emigrate ranges from one quarter to an enormously high three quarters of an age group. Not only is such emigration likely to increase in the coming decade, but its profile will undoubtedly change. Whereas in the past, male migrants left their families behind and sent remittances, young emigrants will contemplate staying abroad permanently (Fargues 2008).

Despite major improvements over the past decades in health and education, and despite a wealth of oil resources, "[MENA's] political, social, and economic systems have not evolved in a way that effectively meets the changing needs of its rapidly growing young population" (Population Reference Bureau), especially in terms of employment (Assaad 2007). Yet the extent to which this large group of young people will become productive members of their societies depends on how well governments and civil societies invest in social, economic, and political institutions that meet young people's current needs (Population Reference Bureau). At the same time, because political participation and civic engagement are important means of providing the youth populations in the region with the tools they need to build successful futures, civil social organizations can also play an important role. In fact, Mr. Amr Mousa, Secretary-General of the League of Arab States, has stressed that the youth bulge "is a demographic opportunity, not a disaster. It holds the potentials for a positive transformation in the Arab World if properly invested in it through the right social and economic policies, and through engaging the young society in all aspects of life" (Model Arab League 2010).

Table 15.4 Replacement level

Category	Country
Have reached or will reach replacement level (TFR = 2.1) or less before 2020	Tunisia, Lebanon, Bahrain, Algeria, United Arab Emirates, Kuwait
Reaching replacement level between 2020 and 2030	Libya, Qatar, Morocco
Reaching replacement level between 2030 and 2040	Jordan, Syria, Egypt
Reaching replacement level after 2040	Comoros, Djibouti, The Sudan, Somalia, Iraq, Oman, Palestine, Mauritania, Yemen

15.5 Fertility

Although mortality in the MENA region began to decline in the late nineteenth and early twentieth centuries, the decline in fertility (births per woman) did not begin until the 1970s. On average, fertility in the Arab region declined from seven children per woman around 1960 to 3.6 in 2000. This decrease, coupled with a significant decline in child mortality, led first to an increase in the proportion of children under 15, and then to an increase in the proportion of young people ages 15–24, who now account for nearly one in five people. The current number of youth in the region is also unprecedented: nearly 95 million in 2005. This youth bulge is even more pronounced in countries in which the onset of fertility decline occurred later and the decline was sharper.

This decline in fertility is attributable to a variety of correlated factors, including better levels of education, particularly among women, women's relatively increased participation in the labor force, later marriages, and increased prevalence rates of contraception (ESCWA 2009). Although the decline is expected to continue in the coming decades, its speed clearly varies from one country to another. Hence, the Arab countries may be classified (as in Table 15.4) according to when they will reach replacement level (approx. TFR = 2.1).

During the 1980s, policymakers attempted to curb runaway population growth by encouraging birth control and promoting family-planning programs which were effective in stabilizing, and even decreasing, the number of annual births. Nevertheless, in MENA, the generation reaching working age will be much larger than that reaching retirement age until at least 2030, and the size of the total working-age population will continue to rise sharply during the next two decades.

15.6 Ageing and the Older Population

In addition to the demographic changes noted above, the MENA region will witness a gradual (but noticeable) increase of its older population (65+ years). In fact, although the proportion of older people is still in the range of 1–4% in most

of the region, Lebanon and Tunisia report that the old already constitute more than 7% of their respective populations. Hence, governments should plan for the needs of this older population, needs that translate into better access to health care, social protection, pension plans, and the combating of poverty, especially among older women.

Although pension reforms have already been legislated in many of the member states in the MENA Region, much of the care required by the elderly is currently provided by family caregivers. However, with an increasing share of older people likely to live apart from their families, this situation can be expected to change, making the provision of social services and health care a major challenge.

15.7 Education

Not only is education a fundamental human right, but providing universal education, especially secondary education, is an indicator of youth participation in the development process and their equal and equitable benefit from it. Over the last two decades, the Arab region has achieved remarkable progress in all educational indicators: the average rate of inclusion in primary education has increased to 80.6%, the proportion of literate young people between 15 and 24 years of age has reached 83.4%, and in 2005, the gender parity index for literacy reached 0.92. Indeed, MENA's investment in female education in the past few decades has been impressive: most countries have closed or nearly closed the gender gap in youth literacy (UN; World Bank Development 2006). Nonetheless, despite the progress made, the goal of universal education has not been achieved, nor has the standard of achievement been uniform across sub-regions and countries in the Arab region.

Moreover, in comparison to primary education, secondary education remains less prevalent in the Arab countries (Najib 2005), which further limits access to university education (39%) (World Bank 2003) because admissions are associated with secondary education scores (World Bank 2007). In addition, rather than focusing on scientific disciplines, higher education tends to focus on academic fields that are often incompatible with the needs of the labor market. For example, the percentage of students enrolled in scientific disciplines like natural sciences is less than 30% of overall university enrolment (Assaad and Roudi-Fahimi 2007).

Furthermore, although it should be noted that the number of private universities has increased over the last decade, access to universities is generally highly dependent on passing national tests, which are designed primarily to measure the acquisition of facts and knowledge through rote memorization instead of critical and independent thinking. There is a need for Arab youth to reconsider their acquired skills and make every effort to acquire new ones – especially in information and communications technology.

In addition, it is believed that the region is still unable to bridge the educational gaps between rich and poor, urban and rural (World Bank 2004). This deficit holds especially true for women (UNESCO, Education for all), who, although their

overall performance is impressive (World Bank 2004), face the major impediments of poverty; early marriage; and a lack of female teachers, girls' schools, and security (World Bank 2004). Even when given access to higher education, women continue to enroll in fields traditionally considered "appropriate for women", such as education, humanities, and the arts.

Education in the Arab region also suffers quantitative and qualitative deficiencies, including centralization and bureaucracy and deficiencies in the curriculum and educational infrastructure, especially in public schools. There are even indications that educational opportunities, if and when available, are often of low quality because of classroom overcrowding, poor infrastructure, lack of teaching materials, and a shortage of teachers and well-trained staff (United Nations 2007). Indeed, one report presented by the Secretary-General of the League of Arab States to the Summit of Arab Kings and Presidents in Riyadh in March 2007 stressed the seriousness of the educational problems in Arab countries.

At the same time, however, because fertility rates continue to decline and the growth rate of the school-age population is slower, governments face less pressure to increase the number of seats in primary schools, and, with some time lag, in secondary schools. The current situation therefore presents a unique opportunity for governments to focus on improving the quality of schooling and expanding higher education.

15.8 Work and Employment

The transition to adulthood is an inherently difficult period for youth everywhere. Obviously, the transition from school to work is a crucial life stage because it determines future economic and social well-being. Likewise, employment is an important lifecycle phase because it enables economic independence and transition from dependence on family to self-reliance. Yet more than 25% of youth in the Middle East are unemployed, the highest such rate in the world, with unemployment rates varying from 6.3% in the United Arab Emirates to 15.7% in Morocco, 17% in Qatar, 18.7% in Yemen, 19.7% in Oman, 21.34% in Lebanon, 25.8% in Egypt, and 38.9% in Jordan (Arab Labour Organization 2006).

Providing decent work opportunities for young people requires the integration of relevant sectors and coherent social, economic, and population policies. Youth unemployment rates are especially high in countries that suffer from occupation and conflict: for example, youth unemployment in Iraq was estimated at 27% and 17.5% in 2004 and 2006, respectively, and that in Palestine, at approximately 29.8% in 2006 and 28% in 2008.

Tapping the full potential of youth, therefore, is one of the most critical economic development challenges facing the Middle East in the twenty-first century (Salehi Isfahani and Dhillon 2008). In many middle-eastern countries, the wait for a first job is measured in years rather than months, and the majority of young people delay marriage and live with their parents well into their twenties. This lengthy

bewildering phase spent waiting for a full state of adulthood – often dubbed *waithood* – has in large part been facilitated by demographic pressures and social norms (Roudi 2001).

The changing age structure of the MENA population, however, is not the only demographic development that will affect the labor market in the next two decades. The recent drop in birth rates and the expanded educational opportunities for women have fundamentally altered women's roles and education in society (Fargues 2008). As a result, women in MENA countries have become more likely to delay marriage and join the workforce. Nevertheless, although women's labor force participation in the MENA region reached 32% in 2006 (World Bank 2004), it remains the lowest in the world (world average = 58%). Men's labor force participation, on the other hand, is comparable to other regions.

In addition, there are great variations within MENA in women's participation in the economy and the extent to which it has changed. Although women make up 28% of the total MENA labor force – which is expected to increase overall by 40% between 2000 and 2010, and by nearly 80% between 2000 and 2020 (World Bank 2008b) – actual rates may be substantially higher as many women work in the informal sector. However, typical female occupations such as caregiver are neither valued as a contribution to development nor distributed equally, which limits the opportunities available to women to pursue education and engage in income-generating employment.

Arab women also still face barriers to employment. Private firms in MENA, especially, are failing to substitute for governments in employing young women, partly because labor markets are highly segregated along gender lines but also because of unwillingness to assume the added cost of maternity leave and child care. This situation is further complicated by women's limited geographic mobility and the limited growth of labor-intensive, export-oriented industries that might otherwise employ women (World Bank 2008a). In addition, whereas male unemployment generally decreases with additional years of education, female unemployment tends to increase with higher levels of education.

Likewise, in MENA, the private sector does not provide women with the same wage and non-wage benefits as men, which drives them predominantly into the public sector (mostly in the education and health sectors). As a result, women work mainly in services, which make up 49% of female employment (ILO 2007) as compared to 39% in agriculture and 12% in industry (ILO 2006). Young males, in contrast, join the labor force at an early age because government legislation allows their recruitment into military and police colleges as officer cadets. There are also appropriate job opportunities for young males to enter the labor market rather than continuing their university studies as females do. In addition, the proportion of male students who choose to pursue their studies abroad is high (Nasser 2009).

Nonetheless, the share of women who are salaried workers has increased substantially (ILO 2007), an increased female economic activity that is due mainly to higher levels of education and a rise in the average age for marriage. More women in the 30-plus age group are also remaining in the labor market even after they are married and have children. These data suggest that one income is no longer

sufficient for the changing needs of the family and that attitudes toward women's working outside the home are slowly changing.

One issue that deserves more attention is *discouragement*, which leads to inactivity by those who view the job search as a futile effort (ILO 2006). Given the barriers to employment, such discouragement is likely to be higher among women than among men. Yet women's unemployment, as well as their economic empowerment, could be enhanced through the effective promotion of female entrepreneurship, especially as female-owned firms are more likely to hire women. Nevertheless, according to one recent study, women account for only 13% of firm owners in MENA, compared to 24% in Europe.

In Arab countries, because of the gap between labor market requirements and educational outputs, unemployment is concentrated among secondary-school and university graduates rather than among primary-school graduates and the illiterate (World Bank 2004). In fact, according to a recent analysis for Egypt, the highest rates of unemployment have now shifted to university graduates. There are two reasons for this shift: First, university students are not only the fastest-growing group among new entrants but are the most dependent on government employment, which is not growing as fast as is needed and might even be shrinking (Assaad 2007). Second, even for the most educated workers, the private sector places less value than the public sector on their educational achievements (World Bank 2008b).

Yet, because the workforce is currently expanding at a rate greater than 3% per year, the region will require the creation of 100 million jobs in the next 20 years and needs 6–7% sustained economic growth to keep up with its growing population. Indeed, Mr. Ahmed Luqman, Director General of the Arab Labor Organization, notes that Arab countries will need to spend \$85 billion over the next 10 years in order to create new jobs and address the unemployment crisis (<http://www.al-jazirah.com/20110521/ec2d.htm> 2011).

Despite these realities, however, governments have not focused sufficiently on a vital component of the employment picture: how to ensure that the region's young people have the right skills for the jobs being created. In fact, private employers surveyed report that only one third of new graduate employees are ready for the workplace when hired. To address this problem, it will be necessary to orient education directly to work opportunities, whether full- or part-time or even self-employment.

There is currently even less focus on how to encourage the private sector (both employers and education providers) to play a role that is complementary to that of the government in addressing the region's pressing needs. One resource that could help remedy this deficit is the recent report *Education for Employment: Realizing Arab Youth Potential*, based on research by McKinsey, which highlights the dramatic gaps in education and employment across the region and provides a road map for closing them based on the private sector.

Moreover, even though education has boosted human capital in the region despite these challenges (UN Development Program 2003) existing legislation has resulted in increasing difficulty in hiring and a greater rigidity in working hours and employment (Edstats and September 2008). The oil-rich and labor-

receiving Gulf countries are faced with the additional challenge of addressing the employment balance between their non-nationals and the rapidly growing number of young nationals who are entering the labor force at a time when their governments can no longer guarantee the lifetime public sector employment on which citizens have customarily relied. As a result, nearly all the Gulf States are now instituting policies that push the private sector to hire more nationals.

The social and political turmoil in the Middle East and North Africa has given renewed urgency to the need to counter chronic joblessness, particularly among young people (Masood 2011). Hence, the World Bank, in its report, *Unlocking the Employment Potential in the Middle East and North Africa: Toward a New Social Contract*, argues that MENA countries must adopt new development policies that realign their economies.

15.9 Migration

The migrants from MENA countries number around 20 million, about 5% of the region's total population. Such emigration is triggered by several factors, among the most important of which is the unresolved conflicts that continue to cause migration within and from the region. As a result, MENA countries as a whole are home to just as many first-generation international immigrants as emigrants (Fargues 2008), and, after slowing down in the 1990s, emigration from Arab countries regained momentum in the early part of this decade. All MENA countries, except for the GCC countries and Libya, have become both origin and destination countries for international migrants. Some countries, like Morocco and Egypt, while remaining major origin countries, have also become unwilling recipients of migrants from elsewhere (Fargues 2008). Migrants originating from the Maghreb and Turkey are concentrated mainly in Europe, whereas those from the Machrek (Levant) and Iran tend to reside in other MENA countries or in North America. In Machrek countries, the popular, as well as the administrative, terminology classifies migration to the Gulf States and Libya as "temporary" but emigration to the West as "permanent."

The MENA region is home to several economies that depend on migrant remittances, which in 2007 reached US\$28.5 billion (World Bank Development 2006). The nations that are highly dependent on these funds include Egypt, Jordan, Lebanon, Morocco, and Tunisia, although remittances, being one of the least volatile sources of foreign exchange earnings for developing countries (Ratha 2003, Mohapatra et al. 2009), are also important to some of the largest source countries for remittances worldwide, including Saudi Arabia, the United Arab Emirates, Qatar, and Kuwait (Byblos Bank 2011).

Nevertheless, statistics on international migration in the region covered by the UN's Economic and Social Commission for Western Asia (ESCWA) remain scarce. Political instability and armed conflict, along with unemployment and underemployment, have been major push factors behind population movements in the region. One widely discussed feature in the literature is the connection

between migration and development (IOM 2005). However, the debate has changed noticeably in recent years, moving from a negative perception (particularly in reference to brain-drain migration) to the current view, in which there is growing acknowledgment of the positive effects of international migration on development in the countries of origin (ESCWA 2009).

In the Arab region, only 36% of international migrants are female (ESCWA 2009), and in some member states, refugees still form a large proportion of the migrant stock (UNHCR 2006). Migrants from Lebanon (67.2%) and Syria (40.9%) are more concentrated in countries with very high levels of human development. The most important type of population movement in the GCC countries is labor migration: the labor forces of all six GCC countries are predominantly non-citizen.

15.10 Health

Overall, the health of youth in the region has improved over past decades: death rates have dropped in all Arab countries and are expected to decline more in the next two decades. Nonetheless, changes in youth lifestyles, such as not exercising regularly and the spread of unhealthy diets and smoking, are exposing them to various health hazards. There is also an increase in the incidence of HIV/AIDS, with data tending to be underestimated.

Progress has also been made in reproductive health, with rates of unwanted child-birth and maternal mortality declining among young women and the number of young people having comprehensive, accurate knowledge of how to avoid sexually transmitted diseases increasing considerably (Population Reference Bureau 2007). Likewise, the progress made during the 1990s in women's access to health care continued after 2000, although there is a wide urban-rural gap in women's access to health services.

In addition, the region has not only seen significant changes in marriage patterns but has experienced declines in the fertility rate, including that for adolescent females (aged 15–19). This drastic decline has resulted primarily from increased female education, higher average age of marriage, and the availability of family planning policies.

The prevalence rate for contraceptive use (percent of women ages 15–49) has increased in all MENA countries. Women with less education marry earlier and have more children, thereby reinforcing the cycle of poverty. The maternal mortality rate in MENA is also higher than in other middle-income regions, although maternal and infant deaths are sometimes caused by regional conflicts.

Violence against women, including honor killings, persists; and honor killings, not being considered homicide, are not punished as such. Significantly, however, in May 2008, Jordan's courts sentenced a man to 10 years in prison for killing his sister, which may suggest a stronger determination on the part of the authorities to reduce that crime. There is also a high prevalence of domestic violence and sexual harassment (Egyptian Centre for Women), and the practice of female genital

mutilation, which is not prevalent in the rest of MENA, remains high in Djibouti, Egypt, and Yemen despite being illegal in the latter two countries.

15.11 Participation in Public Life

Youth who have the opportunity to participate in the life of their communities have a better chance of successful transition to adulthood; most particularly, because such activities promote social integration. Nevertheless, there are still obstacles to the full participation of youth in society. For example, one UNDP report shows that Arab youth are not represented in Arab legislatures or parliaments, and Arab parliaments have no separate committees for youth issues, which are instead dealt with by committees on sports, culture, or family affairs (UNDP 2006). The participation of youth in boards of directors is also limited, often on the basis of appointment and selection. As a result, not only do older people control the process and mechanisms of youth participation in these societies, but young people tend to be averse to political participation because they lack confidence in its procedures, results, and outcomes (Fareed, *Arab youth in civil societies – opportunities and obstacles (in Arabic)*).

The region has, however, witnessed some encouraging developments in the area of women's public participation and representation, with some countries successfully increasing female representation in parliament, primarily through the use of quotas and appointments. Nonetheless, the regional average is still the lowest in the world, and female candidates are generally more successful in local and municipal elections.

The increasing number of poor households headed by women and the lack of adequate social welfare systems clearly reflect the feminization of poverty in the Arab region, vulnerability to which is made worse by gender inequality. Women also face discrimination in property and inheritance rights.

15.12 Conclusions

Because MENA countries have diverse economies and their populations are at different stages of the transition from high to low fertility, their respective governments may choose different approaches to improve educational and job opportunities for youth. Nonetheless, MENA's labor market prospects depend largely on how successfully its governments can develop new social contracts for the twenty-first century, and no governments can succeed in strengthening human capacity among youth without fundamental reforms and a greater engagement by civil society. Hence, the extent to which this large group of young people becomes healthy and productive members of their societies depends on how well

governments and civil societies invest in social, economic, and political institutions that meet current needs.

At the same time, the social and political turmoil in the Middle East and North Africa has given renewed urgency to the need to counter chronic joblessness, particularly among young people. To address this issue, governments can implement a number of immediate measures to step up job creation and enhance the employability of their young populations (Masood 2011).

The region also suffers, however, from overly rigid labor market regulations, which policymakers should aim to relax while simultaneously preserving the right to collective bargaining and providing effective social protection, including unemployment insurance, for workers.

Nations currently undergoing the demographic transition have a unique opportunity to capitalize on the demographic dividend offered by the maturing of formerly young populations. Given the right kind of policy environment, this demographic dividend can help to produce a sustained period of economic growth (Bloom et al. 2003). Most particularly, ESCWA recommends that its member countries implement policies and plans designed to accelerate the economic, social, and political integration of youth, policies whose most important benefit would be the provision of a framework within which both governmental and non-governmental organizations, together with the private sector, can work on youth issues (UN 1996).

Thus, addressing the issues outlined in this paper requires the formulation of a specific youth policy, one that especially addresses the trends in youth unemployment and the establishment of a specific government institution for young people, preferably in the form of a higher council for youth and surveys targeting youth issues.

The importance of leveraging this opportunity to meet the needs of youth is perhaps most eloquently expressed in the following declaration by Her Majesty Queen Rania Al Abdullah of Jordan:

I was once told that the only way to predict the future is to have power to shape the future. Well, here in the Arab world, we have the power. The power is our youth. We have been blessed with the biggest youth population in the world; 60% of our region is under the age of thirty. If we could channel their energy. . . if we could harness their potential. . . we could change the fortunes of our region. With almost one quarter of our young people unemployed and losing hope every day, creating opportunity has never been so urgent. But right now, we are letting them down.

We are letting them down in ill-equipped classrooms with untrained teachers; we are letting them down with outmoded curriculums already obsolete in the modern marketplace; we are letting them down when they seek our advice and practical measures; and we are letting them down when we fail to expose them, at an early age, to the entrepreneurial spirit and potential of the private sector. From government to education providers to employers to civil society and to youth themselves, shaping our future is everyone's responsibility. If we can provide quality education that leads to lasting employment, we will have done our part in shaping the future of the Arab world. No one said it would be easy, but it is a regional imperative.

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Part IV

Policy Implications

Chapter 16

Political Development in Islamic Countries and the Role of Demography

Christian Blickenstorfer

Abstract The People's Power wave that has swept through the Middle East since late December 2010 has ousted some very long-serving autocrats. Although it is too early to tell whether this is a pivotal moment in the history of the Middle East, it will most certainly be an important milestone in the region's further development. Although the outcome of the uprising will vary in the respective countries, the movement is underlain by certain structural similarities that will continue to shape its future development: demographic dynamics, a challenging situation in the labor markets, social structures that particularly affect women, uncertain positions of religious leaders which matter for the final outcome. To cope successfully with these challenges, political leaders will have to come to terms with these structural features and bring about corresponding reforms. It is clear that there can be no easy borrowing of some off-the-shelf-solution for a democratic transition in the Arab world. Whether Western style democracy will be the solution to these challenges is as yet unclear. The Arab Spring movement is more likely to generate populist regimes that will make it easier for the new leaders to cater to the high expectations and wishes of the masses and assuage their social and economic frustrations. It is therefore likely that Turkey and not the European countries will serve as a role model for some countries in the region.

16.1 Introduction

The People's Power wave that has swept through the Middle East since late December 2010 has, at the time of writing, ousted three very long-serving autocrats. Although it is too early to tell whether this is a pivotal moment in the history of the

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Middle East, in comparison to earlier ruptures of historical dimensions – for example, the end of the Ottoman Empire in 1918 or the Iranian Revolution in 1979 – it will most certainly be an important milestone in the region's further development. Most particularly, the young and often underprivileged masses have tasted a sense of power as never before. Although the outcome of the uprising will vary in the respective countries, the movement is underlain by certain structural similarities that will continue to shape its future development. First, because of demographic dynamics, the median age in these countries remains low, with a majority of the population under 30 years of age. Second, as the pressure increases from young, often well-educated, individuals looking for jobs at the same time that fewer older workers are dropping out of the market, the situation in the labor markets remains challenging. Third, Middle Eastern societies continue to be determined by social structures that particularly affect women. Fourth, although religion was not an essential factor at the beginning of the Arabian Spring movement, it is clear that the position of religious leaders will matter for the final outcome. Hence, to cope successfully with the challenges, political leaders both old and new will have to come to terms with these structural features and bring about corresponding reforms. Should they be unable to do so, they may well find themselves in the cemeteries of history.

It is also questionable, and certainly too early to say whether the Arab Spring movement will or should result in Western style democracy and market economies. The fact that societies in the region have a long authoritarian tradition could lead to the conclusion that Arab and Middle Eastern societies are unfit for or incapable of change to a democratic system.¹ In addition, religious leaders and politicians in the region, as well as some Western specialists and scholars, have argued that Islam and democracy simply do not go together. Recent events, however, have already made it clear that religion is but one of many factors affecting developments in the region.

16.2 The Origin of the Arab Spring Movement

The current Arab-wide movement, unexpectedly triggered by the self-immolation of the humiliated Tunisian street vendor Mohammed Bouazizi, has raised awareness of a common Arab suffering, a systematic humiliation, and a common struggle and common destiny. Bouazizi's sacrifice, which drove Arab youth to rise up, was an act of protest not only against unemployment, poverty, and price increases, but also against despotism, corruption, repression, and political paternalism. The young activists within the Arab Spring movement, therefore, are opposing past oppression and fighting to reinstall the notion of dignity (*karama*), which was lost during the dark years and must be reinstated. To achieve this aim, they are demanding not only

¹ Reinhard Schulze, cit. in *Wochenzeitung (WoZ)*, March 17, 2011, pp. 13–14.

jobs but also self-determination, civil rights, and democracy. Nevertheless, it is unlikely that they have a clear understanding of these principles or any definite ideas on how to translate their demands into political reality.²

Another driving force behind the movement has been current technology, most particularly easier access to electronic media. Interestingly, the political activism has been embraced not only by IT- specialists but also by young Arabian musicians, whose popular song “For an upright life standing on solid feet instead of humiliation on our knees”³ calls on Arab youth to participate in the fight. Rappers therefore play a major role in the rebellion throughout the Arab world, and their music serves as an outlet for feelings that have been repressed for decades. These musicians are translating the current social turbulence into rhythm and verses, which are immediately disseminated to Arab youth over Facebook and Twitter.

The West, especially the United States of America, has also helped the Arab Spring movement with ideas and modern communications material. Many official and private groups, including foundations, aid organizations, and specialized firms, have, over the years, offered seminars, workshops, and conferences that introduced political concepts and the use of modern media to mostly young participants. Never in the past has a generation in the Muslim world been able to familiarize itself with and use modern techniques to the same extent that the Arab youth of today are doing on the Internet, a tool that allows not only passive consumption but also immediate idea dissemination and discussion.

Taken together, these recent developments in the Arab region as a whole suggest that three basic elements are decisive for the creation of a new political order: self-determination, nationalism, and religion. How these factors are dealt with under the new constitutions will not only determine the respective country’s internal politics but also the future relations among Arab countries and – as important – with the rest of the world. Although it is currently infeasible to speculate what the geostrategic consequences of the Arab Spring movement might be in the Islamic world, the reactions of each country’s political leadership, although they vary greatly, seemingly point in the direction of more actively asserting their respective positions, disregarding expectations formulated by the Western world, and, consequently, asking less for its support.

16.3 Possible Future Developments

Months after the start of the Arab Spring movement, one may well ask, what will follow? Although history does not simply repeat itself, the universal inclination of any revolutionary ferment is to create the more open, pluralist, democratic societies

² Necla Kelek, “About Freedom in Islam”, *Schriftenreihe der Vontobel Stiftung*, 1950, August 2010.

³ Ibn Thabit, cit. in *Neue Zürcher Zeitung (NZZ)*, March 23, 2011, p. 49.

that have emerged in many parts of the world. Nevertheless, the possibilities for achieving this goal are many. For example, when the Iron Curtain fell in 1989, it peaceably brought down an entire ideological construct, leaving relatively clear ground on which to build something new. The French Revolution of 1789, on the other hand, heralded the beginning of a long period of social and political change and instability, as well as many years of European wars. From a Western viewpoint, a development similar to that of 1989 would be preferable to the French model, but the longer the Arab awakening lasts, the more the latter seems likely.

What does become clearer with every week is that there can be no easy borrowing of some off-the-shelf-solution for a democratic transition in the Arab world. As previously pointed out, few of the activists have a clear understanding of democracy, which they may variously construe as correct treatment, justice, self-determination, and/or some form of political participation, but also as jobs and a better standard of living. Today's Arab revolutionaries are also proud and wary of foreign influence: having already realized that no specifically Arab model exists, they want to forge their own path toward democracy. In doing so, they must find answers to questions such as how to frame relations between Islam and the state and how to integrate ethnic and religious minorities.

Whether Western style democracy will be the solution to these challenges is as yet unclear: a tribal society that accommodates Islamic rules within a consensual context of tolerance and pragmatism might present as viable an alternative. Hence, the Arab countries, like such Muslim-majority but non-Arab countries as Turkey, Indonesia, Malaysia, and Iran, must find their own way. However, one thing seems clear: the overall trend toward democratization is no more stoppable in the Arab world than it has been elsewhere.

In general, modern democracies are based on fundamental elements such as respect for individual rights; separation of society, religion, culture, and politics; an independent judiciary; and a bureaucracy free of corruption. In the Arab world of today, such conditions barely exist: authoritarian power structures have prevented any development toward more individual freedom and democracy. Even when pseudo-democratic systems are in place and carry out allegedly free elections, politics, the politicians, and the bureaucracies are corrupt, and loyalty to the clan is more important than loyalty to the state.

In fact, according to former American security adviser Zbigniew Brzezinski,⁴ because democratic regimes require much time to develop, the Arab Spring movement is more likely to generate populist regimes that, being less complicated, will make it easier for the new leaders to cater to the high expectations and wishes of the masses and assuage their social and economic frustrations. That is, for now, finding practical solutions to the most pressing problems takes priority, and new democracies cannot be expected in the Arab world in the near future. For Europe and the United States, this reality means the dimming of exaggerated hopes,

⁴ Interview with Zbigniew Brzezinski, *Tages-Anzeiger*, April 28, 2011, pp. 6–7.

accepting with good grace the wishes of the countries in the region, and contributing to their economic development without trying to overly influence their undertakings. It is therefore likely that Turkey and not the European countries will serve as a role model for some countries in the region.

Indeed, Egypt and Tunisia, months after the downfall of their presidents, are already struggling with the transition to a new order, one that – in an ideal scenario – could serve as a model for the region. The most important question in this context is whether parliamentary elections should precede the drafting of a new constitution, a dilemma that Egyptian columnist Salama Ahmed Salama illustrates as follows⁵: A very hungry donkey has positioned itself between two stacks; to its left a stack of clover, to its right a hay stack. The animal, getting hungrier by the hour, cannot make up its mind as to where to begin eating. The story ends sadly: the donkey dies.

In March 2011, almost 80% of Egyptian voters favored some amendments to the existing constitution, as well as the election of a new parliament that would install a constitutional council and draft a completely new system of national laws. Since then, however, most of the revolutionary activists have been afraid that existing parties and political groups might take undue advantage of early elections and, by dominating the new parliament, could put their own stamp on the new constitution. Instead, these activists would like to see the new laws drafted by open-minded experts with solid legal knowledge who will not simply insert their own political and religious ideas. In an ideal world, the new political beginning would start with a constitutional council and the drafting of a new constitution that would be put to a public referendum. The new laws would then serve as a basis for parliamentary and presidential elections. Such a procedure, however, is time-consuming and would have to take place in a political vacuum that, in the case of Egypt, is likely to be filled by generals who are products of 60 years of autocratic rule.

16.4 The Role of Islam

According to several well-known scholars and scientists, one primary reason for the social misery in the Arab world is the impossibility of questioning Islam and the patriarchal culture within it.⁶ From a Western viewpoint, it is clear that a religion advocating sociopolitical absolutism is hardly in harmony with the principles of the Enlightenment. Although impossible to detail here, there are many obvious religious and cultural differences between Christianity and Islam that go back to the Islamic world's decision in the High Middle Ages to give absolute priority to the dogma of faith. With this "sealing" of the Koran as God's word, the innovative force of Arab culture disappeared and the opportunity for religious criticism was

⁵ Salama Ahmed Salama, cit. in *Tages-Anzeiger*, June 25, 2011, p. 11.

⁶ Kelek, "About Freedom", p. 42.

narrowed to a minimum.⁷ Admittedly, some Islamic scholars of today concede individual freedom of will and moral responsibility; they have not, however, found a way to harmonize this concession with the divine predetermination they still defend. Compared to the occidental viewpoint, therefore, the Islamic doctrine has a totally different understanding of mankind and the religious faith. It is the community not the individual that is the centre of interest.⁸

If the Koran serves as the sole basis for human rights, the Muslim's individual liberties and rights – for women as well as for men – are limited to a strict minimum. Because the Islamic Umma (community of the faithful) understands itself as a collective that encloses and protects the individual, it defines the human being as a social creature and not as an individual. Such a religious viewpoint, by “invoking explicitly the unity of faith, politics and privacy, creates a political, cultural and religious identity, making it almost impossible to separate religion, culture and politics from one another”.⁹ Hence, the Islamic understanding of the nature of the state can be described as follows: Islam is both religion and political rule. As a result, it does not distinguish between the real world and the “divine state” but rather declares the unity of religion and state, as well as the unity of the faithful and the people. As a result, secularization as it is known in the Western world does not exist in Islam.¹⁰

Nor could any positive concept of liberty and self-determination be developed in the framework of predetermination that is part of the patriarchal hierarchical social order. Unlike the notion of liberty in the Western tradition, the Arabic concept of *hurriya* in its original sense means the opposite of slavery and not *libertas*, the total liberation of the individual from any paternalism or religious guidance. In fact, the word “liberty” does not even appear in the Koran, and in translations is only found in the above mentioned context of freeing a slave.¹¹ For religious Muslims, therefore, liberty exists in the conscious decision to “obey the Islamic rules”.

It is also doubtful whether the actions and thinking of the demonstrators in Tunis and Cairo are in fact characterized by a new spirit of change and innovation. Concrete indications of such a transition are still absent even though the resistance movement, in its inception, did not define itself religiously. To conclude, therefore, that people in the Arab world have already outgrown the religion's authoritarian structures is most probably premature. As yet, no theological discussion has taken place, although if the Arabian Spring movement results in fundamental change, it will become an absolute necessity. Such a discussion, however, must inherently be long and painful, and success will only be possible if democratic and constitutional standards and principles can be set above the religion, bringing some form of separation of state and religion.

⁷ *Ibid.*, p. 53.

⁸ *Ibid.*, p. 56.

⁹ *Ibid.*, pp. 42–43.

¹⁰ *Ibid.*, pp. 58–59.

¹¹ Kelek, “About Freedom,” p. 50.

16.5 Current Developments in Four Arab Countries

Because discussing the developments in all Islamic countries would be infeasible in a short article, this analysis focuses specifically on Tunisia, Egypt, Saudi Arabia, and Morocco. It addresses Tunisia because that is where the Arab Spring movement began, and Egypt because it is the country with the largest population in the region. Likewise, Morocco's King Muhammad VI was the first of the Arab sovereigns to react to the People's Power movement, announcing a series of reforms and thereby acknowledging the ultimately irresistible potency of the trend toward citizen empowerment. Saudi Arabia, in contrast, the largest of the oil-rich monarchies and probably the most autocratic, is so heavily conditioned by Islam that it is fighting to avoid the change as long as possible.

16.5.1 *Tunisia*

The mostly non-violent revolution in Tunisia, which initiated the movement toward democratic change in the Arab world, served as a model for events in other Arab countries. The path to democracy, however, has been more complicated and time consuming than expected and is not without setbacks; although security throughout the country has improved, supporters of the old regime have not buried their hopes for a counterrevolution.

In Tunisia, former President Ben Ali had installed one official national party, although he tried to create a semblance of democracy by allowing seven smaller groups to function as opposition. These latter, however, had no real influence. As a result, at the time of his downfall, neither any real political parties nor a Western style parliament existed. Hence, there is a need to build a new, truly democratic structure on the ruins of this old system and legitimize it with general elections as quickly as possible. Free and fair elections, however, although seen in the Arab public mind as proof of real democracy, require certain predispositions, including freely operating parties characterized by identifiable platforms and membership, and personalities that offer the electorate a wide choice. Before elections can be held, therefore, such parties must be formed, a lengthy process when initiated from scratch. Hence, the dilemma for the revolutionary movement is that, whereas elections are important as a tangible result of the efforts by the political activists and millions of citizens that demonstrated for radical change, the difficulty of effecting rapid economic change in the short term makes political progress even more imperative.

Admittedly, a few old parties that had been operating underground still exist, but their leaders, living in exile, first had to return to the country and adapt their parties to the new situation. At the same time, the representatives of the revolutionary movement – that is, the group of young jobless activists – are confronting an even larger problem: having concentrated all their energy on bringing down the old regime without any far-reaching plans for the country's future, they favor

postponing elections until they can unify their movements on a common platform. Although the acting government eventually complied with this request, setting the elections for October 23, 2011, by doing so it jeopardized the unity within and the cooperation among the different factions of the revolutionary movement.

In addition to this debate over election date, other controversial issues have important implications for a functioning democracy. For example, not only must the press and media be totally reorganized, but the police force, 200,000 strong and the main instrument of the repressive regime, must be completely re-formed with a radically different mentality. All these necessary but time-consuming steps on the road to genuine democracy must be carried out under great pressure: the longer the interim period, the greater the danger that additional obstacles will arise. That is, on the one hand, impatience and dissatisfaction could drive the supporters of the revolution to further action, thereby increasing the instability; on the other, there is a real danger that further unrest will play into the hands of those forces that support the old regime and still hope to turn the clock back. Hence, to achieve positive and lasting social and economic change, Tunisia needs a period of peace and tranquility.

Meanwhile, the economic situation in the country is deteriorating steadily. Not only has the revolution so far cost several billion dollars¹², but thanks to the civil war in neighboring Libya and a substantial setback (80%) in the tourist industry in 2011, the Tunisian economy faces a negative growth rate. At the same time, however, there is no lack of suitable investment opportunities or a well-qualified workforce and modern technologies, which, combined with the country's geographical proximity to Europe, could offer excellent opportunities for Tunisia to become a promising economic centre in the Mediterranean basin. Yet one indispensable condition for realizing such a vision is political and social stability.

16.5.2 *Egypt*

In Egypt too, the euphoria caused by the Arab Spring has turned into disappointment because of continual security problems, economic difficulties, and strong resistance from the old regime's remaining representatives. As a result, the question of how the transformation to a democratic system could be secured has become a matter of chaotic discussion and continuously revised decisions. Nevertheless, owing to the raging political debate and the constant mobilization of the young revolutionaries, the process has been carried forward: change is taking place, and its manifestation in Egypt, which has regained its lead in the Arab world, could serve as a role model for other republican states in the region. The course of the protests in other Arab countries, however, makes it clear that surprise was the crucial factor in the rapid toppling of the

¹² Zimmermann, K.F., "Support Programs for Tunisia would have Signal Effect", NZZ, may 18, 2011.

political leadership in Egypt and Tunisia, whereas the leadership elsewhere, being forewarned, had time to prepare and develop counterstrategies.

In Egypt, following the surprisingly rapid departure of President Mubarak, a difficult period of reorientation and reconstruction was to be expected: forces for a new democracy need time to eliminate the old ruling elites in the party, the military, and the bureaucracy and to oust those who benefitted unduly from the old system. Nevertheless, because the Islamists contributed to neither the outbreak of the revolution nor its early success, it is still impossible to predict whether Islam will remain the only source of jurisdiction or whether its influence can be restrained. Moreover, somewhat ironically, the Arab Spring movement seems to have liberated Islamism, the ghost kept under cover for many years by Hosni Mubarak. The Islamists, together with other forces, are now trying to rise to dominance in order to contain the democratic movement. For example, the Salafists oppose the concept of a secular state and are asking instead for the introduction of Sharia as a basis for the judiciary system. Among the Muslim Brothers, on the other hand, a debate has broken out among the younger members, some of whom are active reformers who would rather see improvements in daily living conditions than the imposition of Sharia. Recently, doubts about the trustworthiness of the Military Council that “presides” over the transition have also grown stronger. As a result, at the end of May and again at the beginning of July, hundreds of thousands of liberal and secular-minded Egyptians demonstrated in Tahrir Square to reiterate their demands for a liberal civil system of government, the return of the military to the barracks, and the immediate implementation of the revolution’s aims as formulated in February.

16.5.3 Morocco

Inspired by the events in Tunisia and Egypt, a protest movement emerged in Morocco in February 2011 and organized monthly demonstrations aimed at influencing the political situation in the country. As in Tunisia and Egypt, the movement in Morocco used Facebook and Twitter to organize its protests and mobilize the population. Its demands also mirrored those of the activists in other Arab countries: better professional prospects, greater respect for civil rights, more social justice, and less corruption and abuse of power. In contrast to those in other Arab countries, however, the Moroccan demonstrators, rather than challenging the form of government perpetuated by the head of state – in this case, the King and monarchy – favored a constitutional monarchy in which the King reigns but does not rule.

The response from King Mohammed VI was surprisingly fast; in March, he acceded to the demonstrators’ demands by announcing a series of reforms, including the drafting of a new constitution. This document was overwhelmingly approved in a July 1, 2011 referendum, in which participation was respectable despite a call by Arab Spring movement leaders to boycott the vote. This new constitution, although it does not yet give the country a Western style constitutional monarchy, represents a far more substantial step toward a more democratic system

than did the previous constitution. Nevertheless, the King has held onto many of his privileges, and critics quickly pointed out that he was simply buying time before another wave of pressure could mount. Even if the Moroccan King's initiative is seen as merely clever, however, it is a fact that no other Arab leader has dared to react in similar fashion. Arnold Hottinger, a leading expert on the Arabian world, characterizes the Moroccan experience as follows: "If everything were to work [straightforwardly] and no interior controversy [were to arise], Morocco could be ruled in a democratic way under the new constitution. But disputes and power struggles will be unavoidable. The King reserves his right to intervene and to decide. This is certainly prudent and it serves the stability of the country. The democratic walk on a tightrope is carried out with a safety net. But how tightly this safety net will restrict the acrobats on the tightrope depends on how much freedom of action the ruler will grant to his representatives and to his courtiers"¹³. Overall, therefore, this new constitution is a telling sign of the ultimately irresistible potency of the trend toward empowering the people.

Under the new constitution, the King remains the "Leader of the Believers" (Amir al-mouminine) – that is, the decisive authority in religious issues – and presides over the council of leading Islamic scholars. The new constitution is, however, more liberal in that the King's person will be merely "untouchable" and no longer "holy". It is also worth noting that this constitutional disposition does not necessarily conflict with the idea of separation of religion and state: the British Queen also holds the title "Defender of the Faith" and is, according to the (unwritten) constitution, "Supreme head of state in matters ecclesiastical as well as civil".

16.5.4 Saudi Arabia

Saudi Arabia plays a key role in the potential long-term success of the Arab Spring. Unlike Egypt or Tunisia, Saudi Arabia is not home to the mixture of economic, political, and social factors that stirs up attempts among the people to overthrow the government. Rather, the socioeconomic situation, although it may have worsened over recent years, is not really bad or desperate, and the rule of the Sunni house Al-Saud, the religiously legitimized custodian of the Holy cities of Medina and Mecca, is considered firmly established. Nevertheless, political institutions have yet to be developed: the absolute ruling king is also his own prime minister, and political parties and trade unions are forbidden. The Majlis-As-Shura, introduced in 1993, does represent a legislative element, but its members are appointed by the King and it plays only an advisory role. Moreover, although the first local elections in the kingdom, held in 2005 and only on a trial basis, provided for half the seats in the regional and local assemblies, the other half of the members were appointed by

¹³ Hottinger A., "At present a three-quarter democracy", Journal 21, July 3, 2011.

the King, and women were not allowed to vote. Whether the democratic ideas propagated by the Arab Spring movement can seriously jeopardize the rule of the house of Saud is a matter of debate among experts, but in general, it is considered unlikely. Far more irritating to the monarchy than the potential spreading of democracy and civil rights is the possibility that Iran will take advantage of the Arab awakening to extend its influence in the region.

As a first defensive reaction in March 2011, King Abdullah granted an additional sum to the people of \$37 billion in direct assistance in the form of salary increases, unemployment benefits, financial aid for housing, and funding for businesses. In the medium term, however, this financial aid will not be enough. According to the German Institute of Development Policy,¹⁴ since the mid-1990s, a class of urban poor has developed among the Saudi population that represents a new phenomenon in the Gulf principalities. Given that no assistance programs have been able to prevent such a development, wealthy Saudi Arabia will have to change its economic policy to guarantee prosperity and social well-being to all its citizens. Not that there is any imminent need for the kingdom to worry about the finite nature of its resources: Saudi Arabia owns one fourth of the world's known oil deposits, and the officially confirmed 264 billion barrels of oil still lying below the desert guarantee production at today's level for the coming 89 years. Nevertheless, the Saudis have tried for years to put their economy on a broader basis, particularly as regards the petrochemical industry. That is, if the oil is merely extracted in Saudi Arabia and then exported and processed elsewhere, the country loses a large portion of the added value. Hence, great attention has been paid not only to increase output capacity but to expand "downstream" business. Such expansion will give a strong boost to other sectors of the economy and enable the building of more secular schools and universities, which will in turn improve education.

The oil sector, which still remains firmly in the hands of the government, is the country's largest employer: about 40% of its expenses are wage costs. The oil revenues, although first used by the royal family to provide jobs for the country's elite, have since, in the interest of political stability, been used to gradually open up the well-paid public sector to more circles of society. Employment in this public sector, therefore, because it promises high wages and soft working conditions, has become very attractive. The population, however, is growing too fast for the state to continue its scheme of a job-for-everybody. Not only are half the 25 million Saudis under 21, but thousands of Saudis flood yearly into a job market that has become so narrow that it can only offer half a job to every Saudi. As a result, although native Saudis constitute about 35% to the workforce, only 19% have a regular job. Meanwhile, since the 1970s, masses of low wage workers have been called into the country, and today, newly created jobs go mostly to immigrants, either because the positions are less prestigious (construction sector, maintenance of

¹⁴ Markus Loewe, cit. in *NZZ*, March 3, 2011, p. 31.

infrastructure, gastronomy) than the Saudis will accept or because the existing workers are unqualified for the jobs with high potential.

The assistance programs and the national structure of social benefits have not been the only discouragement to modernization; the influence of the Wahab clergy has also contributed to the poor functioning of the modern state. The roots of Saudi Arabia go back to a symbiosis in the eighteenth century between the house of Saud and the religious fanatic Abdul Wahab. In this partnership, the house of Saud claimed primacy in foreign, domestic and security affairs but left the clergy, the descendents of Abdul Wahab, in charge of social policy and religious affairs. This sharing of responsibilities can no longer work in today's globalized world of which Saudi Arabia is an important member. The King must therefore limit the competences of the backward-oriented clergy in the fields of judiciary and education, both of which need to be secularized step by step. This process, however, is a delicate walk on a tightrope. That is, if the house of Saud is to maintain its legitimacy, it must recognize that Islam holds a central place in the identity of most Saudi citizens and must balance this with the pressing need for reform. As a result, a separation between state and religion is unthinkable for Saudi Arabia both today and in the near future.

16.6 Outside Assistance

The West has followed the political turmoil in the Arab world mostly with admiration and goodwill, exhibiting a seeming willingness to support the people of the Arab countries in the pursuit of their goals. Nevertheless, although countries like Switzerland could contribute to the transition in Tunisia and Egypt toward peaceful pluralistic societies and the participation in economic development of erstwhile underprivileged groups, it is hard to determine exactly how this assistance can best be accomplished. On the one hand, civil society must be strengthened to prepare it for important dialog with the military and government, which will involve dealing with a difficult past and creating new political structures and mechanisms to mediate between positions that in this transitional period remain far apart. Switzerland could, however, share its experience with cultural diversity and minorities with any countries in the Arab region that are interested. Given that tolerance and human understanding develop best in prosperous surroundings, it is also of prime importance to offer economic and financial assistance and assist in bringing about social reforms. Likewise, the interests of the younger generations, which account for the majority of the protagonists for change, should be continuously encouraged through such measures as retraining programs for the jobless. Such programs would benefit both university graduates and those with a non-academic background.¹⁵ Nevertheless, all efforts undertaken by the West must

¹⁵ Ibid.

keep in mind that the Arab Spring as a movement originated in the countries themselves and that assistance from outside must be offered with reserve and with sensitivity to possible post-imperialistic defensive reactions.

Chapter 17

Demographic Change in Europe's Muslim Communities: Implications and Challenges

Shada Islam

Abstract Europe is currently home to an estimated 44 million Muslims, with the number expected to increase to more than 58 million by 2030. The rise in the number of European Muslims, due to fertility and immigration, is causing unease across the European Union: EU leaders argue that multiculturalism has failed while Europe's far-right parties are winning votes by propagating anti-Islam and anti-foreigner sentiments. Efforts to ensure a better integration of European Muslims are complicated by Europe's own uncertainty about what it means to be 'European', the struggle between religion and secular beliefs and Europe's unease about its economic future, including fears about the impact of globalization on European jobs. In such an environment, Muslims, if they espouse conservative values and customs in the public space, are viewed as 'foreigners' who can never be truly integrated as fully fledged European citizens. Despite such negatives, however, the picture is not universally gloomy. European Muslims are now more active in demanding basic rights and organizing themselves into pressure groups. Europe needs the talent and abilities of all its citizens and of immigrants to climb out of the current economic downturn. Failure to accept difference and diversity in Europe will foster further fear and unease, sap Europe's vitality, exacerbate social tensions and erode European influence on the global stage. Therefore, European governments, acting at multiple levels, must start reshaping the nature of the debate on multiculturalism and consider new initiatives to ensure better integration of European Muslims.

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17.1 Introduction

Europe is currently home to an estimated 44 million Muslims, with the number expected to increase to more than 58 million by 2030 (PEW Forum on Religion and Public Life 2011). About 11 million live in Kosovo, Bosnia-Herzegovina, Albania and other eastern European countries with long-established Muslim communities; 16 million live in Russia and over 18 million live in Western and Northern Europe (PEW Forum on Religion and Public Life 2011). Of the latter group, a large majority are immigrants from Muslim nations who were either invited to come and work in Europe in the 1960s and 1970s or have made their way to the continent in recent years to look for jobs, seek asylum or join their families. Europe's Muslims, however, are not monolithic: they come from different countries, practice different versions of Islam, interpret religious texts very differently and differ widely in social and economic status.

Because of their long-standing historical, geographic, cultural and economic connections to the Muslim world, European countries (members and non-members of the European Union) are deeply affected by the winds of change blowing across North Africa, the Middle East and many parts of Asia. Most recently, the Arab uprisings, which set in motion a deep political transformation of the region, have had both an immediate and a longer term impact on Europe. For example, Britain and France, joined by other European countries, spearheaded the NATO-led airstrikes on Libya as part of an international drive to protect civilians in the country. As regards the future, the EU has promised millions of Euros in trade and aid benefits to Tunisia and Egypt and, in an overhaul of earlier government-focused policies, has promised to work with civil social movements to encourage democracy in the region. Support for the area, however, has been mixed with fears of increased immigration, which has prompted European governments to toughen frontier controls and implement stricter asylum rules. Such concern has sparked a debate over whether to temporarily suspend the Schengen Agreement (European Commission 2010a), under which 25 European countries have agreed to eliminate all internal border controls. The presence and expected rise in the number of Muslims in Europe, including that through increased immigration from North Africa and the Middle East, is also having a powerful impact on Europe's social, demographic and political landscape. Given that the arc stretching across North Africa to Yemen remains far from stable, the number of immigrants and refugees seeking jobs and/or safe harbour in Europe will undoubtedly grow, an increase that is likely to become an important factor in the formulation of EU foreign policy vis-à-vis the Middle East conflict and the war in Afghanistan and Iraq. The debate on Turkey's membership of the EU has also become part of the conversation on Europe and Islam.

17.1.1 Europe's Discourse on Islam and Muslims

This paper focuses on those European Muslims whose arrival and presence on the continent is largely the result of immigration and has triggered an increasingly fierce and acrimonious debate on European identity, the future of multiculturalism in Europe, the integration of minorities and terrorism and security. This discussion picked up momentum following the September 11, 2001 terrorist attacks on the World Trade Center and the Pentagon and has grown even more intense in the last few years, following the publication by several European newspapers of caricatures of the Prophet Mohammed, the murder of Dutch film maker Theo Van Gogh by a young Dutch Muslim, and suspected terrorist activity in Europe. In addition to an array of anti-terrorist legislation enacted over the last decade and attempts to tackle the suspected radicalisation of young Muslims, Belgium and France have banned the full-faced veil and Swiss voters voted in a referendum in November 2009 to prohibit the construction of new minarets. In Germany, Thilo Sarrazin, a former board member of the Bundesbank, one of the nation's most venerated institutions, caused a furore in 2010 with a best-selling book that portrayed German identity under threat from Muslim immigrants. Over the past year, David Cameron, Angela Merkel and Nicolas Sarkozy – the centre-right leaders of the UK, Germany and France, respectively – have all given speeches proclaiming that multiculturalism in their respective countries has proven a failure, and populist, xenophobic and anti-Islamist parties are now represented in legislatures from Belgium, the Netherlands and Italy to Finland, Sweden and Switzerland.

This chapter looks at the state of the current European debate on European Muslims, including fears that the continent faces a 'demographic time bomb'. In doing so, it reviews Europe's increasing unease about Muslim immigration, the popularity of far-right parties with a simple anti-Muslim agenda and the gradual adoption of such far-right rhetoric by many mainstream politicians and the general public. It also examines the anti-Islam discourse across the EU since 9/11 and the reasons for Europe's public anxiety as regards Muslims and Islam. It studies the factors that impact Europe's Muslim communities and fashion their attitudes towards host societies, key policy responses by EU institutions and Muslim efforts to develop a new narrative of active European citizenship. Most particularly, it points out the 'disconnect' between the general image of European Muslims as marginalised 'outsiders' and the reality of Muslim populations in Europe. Finally, based on all these observations, it outlines a way forward for European policymakers and European Muslims as they search to build a truly diverse and inclusive Europe in which all citizens, regardless of their religion, can live in peace and contribute to the continent's prosperity.

One major irony of the current situation is that despite the unease over immigration and foreigners, low fertility rates and an ageing population mean that Europe needs young foreign workers to fill labour shortages in both the skilled and unskilled sectors of the economy. It also needs immigrant income and tax revenues to prop up its creaking pension and health care systems. In fact, EU member states

are increasingly looking at labour migration as a potentially important means of solving the problem of the EU's ageing population. As a result, EU policies and legislative instruments have been introduced to bring in immigrants with the aim of increasing the competitiveness of the EU's economy, promoting sustainable economic growth and strengthening the knowledge-based society.

17.1.2 High Stakes

The stakes are high for both Europe and European Muslims. Europe's response to the challenge of integrating its Muslim minority will define the continent's international reputation, global credibility and social profile in the coming years. The current picture, however, is not as grim as many would like to paint it. Despite anxieties over the visible presence of Islam and Muslims in the public space, the last 10 years have actually been marked by transition and change in the lives of European Muslims. Hence, the spotlight on European Muslims, although it has caused discomfort and unease, has had a positive effect by helping Muslims and host communities to confront difficult issues of integration and multiple identities that had been neglected and overlooked for decades. At the same time, governments are slowly combining a security-focused approach with a more balanced view that includes an integration agenda and Muslim outreach programmes. Government and business recruitment policies are also being gradually changed to increase the employment of Muslims and minorities. In fact, business leaders are demanding an increase in immigration, including that from Muslim countries, to meet Europe's skills shortage, and in the most recent Lisbon Treaty, the EU adopted a new anti-discrimination directive that strengthens existing rules on combating racism. For their part, European Muslims are becoming significantly more active in demanding equal rights as fully fledged citizens, organizing themselves into pressure groups and emerging as influential politicians, entrepreneurs and cultural icons.

17.1.3 A Fresh Narrative

Despite comments on the failure of multiculturalism in Europe, the continent today is a vibrant mix of people, cultures and religions, and although too seldom spotlighted by politicians or the media, integration and mainstreaming is in fact occurring. Most particularly, there is slow but steady recognition that all Europeans, whatever their religion, ethnic origins and cultural background, share a common space. Nevertheless, as pointed out in a recent report from America's Pew Forum, because the EU countries "possess deep historical, cultural, religious and linguistic traditions [...] injecting hundreds of thousands, and some cases millions, of people who look, speak and act differently into these settings often makes for a difficult social fit" (Michaels 2011). Hence, the major challenge for both European

governments and European Muslims is to hammer out a fresh narrative, one that looks at European Muslims as active and fully fledged citizens rather than as exotic foreigners.

If Europeans are to readily embrace and celebrate diversity, however, much more time and hard work may be needed even though work towards such a goal has already begun. At present, Europe is living through a period of transition, one in which the current, often vitriolic, debates about Islam and Muslims reflect a growing realization that Europe is now a truly diverse continent on which people must learn to live together despite their differences. Most particularly, if it is to compete on the global stage, Europe needs to capitalise on the talents of all its citizens. After the storm, therefore, may come a calm acceptance of diversity.

17.2 European Muslims: 'A demographic time bomb'?

The number of European Muslims is certainly set to grow because of high fertility rates among Muslim women, immigration – both legal and illegal – and a rise in the number of people converting to Islam. Yet, despite vitriolic warnings that this so-called 'demographic time bomb' is going to turn Europe into a mythical 'Eurabia' in which Shariah rules supreme, there is little evidence to validate such claims. In fact, studies conducted so far show that far from fighting to change European societies, the majority of European Muslims are law-abiding citizens who pay their taxes and, according to the Open Society Institute, share the same concerns, needs and experiences as non-Muslims, including the quest for a "better quality of education, improved housing, cleaner streets and [the tackling of] anti-social behaviour and crime". Moreover, despite the populist rhetoric, an overwhelming majority of Muslims in France and Germany describe themselves as loyal to their country and see no contradiction between French/German and Muslim (Nyiri 2007).

Although data on the exact number of European Muslims remains patchy, the demographic data provided by the Pew Forum on Religion and Public Life, reported in Table 17.1, is considered relatively reliable. According to the Pew Research Center's estimations, Muslims will account for 8% of Europe's total population by 2030, up from 4.1% in 1990 and about 6% today. The largest numerical increase in size is expected in **Western Europe**, which includes France, Germany and the Netherlands, a projected 5.1 million rise from 11.3 million in 2010 to 16.4 million in 2030. The Muslim share of Western Europe's total population is expected to increase from 6.0% in 2010 to 8.6% in 2030. The number of Muslims living in **Northern Europe**, which includes the United Kingdom, is expected to increase from 3.8 million in 2010 to 7.5 million in 2030, when Muslims will make up 7.0% of Northern Europe's population, up from 3.8% in 2010. The number of Muslims in **Southern Europe** – which includes Balkan countries like Albania, Bosnia-Herzegovina, Croatia, Kosovo, Montenegro, and the Republic of Macedonia and Serbia, as well as Greece, Italy, Portugal and Spain – is projected to increase by 3.1 million, from 10.7 million in 2010 to 13.8 million in 2030.

Table 17.1 Number of Muslims in selected countries

EUROPE				
Number of Muslims in selected countries				
Countries	Estimated Muslim population 2010	Estimated percentage of population that is Muslim 2010	Projected Muslim population 2030	Projected percentage of population that is Muslim 2030
Austria	475,000	5.7%	799,000	9.3%
Belgium	638,000	6.0	1,149,000	10.2
Denmark	226,000	4.1	317,000	5.6
Finland	42,000	0.8	105,000	1.9
France	4,704,000	7.5	6,860,000	10.3
Germany	4,119,000	5.0	5,545,000	7.1
Greece	527,000	4.7	772,000	6.9
Ireland	43,000	0.9	125,000	2.2
Italy	1,583,000	2.6	3,119,000	5.4
Luxembourg	11,000	2.3	14,000	2.3
Netherlands	914,000	5.5	1,365,000	7.8
Norway	144,000	3.0	359,000	6.5
Portugal	65,000	0.6	65,000	0.6
Spain	1,021,000	2.3	1,859,000	3.7
Sweden	451,000	4.9	993,000	9.9
Switzerland	433,000	5.7	663,000	8.1
United Kingdom	2,869,000	4.6	5,567,000	8.2
Total for these countries	18,267,000	4.5	29,759,000	7.1

Population estimates are rounded to thousands. Percentages are calculated from unrounded numbers. Figures may not add exactly due to rounding. Table shows 17 of the 50 countries and territories in Europe. Pew Research Center's Forum on Religion and Public Life, *The Future of the Global Muslim Population, January 2011*

The largest increase in the number of Muslims in Europe over the next 20 years is expected to occur in the **United Kingdom**, where this number is projected to almost double from 2.9 million in 2010 to 5.6 million in 2030. By 2030, Muslims are expected to make up 8.2% of the U.K.'s population, up from 4.6% in 2010. **France's** Muslim population is expected to climb from 4.7 million in 2010 to 6.9 million in 2030, while **Germany's** is expected to increase from 4.1 to 5.5 million during this same period. Although Italy, Sweden, Spain, Belgium and Austria have smaller numbers of Muslims than the U.K., Germany and France, their Muslim populations are also forecast to grow significantly in the next 20 years, more than doubling in size in Italy and Sweden and likely to increase significantly in Spain, Belgium and Austria.

According to the PEW Forum, one reason for the projected rise in Europe's Muslim population, both in absolute numbers and as a percentage of the population, is that Muslims' **fertility rates** are generally higher than those of European non-Muslims. For example, one analysis of current trends in the 25 European countries for which data are available indicates that Muslim women in Europe today have an average of 2.2 children each, compared with an estimated average of 1.5 children

for non-Muslim women. However, the fertility gap between Muslims and non-Muslims in Europe is expected to narrow in the coming years: by 2025–2030, the average fertility rate for Muslim women in these same countries is expected to drop to 2.0 children per woman, while the average fertility rate for non-Muslim women is projected to increase slightly, to 1.6 children per woman. A major factor in the growth of Europe's Muslim population in recent decades has been the **large influx of immigrants** from South Asia, North Africa, Turkey and other parts of the developing world. As a result, Muslim populations in Europe today are generally more youthful than their non-Muslim counterparts, with those under age 30 comprising about 49% of the Europe's Muslim population in 2010, compared to about 34% of the non-Muslim population. In addition, Europe's Muslim population is projected to remain relatively youthful in the coming two decades, with about 42% expected to be under age 30 in 2030, compared to about 31% of the non-Muslim population.

The major catalyst for this immigration of thousands of Muslims into Europe was, according to Alan Stoddard (2007), an increasing demand for labour in the 1960s and 1970s. In Germany, for example, the large percentage of Turkish Muslims who now live in the country first began arriving in the 1960s in response to domestic labour shortages. Although the original idea was for all these workers to leave the country after fulfilling their work responsibilities, nearly half remained and were eventually joined by their families. This phenomenon is also true of Muslim guest labourers in Sweden, the Netherlands and France, as well as Turkish, Yugoslavian and Albanian guest labourers in Switzerland – all migrated 'temporarily' in the 1960s and 1970s but eventually chose to stay in the host country. Immigrants from Morocco constitute a large portion of the total Muslim population in France, Belgium, the Netherlands, and especially Spain, together with a significant number of immigrants of Algerian descent. Muslims of Turkish origin make up nearly 70% of the total Muslim population of Germany and close to 33% of that of Austria, while the majority of Muslims in the UK are of South Asian descent, and most Muslims in Greece are immigrants from Albania.

Stoddard further points out that because a large majority of European Muslims immigrated to fill low-skilled labour positions, most Muslims tend to be socioeconomically marginalised, a claim supported by the EU Monitoring Centre on Racism and Xenophobia (2004) whose 2003 report puts the employment rate for Pakistanis and Bangladeshis in the UK at only about 2% versus the approximate 6% in the broader population. A similar trend exists in Germany.

17.2.1 Repercussions of the Arab Spring: "Europe is being invaded"

In responding to the Arab Spring, European governments and public opinion have been torn between support for democracy in the region, anxiety over the medium-term impact of the uprisings on regional stability, and fears that upheaval in their

southern neighbourhood will result in an increase in immigration and therefore in the number of Muslims in Europe. In fact, even as Tunisia and Egypt overthrew long-standing dictators, the number of North African immigrants arriving on European shores prompted an internal EU dispute on sharing out the burden of caring for the refugees. Frustrated at the lack of EU action to help deal with those fleeing the violence, Italy, the first port of call for the North African ‘boat people’, took the unusual step of issuing many of the Tunisians temporary residence permits that allow them to go anywhere in the 25-nation Schengen zone. The Italian stance infuriated Germany and France, which, being a former colonial power in Tunisia, is home to many of the relatives, friends and co-workers with whom the refugees hoped to reunite. “Europe is being invaded,” complained Roberto Maroni, Italian Minister of the Interior (Greenblatt 2011).

17.2.2 Rising Hostility: The Norwegian ‘wake-up call’

Even before the Arab revolutions, the rising presence of Islam and Muslims in Europe was generating increased hostility from mainstream society. To some extent, matters came to a head in July 2011 with the massacre of 93 people in a bomb attack and a separate killing spree by Norwegian Anders Behring Breivik, who claimed that he was acting to prevent a Muslim take-over or Islamisation of Europe. This incident triggered a continent-wide reflection on the ‘enabling environment’ for violent extremists being created in Europe by far-right parties and their message of hate against Muslims. In fact, Breivik’s manifesto referred specifically to such parties as the English Defence League, an overtly anti-Muslim fringe group in Britain, and the Dutch Freedom Party, an anti-immigrant party propping up the government in The Hague. Breivik also seems to have been deeply influenced by a small group of American bloggers and writers who have warned for years about Islam’s supposed threat to Western civilization. Hence, although Europe’s far-right wing parties strongly rejected Breivik’s actions, an editorial in the *New York Times* rightly noted “[a] disturbing, and growing, intolerance across Europe for Muslims and other immigrants from Africa, Asia and the Middle East.” It further pointed out that “[i]nflammatory political rhetoric is increasingly tolerated [and] anti-immigrant and anti-Islamic parties are getting stronger notably in northern European countries that have long had liberal immigration policies” (New York Times 2011).

A number of recent surveys have also indicated that a majority of Europeans are worried about the impact of Muslim immigration on their daily lives. For example, the recent Global Views on Immigration (Toameh 2011) survey, conducted in Belgium, Britain, France, Germany, Hungary, Italy, Poland, Spain and Sweden by the London-based Ipsos global research firm, shows that half of all Europeans believe there are too many immigrants in their countries and that immigration is having a negative impact on their lives (Kern 2011). These findings mirror dozens of other recent polls showing that scepticism about Muslim immigration is not limited to a ‘right-wing’ political fringe but rather that mainstream voters across the entire political spectrum are worried about recent developments.

17.2.3 The EU Response

The EU's response to the public concerns has been threefold: First, EU governments have ordered a general halt on legal immigration. Second, since 9/11, they have implemented an array of counter-terrorism measures. Third, in recent years, they have begun focusing on ensuring the integration of Muslims through pro-active outreach programmes and the introduction of tough anti-discrimination legislation. As a result of such policy changes, migrants can now come into Europe only through an employment or student permit for skilled workers, by marriage immigration and family reunification, or through asylum and illegal immigration (Stoddard 2007). EU governments have also introduced a spate of measures to control the bloc's external borders, as well as tougher policing, racial profiling, strict immigration tests and stringent language requirements. Human rights groups, however, have warned that some of these measures are a violation of fundamental rights and that tough governmental measures may be increasing the sense of alienation and militancy among vulnerable Muslim youth.

EU action in the immediate aftermath of 9/11 centred on measures to fight terrorist activity as EU governments scrambled to convince their citizens that they were doing their best to ensure their security. As a result, initiative followed initiative: EU leaders agreed to a European arrest warrant based on a common definition of terrorism and adopted a regulation clamping down on sources of terrorism financing. They also set up joint investigation teams of police and magistrates from across the bloc, established exchange of information on terrorism between member states, built a specialist anti-terrorist team within Europol and established Eurojust, a co-ordination body of magistrates, prosecutors and police officers that became operational in January 2002. The EU also agreed to closer co-operation with the U.S. on extradition, as well as mutual legal assistance, cross-Atlantic interrogations using video conferencing, and joint work on criminal and terrorist investigations. Following the Madrid train explosions in March 2004 and the bombings on the London transport system in July 2005, as fears of 'home grown' terrorists grew in Europe, EU governments enacted tough new legislation to curb the rise in the number of 'home grown' European radical groups by making it easier to interrogate and arrest suspected al-Qaeda operatives and recruits. A special EU counter-terrorism coordinator was appointed in March 2004.

17.2.4 The Global Race for Talent

This focus on security and immigration, however, has meant that Europe's integration agenda has mostly taken a back seat, with EU anti-discrimination policies often lost in the maze of measures to combat radicalisation, especially of young men of Muslim descent. As demography forces politicians to confront the issues of integration, however, this focus is gradually changing, as is particularly visible in the EU's

scramble to meet labour shortages and draw ahead in the increasingly fierce global race for talent. In recent years, EU governments have agreed on some Common Basic Principles on Integration (Council of the European Union 2004), have set up national contact points on integration, have published a *Handbook on Integration* (European Commission 2010b) that identifies best practices in member states, and have begun to publish an annual report on migration and integration. They also declared 2008 to be the Year of Inter-Cultural Dialogue. Not only does the European Commission's Agenda for Integration, adopted in 2010, highlight the need for better integration, but EU Home Affairs Commissioner Cecilia Malmström emphasises the need to "do more" to ensure that newly arrived people have a chance "to learn the language of their new country", secure employment and attend school. The demographic challenges ahead, she suggests, "mean that we will soon be dependent on labour migration in order to sustain our way of living."¹

In fact, a recent Commission study stresses that diversity brought about by migration can be a competitive advantage and a source of dynamism for the European economies, whose workforce is expected to decline by approximately 50 million between 2008 and 2060 (European Commission 2011). For example, in terms of future demand for elderly care, the Commission's 2010 Agenda² for New Skills and Jobs estimates that by 2020, there will be a shortage of about one million professionals in the health sector – and up to two million if ancillary healthcare professions are taken into account. Likewise, a study by the European Migration Network emphasises that EU member states, aware of the need to remain competitive on the international market, have put labour migration higher up on the political agenda and that "[t]he (increasing) global demand for talent will be a common EU challenge" (European Migration Network 2011).

17.3 Living with Diversity

It remains to be asked, however, whether Europeans are ready to accept such social change. According to Tufyal Choudhury of the "At Home in Europe" project,³ which examined Muslim attitudes in seven EU countries, not only Muslims per se but also European policymakers and practitioners will need to adapt to far greater social diversity in the "delivery of education, employment [and] health services". "Integration is working," claimed Choudhury, "[yet] Europe [does not] see that

¹ *More Efficient and Secure Visa System Goes Live*, 11 October 2011, available on the website of Cecilia Malmström at http://ec.europa.eu/commission_2010-2014/malmstrom/news/default_en.htm#20110909

² European Commission, "i2010: A European Information Society for Growth and Employment," *i2010: Information Space Innovation & Investment in R&D Inclusion*. Available at http://ec.europa.eu/education/news/news2675_en.htm

³ Open Society Foundations, At Home in Europe project website, <http://www.soros.org/initiatives/home>

integration takes three generations, and it is roughly where it should be when it comes to generation number two.” He further argued that it is part of a normal pattern for there to be tensions with second generation immigrants as they try to find a balance between their parents’ culture and history and their sense of belonging in the European country of their birth. In fact, across Europe, those arguing for a more intelligent debate on integration are beginning to speak up. In Britain, Baroness Sayeeda Warsi, the first Muslim woman to serve in the British Cabinet, has warned that Islamophobia has “passed the dinner-table test” and is seen by many as normal and uncontroversial. She has therefore pledged to use her position to wage an “ongoing battle against bigotry” (Kirkup 2011).

17.3.1 A Time for Reflection for European Muslims

This is a time of change, debate and reflection among Muslims in Europe: a time to deal with some very difficult and sensitive issues, a time to be self-critical and a time to focus on citizenship and integration rather than on religious identity alone. Recognition of this reality is shifting Muslim attention from the defence of Islam to the uphill struggle to gain more political power, to move up the employment ladder and, in many cases, to gain professional renown; for example, as musicians, actors and artists. As noted by Melissa Ann Parker, European Muslim organizations are now driven by the issues that affect European Muslims within European states – education, discrimination and unemployment – and European Muslims now see themselves as “Europeans [who] must work to improve the conditions in the cities in which they live” (Parker 2008). In addition, they are asserting the importance of working with fellow Europeans to solve common societal problems and, no longer seeing the Muslim community as disengaged from Europe but rather as part of the larger European community, they are developing a Euro-Islamic identity.

This latter point is further emphasised by Tariq Ramadan, professor of Islamic Studies at Oxford University and president of the European Muslim Network, who argued that it is time to “change our way of talking about Islam, our way of creating and building the ‘Other’ [...] and to accept that Islam is a European religion, because we have millions of citizens who are French, British, German *and* Muslim.”⁴ Rather, Ramadan insisted, the discussion should move to “post-integration [because] if we keep on repeating year after year, generation after generation, that ‘they’ need to integrate, we imply that there is a host country, and [Muslims] are immigrants [...] Muslims are not immigrants in Germany. They are German, they are European [...] we have to stop asking: where do you come from and ask: where are we going – together?”

⁴“European Muslims Can Do Better, Says Leading Islamic Scholar”, Deutsche Welle. Available at <http://www.dw-world.de/dw/article/0,,14786939,00.html>

Nevertheless, as long as populists rant against minarets and halal food and focus on a minority that adheres to the tribal customs and traditions of their countries of origin – including, in some shameful cases, honour killings, forced marriages, genital mutilation and polygamy – the reality of European Muslims' lives and their efforts to integrate into the mainstream economic and political life of their country will remain lost in transmission. Yet, in terms of Muslims' economic contribution, not only are the "new European" (immigrant) entrepreneurs actively fostering the revitalization of impoverished urban neighbourhoods, creating jobs and prompting innovation in products and services, but they also account for 10% of overall self-employed businesses in Germany, 11% in France and an impressive 14% in Britain (European Policy Centre [2011](#)).

17.4 The Way Ahead

With the number of European Muslims set to increase as a result of both fertility and immigration, EU countries must hold an urgent, intelligent debate on immigration and integration. Such a discussion requires an end to accusatory interventions, a shift in focus away from marginal issues like minarets and the sartorial choices of Muslim women to real questions of discrimination, and recognition that integration is a two-way street in which adjustment efforts must be made by both minorities and host societies. Hence, although "throwing in the towel" on multiculturalism may help win votes, such statements only risk further alienation of the bloc's Muslims, increase the threat of radicalization among youth and make it more difficult for Europe to attract much-needed global talent to spur its economy.

Europe's struggle to build a society that accommodates Muslims and other minorities, however, is also challenged by uncertainty about what it means to be 'European', suggestions that national identities should be replaced with a single European one, and the struggle between religion and secular beliefs. Europe is also uneasy about its future, its mood soured by the economic slowdown, the euro sovereign debt crisis and public anxieties about the impact of globalization on European jobs. As a result, more than ever before, policymakers and citizens are wary of outsiders, whether immigrants, refugees, Muslims, Chinese or Indian exporters and investors. In such an environment, Muslims, if they espouse conservative values and customs in the public space, are viewed as 'foreigners' who can never be truly integrated as fully fledged European citizens. Such sentiments are then capitalised on by far-right politicians like Geert Wilders of the Netherlands and his, in many ways more colourful and vocal, counterparts in Sweden, Austria and Switzerland to peddle a simple ideology of hate.

Despite such negatives, however, the picture is not universally gloomy. Even though the focus falls invariably on a minority of Muslims who fall prey to radical ideologies or demand the establishment of faith-based schools, permission to wear the burqa or segregation by gender at public pools and hospitals, European Muslims

are now more active in demanding basic rights and organizing themselves into pressure groups. As a result, they are emerging as influential politicians, entrepreneurs and cultural icons. This new generation of European Muslims, energised by developments in their homelands, are focusing on citizenship and integration rather than religious identity alone, a shift in focus that also demands a transformation of mindsets.

17.5 An Agenda for Changing Mindsets

The two most important requirements for meeting the current challenge are that Europeans recognise the concept of multiple identities and that EU governments ensure full implementation of existing anti-discrimination legislation and actively recruit minorities. Therefore, to deal with the present sorry lack of representation of Muslims and other ethnic minorities in national governments, parliaments, and EU institutions, some form of affirmative action (e.g., support for higher education, facilitation of job promotion) is needed that will encourage minorities to become active social participants. Europe must also find the right balance between combating terrorism and ensuring the integration of minorities, and mainstream European political parties must refuse to compromise with populist politicians and bring minorities into the fold as candidates to give them a stronger voice in shaping political debate. European governments may also need to craft a more balanced foreign policy, including that on the Middle East conflict and the wars in Afghanistan and Iraq, and, if Europe is to be taken seriously by its Muslims, they should conduct the argument over Turkey's EU membership in a more rational manner. Business leaders, for their part, must become less timid in pointing out that ageing and skills-deficient Europe needs foreign labour.

Reshaping the nature of the debate on multicultural and European Muslims requires sustained effort on many fronts, as well as action by a myriad of agents on the national, regional and local levels, including government, civil society and public media. It thus presents a need for a new lexicon that refers to 'European Muslims' rather than 'foreigners' and 'immigrants'. The stakes of meeting these challenges are high: failure to accept difference and diversity will foster further fear and unease, sap Europe's vitality, exacerbate social tensions and erode European influence on the global stage. At the same time, Europe needs the drive and talent of all its citizens to work with the newly assertive Arab citizens to the south and become a strong, credible actor in an increasingly competitive world. It will not achieve this end, however, without strong leaders who are willing to take up the challenge of building – rather than denouncing – multicultural Europe.

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Chapter 18

The Demographic Challenge for Economic Policy Makers: Labor Market Developments in a Framework of Sustainable Economic Growth and Financial Sector Development

Daniel M. Hofmann

Abstract In the years to 2020, the MENA region will have to create something on the order of 55–70 million jobs just to keep pace and bring the level of overall unemployment down to a more palatable norm. If the demographic time bomb cannot be defused, the region will continue to be exposed to social tension and political upheaval. This chapter traces some of the reasons for the region’s chronic unemployment and it sketches a reform agenda based on the requirements associated with financial sector development. The chapter presents an insurance perspective, because insurance, by providing mechanisms for risk transfer, expands the production possibility frontier of economies. Insurance, however, does not exist in a vacuum. Consequently, the chapter’s focus is on the prerequisites for creating an institutional environment that fosters macroeconomic stability, which ultimately also lays a basis for financial market stability. A quick glance at the region reveals that most MENA countries fall short of necessary prerequisites on almost all points.

18.1 Introduction

The unrest that began in the Maghreb in early 2011 and resulted in the unceremonious toppling of tyrants from Tunisia to Egypt was – certainly in hindsight – one of the best predicted of political developments. As early as 2008, Noland and Pack argued that “the central economic challenge confronting the Arab world today is

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how to provide employment for the large number of young people entering the labor force” (Noland and Pack 2008). In support of their claim, they cited World Bank estimates that the Arab world would have to create something on the order of 55–70 million jobs over the period to 2020 just to keep pace and bring the level of overall unemployment down to a presumably more palatable global norm. They were quite clear about the consequences of failing to do so: “If progress is insufficiently rapid to address the underlying imperative to create jobs, it is not difficult to envision a region caught in a vicious circle where impoverishment, discontent, militancy, and repression feed upon one another, deterring reform and impeding growth”. This situation, they concluded, presented obvious “risks of internal political violence or the externalization of discontent”.¹

As obvious as these risks might have been, however, the employment problem in the Arab world was and continues to be the symptom of a much deeper crisis: a failure to create an environment conducive to economic growth, employment, and rising standards of living. This failure has many causes, the most pertinent of which are discussed in this chapter, which also presents an agenda for reform based on the practical requirements associated with financial sector development. The focal point of the discussion is the insurance sector (in which the author has worked), which provides a unique perspective on the issue because the transfer of risk through insurance is one of the key factors supporting growth and fostering prosperity. For the purposes of this brief discussion, the Islamic world is narrowed down to the Maghreb, Egypt, and the countries on the Arab peninsula.

18.2 Chronic Unemployment

The region’s unemployment problem has been long in the making. According to one recent analysis (Abdih 2011), the average unemployment rate in Egypt, Jordan, Lebanon, Morocco, Syria, and Tunisia – known as the MENA 6 – has been stuck at about 12% for the past two decades. Such high unemployment has been coupled with low labor force participation: with fewer than half the people in the job market employed, the labor force participation rate in the six MENA countries is lower than in any other region of the world (see Fig. 18.1). Although it is hardly surprising that labor market participation rates (measured as the ratio of employment to working age population) are on average about 10% points higher in the developed economies and the EU than in the MENA countries, it is remarkable fact that labor market participation rates for South East Asia and East Asia are 25% points higher. This notable difference clearly points to the huge potential that a better policy mix could unleash in the MENA region.

¹ Noland and Pack, “Arab Economies”, p. 10.

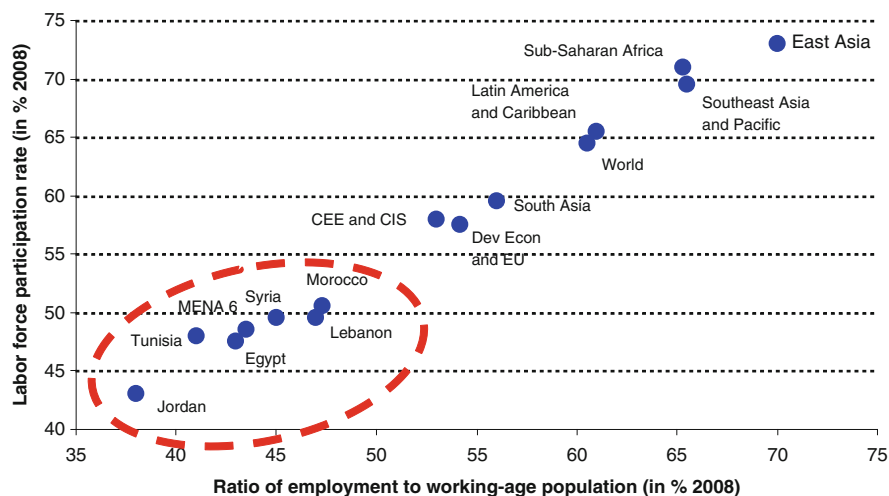


Fig. 18.1 Low labor market participation in the MENA region (Source: IMF based on ILO data and national statistics)

In addition, as so vividly underscored by the protests in the streets of Tunisia and other countries, unemployment is particularly severe among the youth population. According to one IMF analysis, young people in the age group 15–24 account “for 40% or more of the unemployed in Jordan, Lebanon, Morocco, and Tunisia, and nearly 60% in Syria and Egypt”.² On average, in 2008, more than one quarter of this age cohort in the region was unemployed, which again amounts to the worst performance among all regions of the world (see Fig. 18.2).

Unfortunately, there is little hope for the young to escape the unemployment trap by virtue of higher education. Contrary to the experience in most other countries, there is a considerable mismatch between the skills offered by the younger and increasingly better-educated generation and what employers are actually seeking. In Egypt, Jordan, and Tunisia, for example, the unemployment rate among people with university degrees exceeds 15%. If, as the numbers imply, the education system in these countries is not producing graduates with the kind of job skills that ensure gainful employment, it is clearly malfunctioning.

Figures 18.1 and 18.2 also reveal that the countries of the MENA region are comparatively tightly clustered and their performance is uniformly poor. Not only are youth unemployment rates the highest in the world, but labor force participation rates are below the global average and, of course, significantly worse than the participation rates achieved in the dynamic countries of East Asia. Again, then, as previously stated, there is plenty of room for improvement through a better policy mix.

² Ibid.

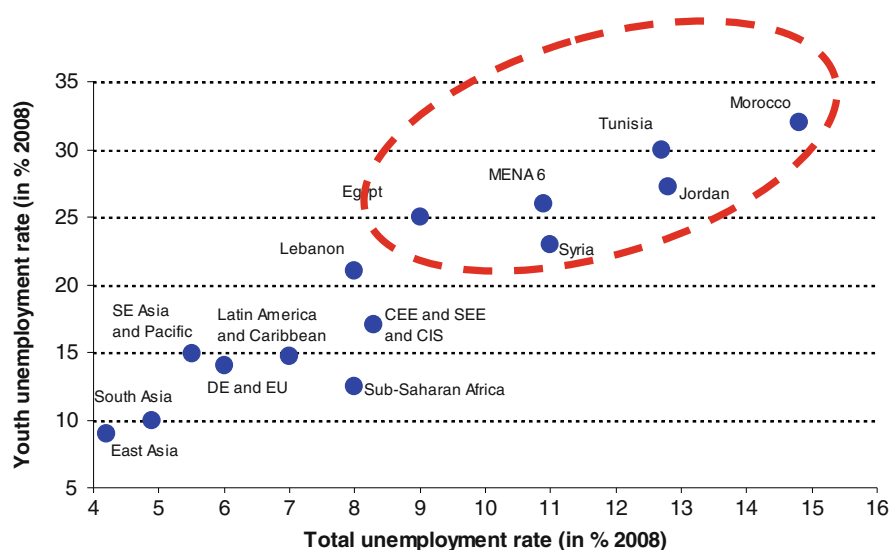


Fig. 18.2 Persistent youth unemployment in the MENA region (Source: IMF based on ILO data and national statistics)

That said, it must also be acknowledged that one reason for this underperformance resides to a degree in demographics that policy measures are unlikely to change in the short term. Over the last 10 years, the MENA region's labor force has grown at an average rate of 2.7% per year,³ the highest growth rate across the world, with the exception of Africa. At the same time, population growth, although expected by demographers to slow down in the coming decade, continues to be higher than in most other world regions, and policymakers throughout the Middle East are facing daunting challenges. If the demographic time bomb cannot be defused, the region will continue to be exposed to social tension and political upheaval. Thus, if policymakers do not tackle fundamental reform by changing how the economy and society interact, they will become stewards of continuing decline and possible social and economic disintegration.

To suggest an insurance-based approach to the sustainable development of Islamic economies, this discussion, rather than presenting an abstract treatise, takes as its starting point the economic and regulatory framework required for building a prospering insurance sector. Such a framework, however, must necessarily be seen in the wider context of financial sector performance and reform, because a developed and fully operational financial system promotes economic efficiency. In fact, both theoretical arguments and empirical research support the claim that financial sector development boosts economic growth:

³ Ibid.

The theoretical argument for linking financial development to growth is that a well-developed financial system performs several critical functions to enhance the efficiency of intermediation by reducing information, transaction, and monitoring costs. A modern financial system promotes investment by identifying and funding good business opportunities; [it] mobilizes savings; monitors the performance of managers; enables the trading, hedging, and diversification of risk; and facilitates the exchange of goods and services. These functions result in a more efficient allocation of resources, a more rapid accumulation of physical and human capital, and faster technological progress, which in turn feed economic growth (Creane et al. 2003).

Likewise, empirical research has shown that countries with higher levels of financial development tend to grow faster, up to 0.7% per annum. At the same time, the initial level of financial development has turned out to be a good predictor for subsequent rates of economic growth and levels of capital accumulation.⁴ Nevertheless, it must be acknowledged that the direction of causality may not always be clear. That is, financial sector development either takes place in anticipation of future business prospects or simply follows and accommodates developments in the wider economy. In the context of this study, however, the direction of causality appears less relevant: it suffices to use financial sector development – or more concretely, the conditions enabling the growth of insurance markets – as a proxy for a framework conducive to promoting sustainable economic growth.

18.3 A Framework for Financial Sector Development

As Peter Bernstein has eloquently argued, the taming of risk is a key driver of modern economies (Bernstein 1998). Mitigating the adverse outcomes of risk through insurance enables risk adverse individuals and entrepreneurs to assume more risk than they would do in the absence of insurance. Where there is risk, on the other hand, there is also reward, so pursuing higher return activities is one way of engaging in activities that foster higher productivity and higher rates of economic growth.

The economic and financial benefits provided by insurance are obviously too numerous to detail here; this text, therefore, mentions only a few for illustrative purposes.⁵ Banks, for example, would be reluctant to lend money to a construction firm building a plant were the project not properly insured. Hence, to the extent that insurance premiums reflect the price of risk, they can act as signals for the allocation of risky activities and their proper mitigation. Likewise, through their role as investors, insurers allocate capital to activities that in turn support economic growth.

⁴ Ibid.

⁵ For more examples, see also the Association of British Insurers, “The Economic Value of General Insurance”. Available at www.abi.org.uk/generalinsurance

It is in this sense that insurance is a key enabler of economic activity. Without agents for the sophisticated pooling and transferring of risk – in other words, without insurance – economic activity would either be diminished or simply cease to exist. Insurers, by providing mechanisms for risk transfer, expand the production possibility frontier of economies, and insurance, together with the development of banking and the joint-stock company, has become one of the three fundamental pillars on which our modern economies are built. These pillars are the foundation for economic growth and job creation, and a means of ensuring the prosperity of future generations.

Insurance, however, does not exist in a vacuum: a number of conditions must be met for insurance to exist and for economic agents to benefit from the rational mitigation of risk through insurance. The conditions required to build and sustain a flourishing insurance sector, the most relevant of which are listed below, correspond to the conditions required to build a prospering economy:

- The insurance company engages in long-term contracts with customers. Specifically, it demands an upfront premium for the promise to make policyholders whole in the occurrence of adverse events. Thus, the enforceability and the sanctity of contracts is an eminent precondition for the existence of insurance, and disputes about the intention and enforceability of contracts can only be settled if the rule of law is also in place.
- The underwriting of risk requires capital, which in mutual insurers, is provided by policyholders. In general, however, insurers are financed through the issuance of equity shares by either privately owned firms or publicly listed companies. Thus, laws regulating issues of corporate governance and shareholder protection are important preconditions for a joint stock company to exist.
- Insurers (and life insurers in particular) manage (1) sizeable investment portfolios that ensure payment of future claims and (2) investments on behalf of their policyholders that result from unit-linked products. These investment activities require access to stable and well-supervised financial markets that provide a broad variety of financial products.
- As institutional investors, insurers also play an important role in the allocation of capital to the real economy. One institutional requirement for proper discharge of this function is the existence of sound and well-regulated capital markets that ensure transaction transparency and investor protection.
- To avoid undue risk concentrations in domestic markets and to gain diversification benefits, primary insurers typically seek access to global reinsurance capacity, the tapping of which benefits the domestic industry. Specifically, it allows for more efficient capital management and ultimately increases the capacity to assume risk. One precondition for such benefits is open markets that enable the import of technical skills and the knowledge embodied in the operation of foreign competitors. Thus, opening the market to foreign direct investment inflows and promoting a stable economic environment for such investments are essential.

This list of five points, although it could easily be extended, suffices to underscore the importance of creating an institutional environment that fosters macroeconomic

stability, which ultimately also lays a basis for financial market stability. Such an environment must build on strong institutions that can provide strong, fair, and transparent supervision of the financial sector. Prudent regulation and supervision should in particular protect, and provide for, creditor and investor rights and the enforcement of contracts. In short, it must be built firmly on the rule of law. Finally, to facilitate knowledge transfer by linking domestic initiatives to the context of global developments, the framework should also allow for cross-border flows of financial services and the inflow of foreign direct investments.

Achieving such a framework is undoubtedly a tall order. Indeed, in light of the recent financial crisis that rattled predominantly Europe and the United States, it might be argued that even economically more advanced countries have fallen short of meeting the criteria for the macroeconomic and financial market stability that fosters an environment conducive to sustainable prosperity. However, failure to meet these criteria does not imply that the criteria are mistaken. On the contrary, there are good reasons to believe that they do indeed describe a sound framework that is well worth policymakers' efforts at implementation.

That said, however, a quick glance at the MENA region clearly reveals that most MENA countries fall short of these criteria on almost all points. The next sections, therefore, briefly review the development stage of insurance in the region relative to other emerging markets, summarize the record with respect to the five criteria outlined above, and then describe the institutional environment.

18.4 The Insurance Sector in the MENA Region

Throughout the world, insurance market development follows the stylized pattern of an S-curve in which the provision of insurance services tends to be low at low stages of economic development. Here, the stages of economic development are represented by income per capita, while the provision of insurance services is approximated by insurance penetration ratios, here defined as the total of insurance premiums in percent of gross domestic product (GDP). At a certain stage of development, the demand for insurance takes off, and penetration ratios grow disproportionately until they begin to level off at higher stages of economic development.

Such a stylized S-curve, based on selected data points, is presented in Fig. 18.3, which, to avoid clutter, primarily shows the data for the MENA countries with that for only a few lower and higher developed countries included for reference. While the horizontal axis plots the logarithm of GDP per capita, the vertical axis shows insurance penetration ratios. A quick glance confirms that in the MENA region, insurance penetration ratios are low relative to the expected levels by income. Two outliers are the United Arab Emirates (UAE) and Kuwait, two very rich countries (as defined by their respective GDP per capita levels) with very low insurance penetration ratios. In general, however, the insurance sector throughout the whole region is underperforming.

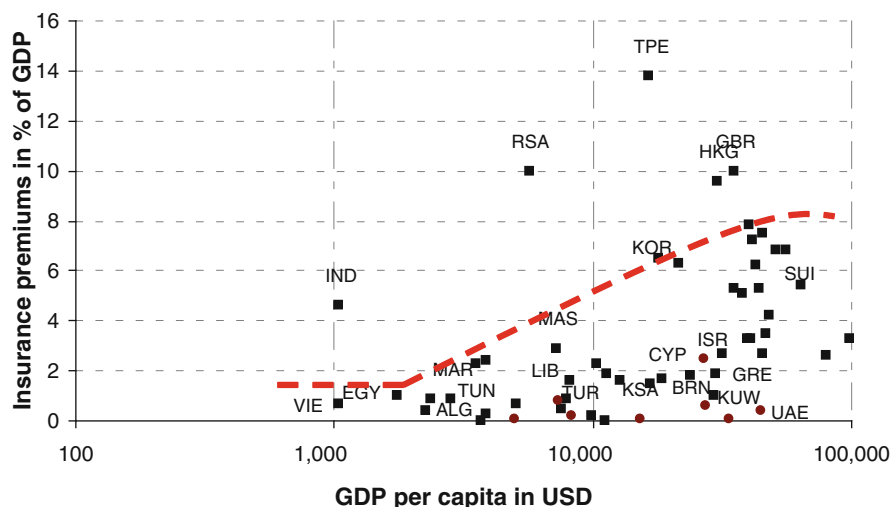


Fig. 18.3 Insurance penetration across the world (Source: Swiss Re, Sigma series)

One notable exception is Morocco, whose insurance penetration is close to a location on the S-curve, indicating an outperformance relative to other countries in the region. According to a recent World Bank study, such outperformance can be explained *inter alia* by capable supervision – specifically, regulation that closely tracks developments in the EU – and a strong private sector, coupled with a preparedness to accept foreign ownership of leading local competitors (Lester 2010). We also note in passing the importance of strong regulation and supervision, which enables private sector development and openness to foreign capital. These are themes whose presence and absence will continue to play an important role in the MENA region’s financial sector development.

In general, the underperformance in the MENA region is both cause for concern and reason for optimism. As regards the former, the underperformance evidenced in Fig. 18.3 points to the presence of what must be a number of stifling factors. At the same time, there is reason to believe that the removal of the many factors constraining financial sector and, more specifically, insurance market development would unleash sizeable growth dynamics. Thus, even though space constraints limit the present discussion to only on a few factors that constrain the insurance sector (and hence, a limited number of policy recommendations), the overriding concern of the paper is much broader financial sector development as a precondition for higher trajectories of sustainable economic growth.

One recent World Bank study identified a large number of factors as responsible for the slow development of the insurance industry in the MENA countries,⁶ including the quality of regulation, the market structure, a lack of development in

⁶ Ibid., p. 26f.

other financial sector segments, social and human development factors, and cultural and religious factors. To these should also be added the dominant presence in a number of countries of state-owned insurers, which tend to crowd out private sector firms. As is obvious, some of the above-mentioned factors are “out of reach of policy makers or can only be changed very gradually, while other factors can be addressed over [a] shorter period of time”.⁷ It should also be kept in mind that many are linked in a complex web of interdependencies, which makes the reform task quite challenging for both structural and political reasons. Nevertheless, although we return to the importance of strong supervision below, for now, we limit our considerations to a couple of other closely related topics.

With respect to market structure, a number of countries display a high degree of fragmentation, which implies that many insurers cannot achieve the critical size necessary for efficient risk pooling. At the same time, there may be fierce competition between firms, leading to underpricing and underprovisioning (i.e., pricing and provisioning that do not adequately reflect the underlying risk). These factors, in turn, create underwriting losses further down the road that may not be recouped through income from investment activities. Such predatory behavior can lead to pronounced insurance cycles, which are of course also known in advanced economies. Such cycles, because they can cause large losses and ultimately insolvency for individual firms, create a formidable challenge for prudential supervision.

Related to this sequence of developments is a widespread lack of professional or technical skills. Tellingly enough, only two MENA countries—Egypt and Lebanon—are represented among the 85 Full and Associate members of the International Actuarial Association.⁸ Not only have similar deficiencies been identified in the areas of accounting and auditing, but insurance is a particularly complex business, one that requires sophisticated skills in the actuarial determination of prices and provisions if they are to adequately reflect risk. As a result, although courses in basic accounting are offered throughout the region, the actual services rendered are, according to the World Bank, limited with respect to the specialized skills required by the insurance sector.

One option for reducing this skills gap would be an enhanced presence of foreign competitors: insurers from advanced economies, particularly, could transfer relevant technical and management skills. Such transfer, however, would require a more decisive opening of the market to foreign direct investment. Yet today, a number of countries in the region still forbid the establishment of branches by overseas companies and/or continue to restrict ownership by non-national carriers.⁹ Such market entry constraints are often justified as measures to protect an infant domestic industry, presumably so that it can grow without being exposed to foreign competition. However, as previously mentioned, a fragmented industry that lacks

⁷ In this context, the World Bank specifically mentions Algeria, Egypt, Libya, and Syria; see also, Lester, *insurance Sector*.

⁸ Ibid.

⁹ Ibid., p. 19.

technical underwriting skills is likely to be more prone to failure than an industry that develops in lock-step with technically more able competitors. Ultimately, of course, foreign skills must be adapted to local practice, and capacity must be developed domestically.

18.5 Institutional Deficits

Financial market development requires an appropriate institutional framework, as well as sound prudential regulation and, in today's environment, sound macroprudential regulation. Supervisory institutions should thus be strong and empowered to secure market transparency and forcefully monitor corporate governance at the firm level. At the same time, independent courts are indispensable to upholding the rule of law, and the real economy needs to be steered on an even keel, which requires a well-developed monetary and fiscal policy tool set. Hence, the following discussion reviews the record for these requirements using highly aggregated data sets that reflect the quality of institutions and the resulting financial market sophistication.

18.5.1 Survey Data

To plot an aggregate index that expresses the quality of institutions in the MENA region, as well as neighboring countries, we culled data from the tables in the *Global Competitiveness Report* (GCR) published annually by the World Economic Forum (WEF). The WEF methodology aggregates 12 pillars of competitiveness into a comprehensive competitiveness index in which each pillar comprises various subindices. Here, the “quality of institutions”, together with the pillars for “infrastructure”, “macroeconomic environment”, and “health and primary education”, constitutes the basic requirement for what the forum calls “factor-driven economies” (World Economic Forum 2010). Other pillars are grouped under “efficiency enhancers” (which include “financial market development”) and “innovation and sophistication factors”. Although hard data, such as gross domestic product and population, do enter the construction of the basic indicators, the bulk of the GCR indices are the product of the WEF's annual executive survey, administered to native and expatriate executives residing in the respective countries. The 21 subindices, listed in Table 18.1, are then aggregated to produce the “quality of institutions” index scores.

The scatter plot in Fig. 18.4, which combines both the score (out of 7) for each country and its rank in the total sample of 133 countries, reveals three distinct clusters for the MENA region. Qatar and the United Arab Emirates lead the cohort in a top-ranked cluster of comparatively high scores that ranks in the top third of the world league table. This cluster primarily comprises mainly the oil and natural gas rich Gulf countries, with the only exceptions of Jordan and, perhaps a little

Table 18.1 Subindices used to compile the “quality of institutions” index number

1. Property rights	9. Burden of government regulation	15. Organized crime
2. Intellectual property protection	10. Efficiency of legal frameworks in settling disputes	16. Reliability of police services
3. Diversion of public funds	11. Efficiency of legal framework in challenging regulations	17. Ethical behavior of firms
4. Public trust of politicians	12. Transparency of government policymaking	18. Strength of auditing and reporting standards
5. Irregular payments and bribes	13. Business cost of terrorism	19. Efficacy of corporate boards
6. Judicial independence	14. Business cost of crime and violence	20. Protection of minority shareholder interests
7. Favoritism in decisions of government officials		21. Strength of investor protection
8. Wastefulness of government spending		

Source: WEF, *The Global Competitiveness Report 2010–2011*

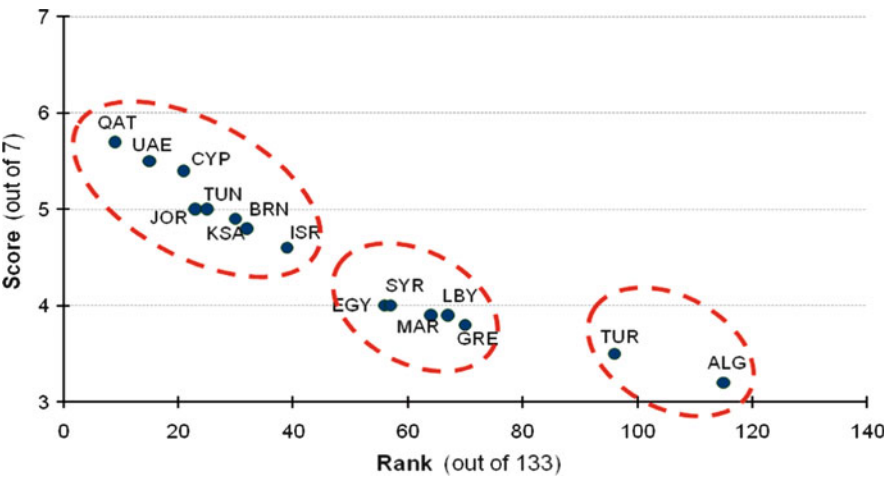


Fig. 18.4 The quality of institutions (Source: WEF; Global Competitiveness Report)

surprisingly, Tunisia. At the other end of the spectrum, Algeria represents the bottom cluster, while Egypt, the region’s most populous country with more than 83 million inhabitants, ranks in the middle.

A similar clustering emerges in Fig. 18.5 with respect to the index for financial market sophistication. Again, the energy producers in the Gulf and Jordan are represented in the top league, but Tunisia is now relegated to the middle, and although Egypt is again ranked in the middle, Algeria now ranks at the bottom. It is

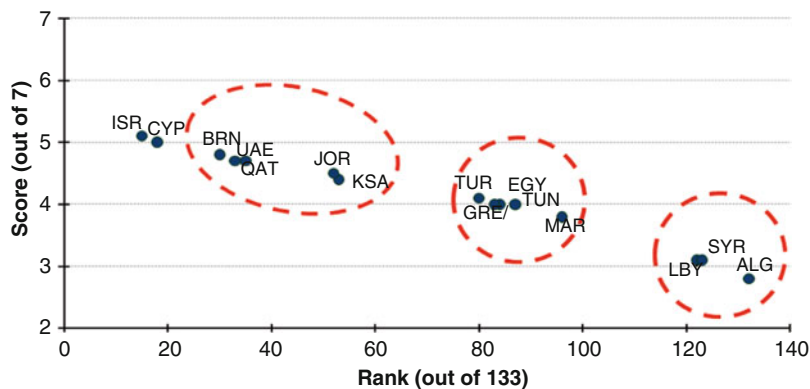


Fig. 18.5 Financial market sophistication (Source: WEF; Global Competitiveness Report)

also worth noting that the index rank for financial sophistication is almost uniformly lower for all countries than the index rank for the quality of institutions. In the middle cluster, for example, the median country rank is centered on 60 with respect to institutional quality but on 95 with respect to financial market development. This sizeable rank shift is observable for all clusters and all countries.

Obviously, institutions are only one factor that implicitly shapes an environment conducive to financial market development, and the WEF's financial market assessment methodology may be biased toward the development stage in more advanced economies. Hence, although factors such as "ease of access to loans", "soundness of banks", and "regulation of securities exchanges" should play an important role in the region, other variables like "venture capital availability" may be less applicable to MENA. That said, it is clear that the region lags in important factors that are relevant for the development of sound and thriving financial markets.

18.5.2 Quantitative Indicators

Despite the inherent weakness of the survey method used to compile the indices in the *Global Competitiveness Report*, the results hold up reasonably well when compared to indices that are constructed predominantly from quantitative data. For instance, in a slightly older study, Susan Creane and her coauthors surveyed 20 MENA countries based on a data set that included over 100 quantitative and qualitative statistics and accounted for six broad themes relevant to financial sector development:¹⁰ (1) development of the monetary sector, including monetary

¹⁰ Creane et al., *Evaluating Financial Sector Development*.

Table 18.2 MENA financial development ranking

Level of financial development		
High	Medium	Low
Bahrain	Algeria	Iran
Jordan	Djibouti	Libya
Kuwait	Egypt	Sudan
Lebanon	Mauritania	Syria
Oman	Morocco	Yemen
Qatar	Pakistan	
Saudi Arabia		
United Arab Emirates		

Source: Creane et al., *Evaluating Financial Sector Development*

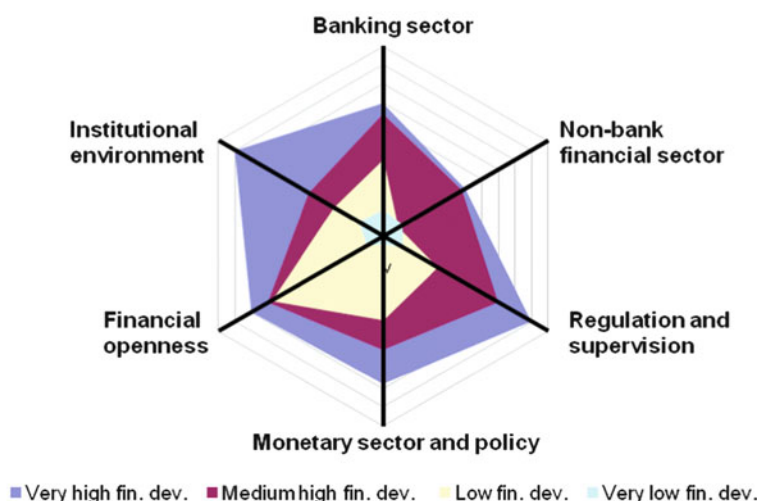


Fig. 18.6 Overall financial development assessment (Source: Creane et al. *Evaluating Sector Development*)

policy; (2) banking sector size, structure, and efficiency; (3) development of the non-bank financial sector; (4) quality of banking regulations and supervision; (5) financial openness; and (6) quality of the institutional environment. For each theme, index values were compiled that measure each country's achievement with respect to that particular area.

The financial development levels ("high", "medium", and "low") for the 20 countries are reported in Table 18.2, which lists the countries alphabetically in each of three columns. A slightly different perspective is offered in Fig. 18.6, which reports the average index numbers for the countries grouped at four different financial development levels, ranging from "very high".

The overall finding reported by Creane and colleagues is that MENA countries show relatively strong levels of achievement in the regulatory and supervisory

sphere, and earn comparatively high marks on financial openness. They identified particularly weak points, however, with respect to the institutional environment and the promotion of non-bank financial sector development. Not only are these findings in line with those from the *Global Competitiveness Report*, but they support the assumption that the MENA as a whole could do more to promote the insurance sector as an industry supportive of economic growth. In a global development context, therefore, it appears that “the MENA region performs better than most developing countries, but ranks far behind the industrialized countries and East Asia”.¹¹

Overall, as Fig. 18.6 shows, Creane and her coauthors report that “countries with higher levels of financial sector development tend to have (1) a greater use of indirect monetary policy instruments; (2) a smaller degree of public ownership of financial institutions; (3) smaller or no monetary financing of the fiscal deficit; (4) stronger prudential regulation and supervision; (5) higher-quality human resources, including management and financial skills; and (6) a stronger legal environment”.¹² As regards the non-bank financial sector (which together with insurance comprises asset markets and pension funds), the “development of these markets is complicated by legal limitations on ownership and the need for a clear and stable legislative framework”.¹³ The institutional environment, in turn, suffers from “poor legal enforcement of contracts and loan recovery” and weak enforcement of property rights, which “hinders commercial activity and investment, and hence growth”.¹⁴

Finally, institutional and financial market sophistication counts for nothing if policymakers cannot ensure a stable macroeconomic environment. High rates of inflation penalize savers and discourage investment, while severe macroeconomic imbalances (as evidenced in high public sector deficits and public sector debt) drive up borrowing costs and increase the risk of foreign exchange market crises. In short, an unstable economy invariably impoverishes households, disrupts corporate planning, and is likely to generate severe market financial market turbulences.

Accordingly, it would be incomplete to assess the MENA countries’ readiness for financial sector development – and ultimately economic growth – purely on institutional factors. Growth, and sustainable growth in particular, also requires competence in the area of macroeconomic policy. To assess such competence, the economics team of Goldman Sachs has, for a number of years, constructed a collection of Growth Environment Scores (GES) that synthesize a large body of research on economic growth and development.¹⁵ This measure, which now covers 170 countries, includes a total of 13 subindices, each evaluated on a scale from

¹¹ Ibid.

¹² Ibid., p. 9.

¹³ Ibid., p. 7.

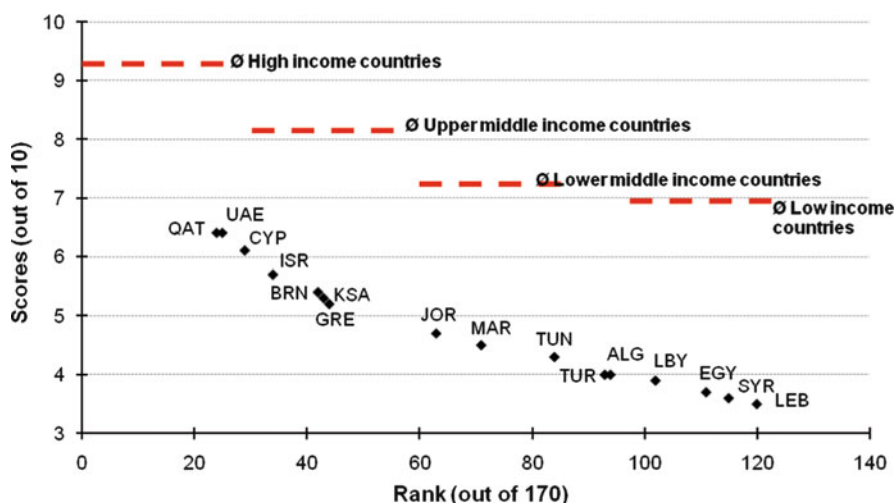
¹⁴ Ibid., p. 8.

¹⁵ The seminal research examined the growth prospects in BRIC countries. See, for example, Goldman Sachs, “How Solid Are the BRICs?”, Global Economics Paper No. 134, December 2005.

Table 18.3 Factors in the growth environment scores

Macroeconomic stability	Human capital
Inflation	Education
Government deficit	Life expectancy
External debt	
Macroeconomic conditions	Political conditions
Investment rates	Political stability
Economic openness	Rule of law
	Corruption
Technological capabilities	
Penetration of PCs	
Phones	
Internet	

Source: Goldman Sachs, “How Solid Are the BRICs?”

**Fig. 18.7** Economic growth scores (Source: Goldman Sachs, “How Solid Are the BRICs?”)

0 (= bad for growth) to 10 (= good for growth). The broad classes of factors and subindices identified in this context are synopsized in Table 18.3. Especially noteworthy, besides the prominent macroeconomic factors, are the proxies for institutional conditions, such as the subindices for the “rule of law” and “corruption”.

As in the previously conducted exercise, we are now in a position to review the total scores achieved and the relative ranking held by the MENA countries. To avoid clutter, Fig. 18.7 shows the now familiar MENA country sample, which is compared to the average of four income categories (indicated by the dotted lines) using the World Bank classification for high income, upper middle income, lower middle income, and low income countries.

The result is quite sobering: the growth scores for all countries in the region are well below the scores for the other countries in the income average group to which

they belong. Even the growth scores of the United Arab Emirates and Qatar, which according to their GDP per capita numbers rank in the high income category and whose financial sector development is advanced, are several points below the average GES level achieved by high income countries. Moreover, the gaps between global achievement levels and actual performance in the region become larger downward through the ranking and so does the concomitant need for policy reforms. Thus, in the eyes of the Goldman Sachs economists, countries like Egypt, Syria, and Lebanon have very dire growth prospects indeed.

18.6 The Need for Change

The below-average performance of the MENA region with respect to financial sector development suggests plenty of room for improvement, a challenge that this paper places in a market framework based on strong institutions and sound macroeconomic policymaking conducive to financial sector development. Nevertheless, in reality, the challenge is more difficult. That is, although it is easy to draw up a list of requirements for policy reforms and structural changes, the situation in the region is actually path dependent and the institutional reform arrangements considered by economists are likely to describe only a small set of the wide range of options available to policymakers. As Dani Rodrik has rightly argued, “there is no ‘one way’ to prosperity” and “countries have the right to protect their own social arrangements, regulations, and institutions” (Rodrik 2011).

Thus, structural reforms must go beyond adherence to sound macroeconomic policies, market opening, and institutional strengthening. Above all, they must be supported by policies that promote economic diversification and move the economy from traditional low-productivity sectors into higher productivity activities that produce internationally traded goods and services. In general, such profound changes cannot be left to market forces alone: they require the will to take on vested interests and an ability to execute well-designed industrial policies. The good news is that the region does not appear to suffer from a lack of entrepreneurs. What has been holding back entrepreneurial initiative, however, is an inadequate business environment and the stifling impact of political authoritarianism.¹⁶ It still remains to be seen, however, whether the recent far-reaching political changes in a number of MENA countries will improve the adverse policy environment that has weighed on them for so many decades.

It should also be noted that assumptions about culturally stifling factors may overemphasize the influence of religious factors. Even a cursory glance at Fig. 18.3 reveals a number of Islamic countries in which the insurance sector has developed well in line with historic experience. In this figure, the already-mentioned outlier

¹⁶ See also, Noland and Pack, “Arab Economies”.

Morocco is joined by another well-performing country with a Muslim majority, Malaysia. Hence, based on a wide range of research, Noland and Pack defend an opposite conclusion. They detect no robust statistical results that would support the stifling impact of Muslim rule and state quite resolutely that “if anything, Islam appears to promote growth” (Noland and Pack 2004). “This result”, they further claim, “is obtained whether one examines fairly large cross-sections of countries over decades, a smaller group of countries for most of the twentieth century, or sub-national jurisdictions within multi-ethnic, multi-religious countries with substantial Muslim populations”.

The conclusion drawn by Noland and Pack is supported by Timur Kuran in his discussion of the long divergence between Muslim societies and Western capitalism (Kuran 2010), which rejects the fundamental inability for Islam and capitalism or market-based economies to coexist. Rather, he argues, the fact that many Islamic countries, particularly in the MENA region, have not embraced capitalism is more likely the result of historic path dependency than an intrinsic inability. One major factor explaining the long divergence, he suggests, is the different development of inheritance laws. In Islamic societies, wealth has traditionally been distributed after death among many heirs, whereas European culture early on adopted the principle of primogeniture. Likewise, in European societies, historical advances in banking (through the introduction of the letter of credit) and accounting (following the invention of double bookkeeping) laid the foundation for the creation of wealth in structured business relationships and the development of the modern corporation.

In slightly different vein, Jan Luiten van Zanden points to the importance of different urban structures in Europe and Islamic countries (van Zanden 2009). Whereas European cities formed clusters or so-called “producer cities” that were linked to transportation networks and could focus strongly on economic performance, Muslim cities tended to develop as “consumer cities” that were seldom linked to efficient modes of transportation and ended up being far less dynamic. His conclusion appears sound: it was not adherence to *sharia* that held back the growth dynamics in the region but rather historic and political choices in combination with social practices and legal institutions. It is these factors that present the true challenge for today’s policymakers. In other words, to put their countries on a trajectory of financial sector development and sustainable job-creating economic growth, they must, like policymakers everywhere, address their historic legacies.

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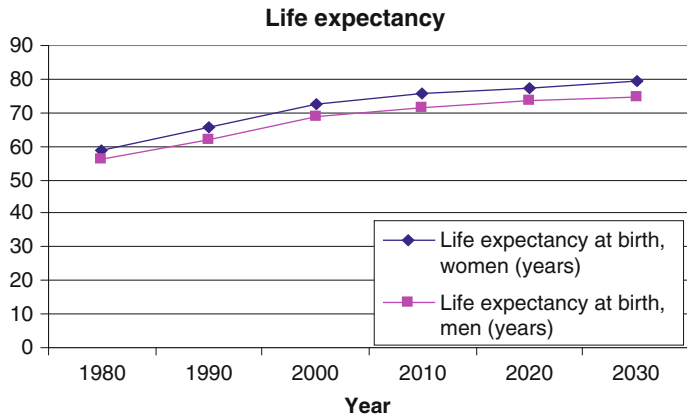
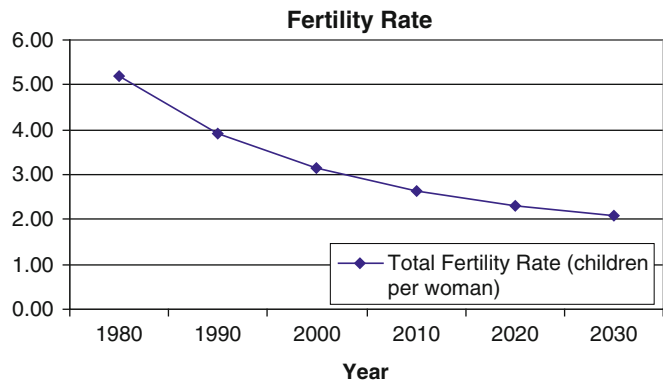
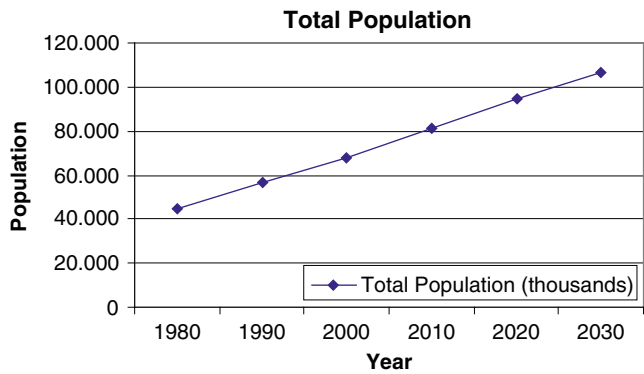
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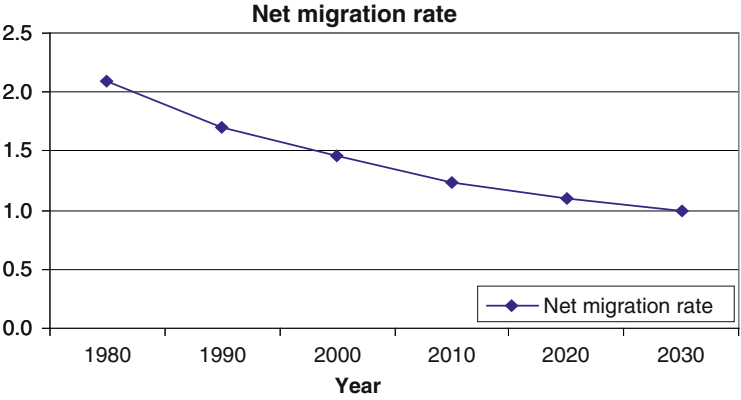
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Statistical Annex: Egypt

	1980	1990	2000	2010	2020	2030
Total population (thousands)	44,952	56,843	67,648	81,121	94,810	106,498
Population age 0–4	7,293	8,507	8,172	9,008	9,065	8,607
Population age 5–9	6,190	7,823	7,908	8,499	9,184	8,773
Population age 10–14	5,600	6,971	8,300	8,074	8,959	9,023
Population age 15–19	4,878	5,855	7,678	7,851	8,452	9,141
Population age 20–24	4,010	4,902	6,308	8,158	7,931	8,819
Population age 25–29	3,154	4,220	4,876	7,347	7,569	8,174
Population age 30–34	2,761	3,705	4,353	5,901	7,891	7,672
Population age 35–39	2,060	3,148	4,101	4,782	7,235	7,460
Population age 40–44	1,959	2,848	3,706	4,437	5,894	7,871
Population age 45–49	1,763	2,061	3,093	4,068	4,786	7,211
Population age 50–54	1,545	1,835	2,719	3,597	4,365	5,802
Population age 55–59	1,239	1,553	1,877	2,890	3,871	4,585
Population age 60–64	949	1,289	1,577	2,429	3,288	4,041
Population age 65–69	696	944	1,238	1,575	2,502	3,420
Population age 70–74	460	621	900	1,186	1,911	2,674
Population age 75–79	254	353	523	766	1,044	1,747
Population age 80–84	106	154	234	396	581	1,018
Population age 85–89	30	45	72	130	224	350
Population age 90–94	5	8	13	25	52	94
Population age 95–99	0	1	1	2	6	13
Population age 100+	0	0	0	0	0	1
Total fertility rate (children per woman)	5.20	3.90	3.15	2.64	2.32	2.10
Life expectancy at birth, women (years)	59	66	72	76	78	79
Life expectancy at birth, men (years)	56	62	69	72	73	75
Net migration rate	2.1	1.7	1.5	1.2	1.1	1.0
Primary education (years)	6	5	5	6	–	–
Secondary education (years)	6	6	6	6	–	–

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm> and United Nations, Department of Economic and Social Affairs, Population Division (2011). World Population Prospects: The 2010 Revision, CD-ROM Edition.





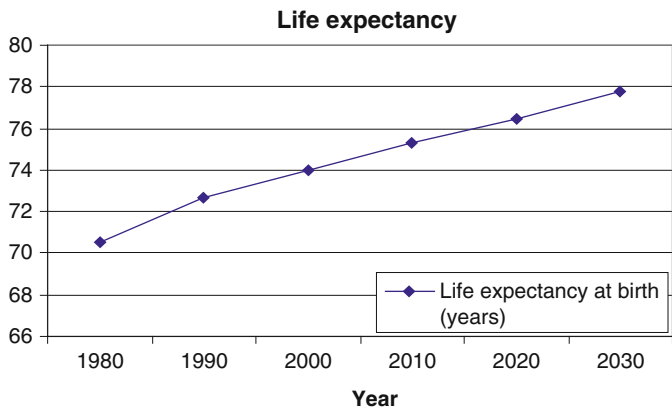
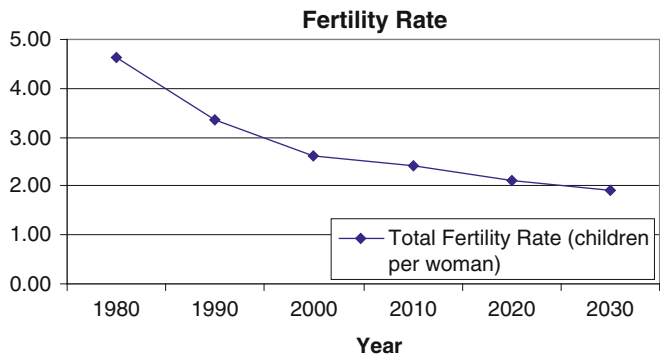
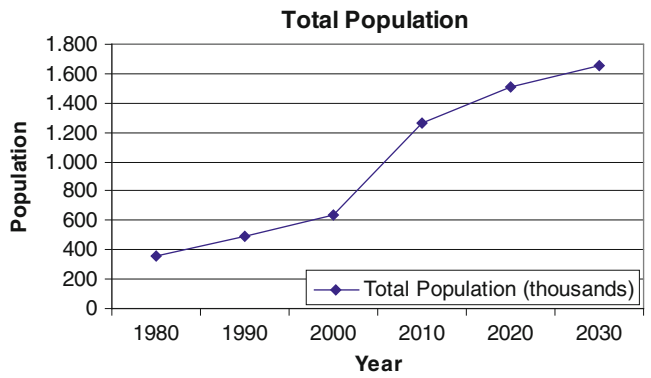
Statistical Annex: Gulf States

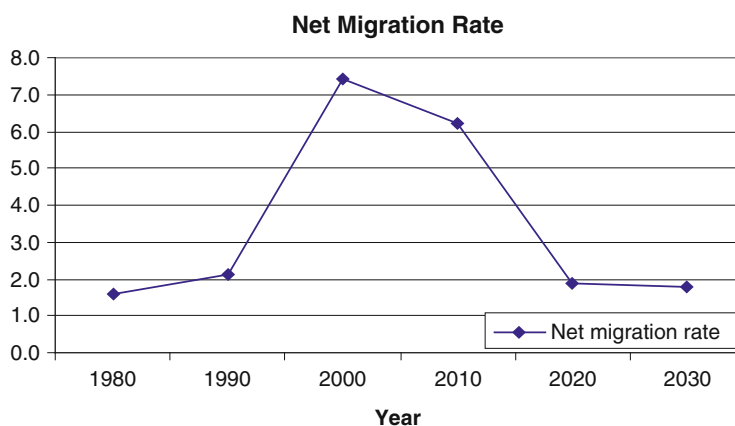
Bahrain

	1980	1990	2000	2010	2020	2030
Total population (thousands)	357	493	637	1,262	1,508	1,653
Population age 0–4	49	65	60	93	105	88
Population age 5–9	39	53	61	79	117	93
Population age 10–14	35	43	58	81	96	104
Population age 15–19	35	37	49	68	80	117
Population age 20–24	44	44	58	120	84	99
Population age 25–29	43	58	68	185	83	93
Population age 30–34	30	61	71	168	136	101
Population age 35–39	21	47	65	133	196	93
Population age 40–44	17	27	54	111	172	135
Population age 45–49	13	17	37	81	134	189
Population age 50–54	10	13	20	64	110	165
Population age 55–59	8	9	12	36	78	127
Population age 60–64	6	8	9	17	60	101
Population age 65–69	3	5	6	10	32	69
Population age 70–74	2	3	5	8	13	48
Population age 75–79	1	2	2	4	7	21
Population age 80–84	1	1	1	3	4	7
Population age 85–89	0	0	1	1	1	2
Population age 90–94	0	0	0	0	0	1
Population age 95–99	0	0	0	0	0	0
Population age 100+	0	0	0	0	0	0
Total fertility rate (children per woman)	4.63	3.35	2.62	2.43	2.13	1.92
Life expectancy at birth (years)	71	73	74	75	77	78
Net migration rate	1.6	2.1	7.4	6.2	1.9	1.8
Primary education (years) ^a	6	6	6	6	–	–
Secondary education (years)	6	6	6	6	–	–

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>

^aPrimary and secondary education is for all countries year 2009, since 2010 was not available

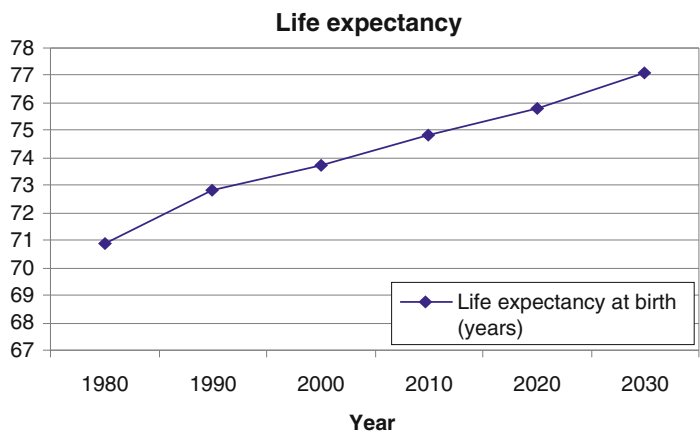
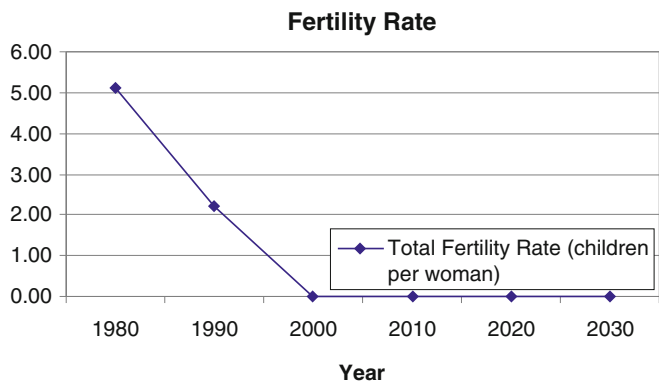
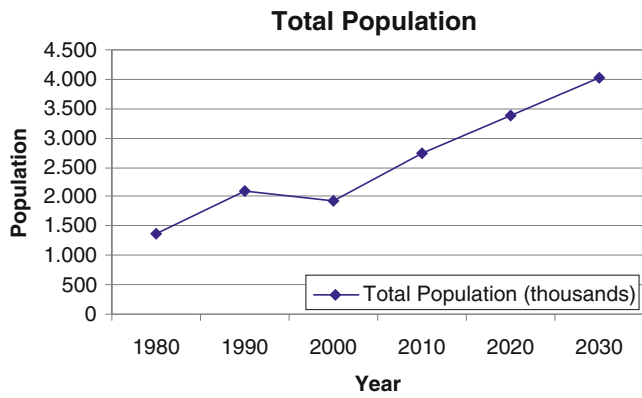


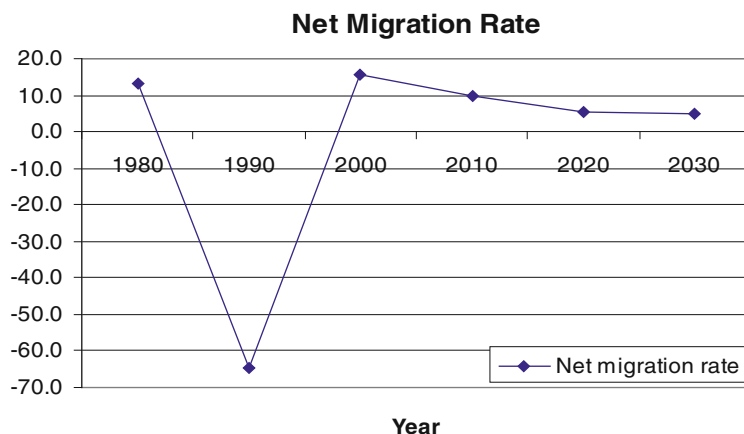


Kuwait

	1980	1990	2000	2010	2020	2030
Total population (thousands)	1,378	2,089	1,942	2,737	3,393	4,012
Population age 0–4	214	251	184	281	256	282
Population age 5–9	183	266	175	251	255	265
Population age 10–14	154	227	158	198	286	261
Population age 15–19	117	214	124	183	257	260
Population age 20–24	129	177	175	240	220	307
Population age 25–29	142	173	236	340	254	316
Population age 30–34	118	191	240	322	358	308
Population age 35–39	102	172	189	282	430	321
Population age 40–44	78	134	164	231	332	371
Population age 45–49	49	112	93	136	248	406
Population age 50–54	38	71	75	111	197	304
Population age 55–59	18	42	39	49	112	224
Population age 60–64	13	27	30	44	91	176
Population age 65–69	8	16	37	15	38	95
Population age 70–74	5	7	13	25	33	71
Population age 75–79	6	4	7	22	9	25
Population age 80–84	3	4	2	5	11	16
Population age 85–89	1	1	1	2	5	3
Population age 90–94	0	0	0	0	1	1
Population age 95–99	0	0	0	0	0	0
Population age 100+	0	0	0	0	0	0
Total fertility rate (children per woman)	5.10	2.20	0.00	0.00	0.00	0.00
Life expectancy at birth (years)	71	73	74	75	76	77
Net migration rate	13.2	–64.8	15.4	9.7	5.6	4.8
Primary education (years)	4	4	4	5	–	–
Secondary education (years)	8	8	8	7	–	–

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>

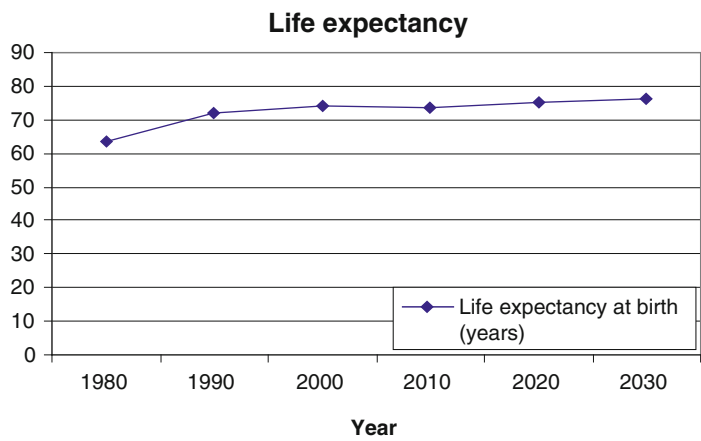
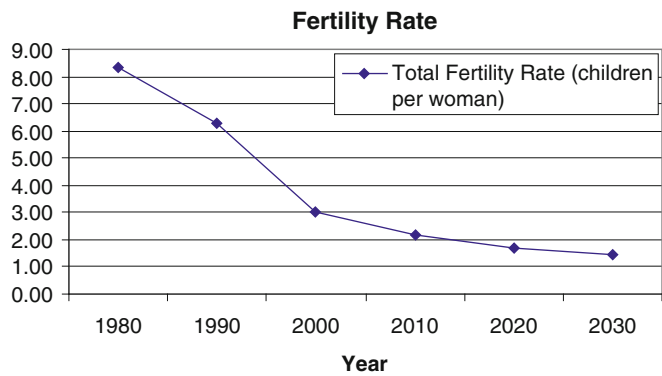
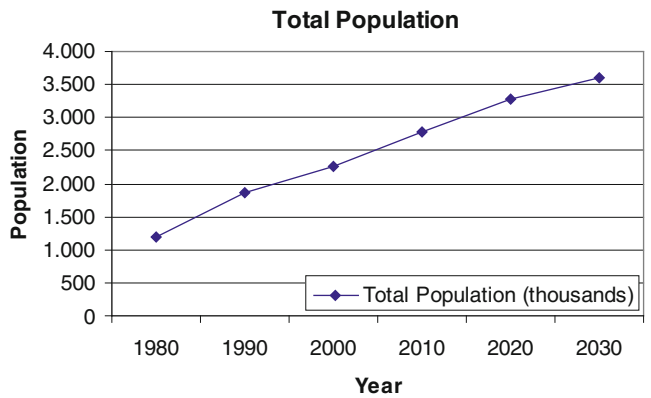


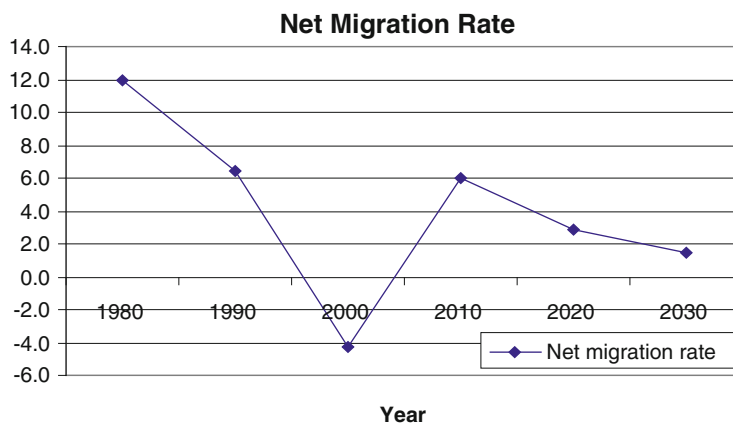


Oman

	1980	1990	2000	2010	2020	2030
Total population (thousands)	1,181	1,867	2,264	2,785	3,289	3,604
Population age 0–4	239	336	268	282	232	192
Population age 5–9	168	289	279	247	265	210
Population age 10–14	132	227	285	227	318	232
Population age 15–19	110	157	254	268	263	268
Population age 20–24	97	142	246	343	204	325
Population age 25–29	95	141	211	394	190	278
Population age 30–34	92	138	191	291	247	220
Population age 35–39	70	126	153	207	348	203
Population age 40–44	50	98	111	164	312	255
Population age 45–49	36	70	83	104	266	349
Population age 50–54	26	47	52	93	227	307
Population age 55–59	20	32	44	49	153	255
Population age 60–64	16	22	31	44	122	210
Population age 65–69	12	15	22	23	63	134
Population age 70–74	9	12	15	21	44	96
Population age 75–79	5	8	9	13	20	41
Population age 80–84	3	4	6	9	11	21
Population age 85–89	1	2	3	5	3	6
Population age 90–94	0	1	1	1	1	2
Population age 95–99	0	0	0	0	0	0
Population age 100+	0	0	0	0	0	0
Total fertility rate (children per woman)	8.32	6.27	3.01	2.15	1.71	1.47
Life expectancy at birth (years)	63	72	74	73	75	77
Net migration rate	12.0	6.4	–4.3	6.0	2.9	1.5
Primary education (years)	6	6	6	6	–	–
Secondary education (years)	6	6	6	6	–	–

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>

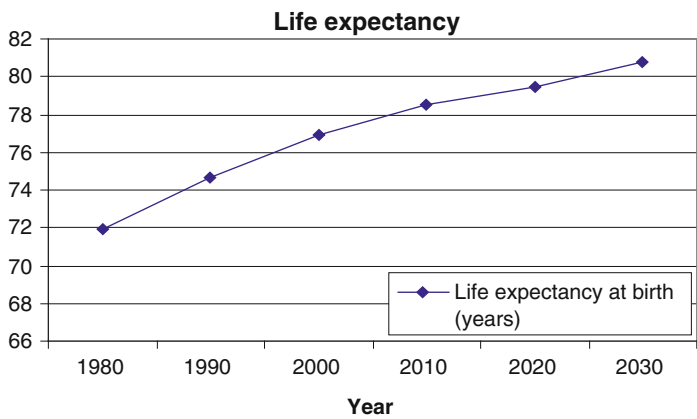
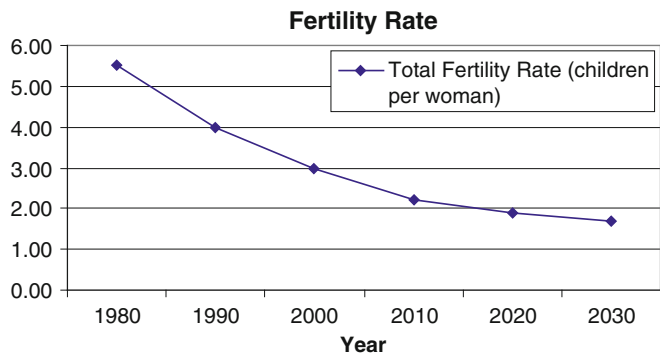
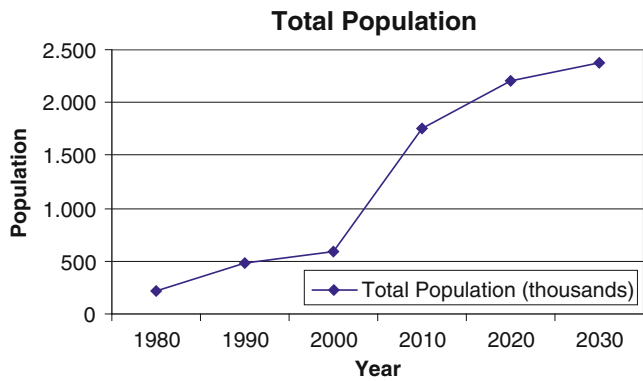


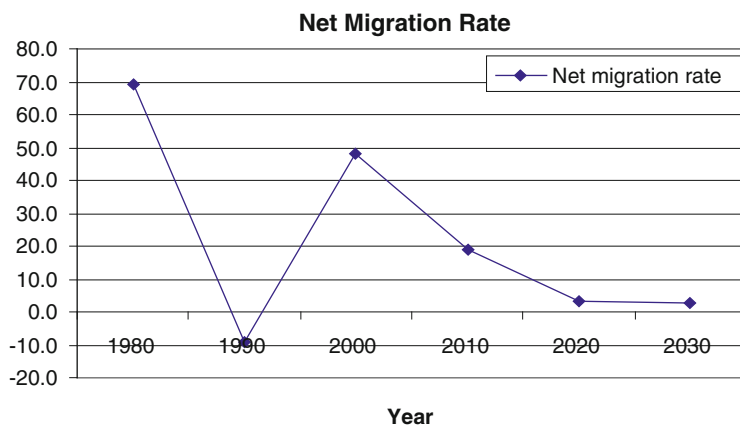


Qatar

	1980	1990	2000	2010	2020	2030
Total population (thousands)	220	474	591	1,760	2,199	2,369
Population age 0–4	33	52	52	91	95	77
Population age 5–9	23	48	53	79	116	84
Population age 10–14	18	34	49	68	107	103
Population age 15–19	19	29	45	69	134	135
Population age 20–24	26	36	39	187	191	163
Population age 25–29	28	50	53	295	221	220
Population age 30–34	23	64	66	279	286	258
Population age 35–39	17	60	70	249	318	233
Population age 40–44	12	41	64	179	254	252
Population age 45–49	8	25	44	118	204	268
Population age 50–54	5	16	25	75	131	206
Population age 55–59	3	9	13	39	74	164
Population age 60–64	2	5	8	14	39	104
Population age 65–69	1	3	5	7	16	57
Population age 70–74	1	1	3	8	5	29
Population age 75–79	1	1	1	2	3	10
Population age 80–84	0	0	1	1	4	3
Population age 85–89	0	0	0	0	1	2
Population age 90–94	0	0	0	0	0	1
Population age 95–99	0	0	0	0	0	0
Population age 100+	0	0	0	0	0	0
Total fertility rate (children per woman)	5.50	4.00	3.00	2.20	1.90	1.70
Life expectancy at birth (years)	72	75	77	79	80	81
Net migration rate	69.2	–9.0	48.3	18.8	3.1	2.9
Primary education (years)	6	6	6	6	–	–
Secondary education (years)	6	6	6	6	–	–

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>

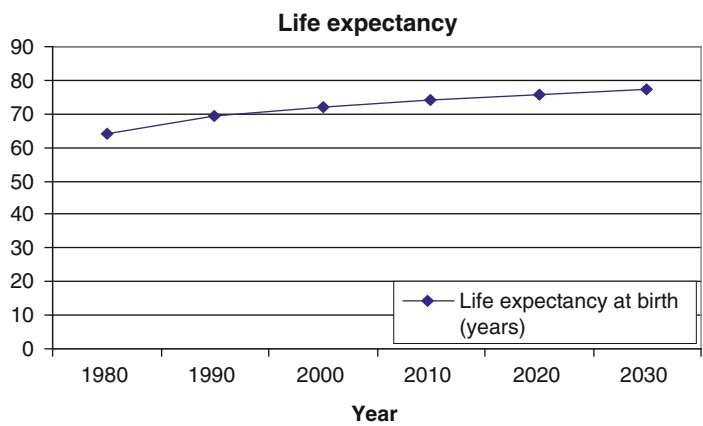
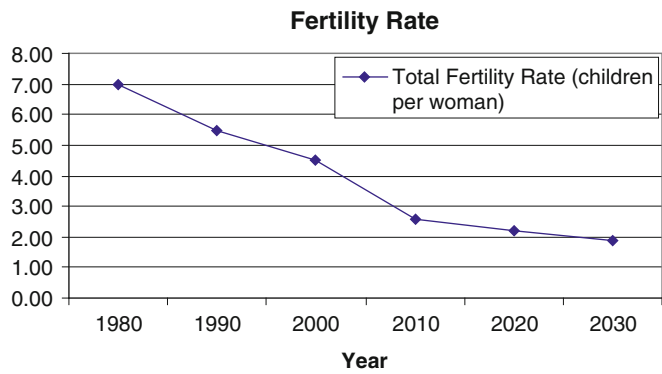
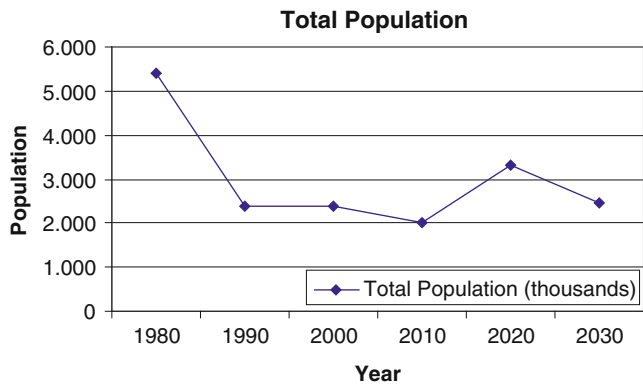


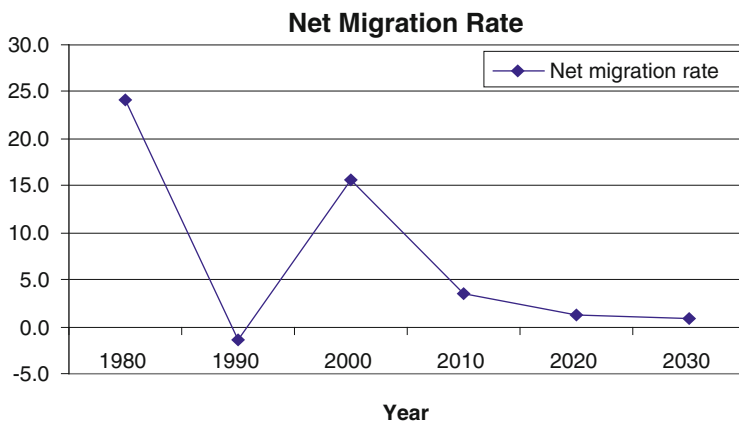


Saudi Arabia

	1980	1990	2000	2010	2020	2030
Total population (thousands)	5,417	2,387	2,401	2,005	3,327	2,450
Population age 0–4	1,824	2,713	2,801	3,145	3,131	2,822
Population age 5–9	1,454	2,422	2,604	2,749	3,007	3,000
Population age 10–14	1,108	1,759	2,341	2,436	3,075	3,093
Population age 15–19	918	1,342	1,959	2,495	2,630	2,946
Population age 20–24	825	1,545	1,800	2,452	2,384	3,041
Population age 25–29	795	1,600	2,005	2,453	2,987	2,865
Population age 30–34	695	1,355	1,727	2,844	3,517	2,922
Population age 35–39	533	1,016	1,345	2,548	3,248	3,398
Population age 40–44	418	631	1,061	1,849	2,842	3,516
Population age 45–49	331	526	694	1,371	2,071	2,982
Population age 50–54	260	324	455	1,100	1,314	2,519
Population age 55–59	203	280	355	780	946	1,790
Population age 60–64	153	200	222	414	871	1,138
Population age 65–69	113	142	300	344	713	853
Population age 70–74	80	100	153	146	388	745
Population age 75–79	50	84	107	159	260	521
Population age 80–84	27	78	65	92	79	217
Population age 85–89	11	16	34	59	51	95
Population age 90–94	4	5	15	9	15	15
Population age 95–99	1	1	1	2	4	4
Population age 100+	0	0	0	0	0	0
Total fertility rate (children per woman)	7.00	5.50	4.50	2.60	2.20	1.90
Life expectancy at birth (years)	64	70	72	74	76	77
Net migration rate	24.2	–1.4	15.7	3.6	1.3	0.9
Primary education (years)	–	–	–	–	–	–
Secondary education (years)	–	–	–	–	–	–

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>

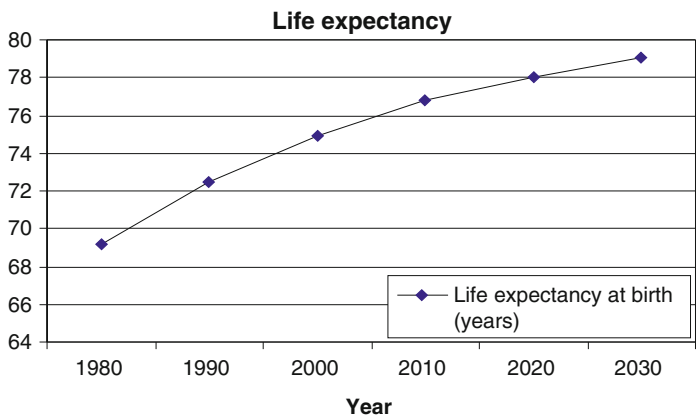
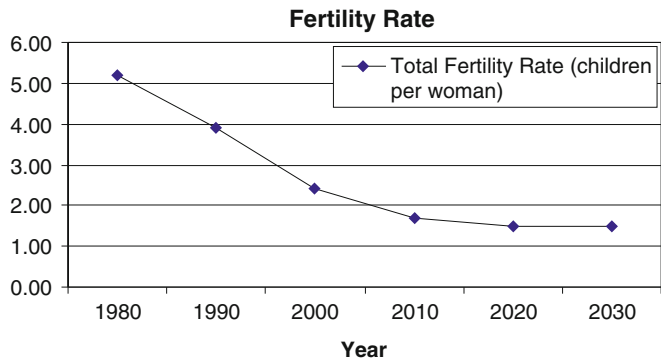
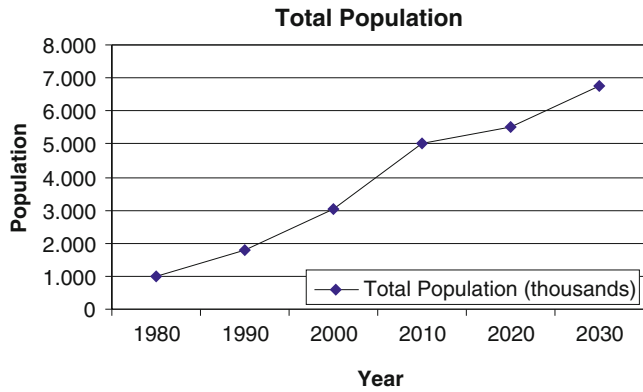


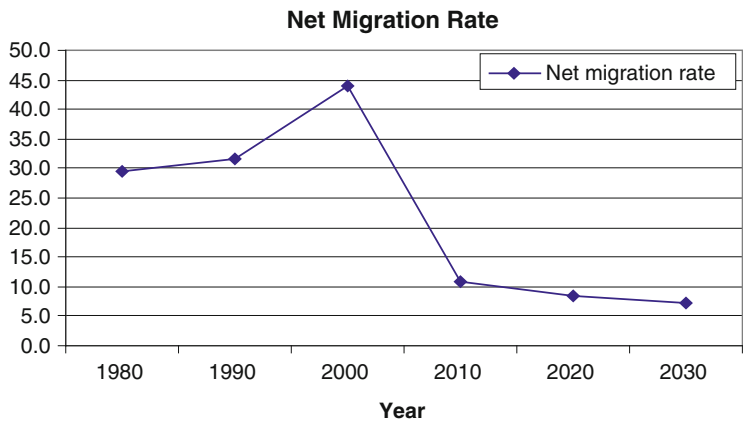


United Arab Emirates

	1980	1990	2000	2010	2020	2030
Total population (thousands)	1,017	1,808	3,032	5,043	5,517	6,754
Population age 0–4	132	226	262	421	450	397
Population age 5–9	97	191	271	411	502	431
Population age 10–14	58	145	244	448	455	486
Population age 15–19	58	134	198	429	448	544
Population age 20–24	127	151	287	782	551	548
Population age 25–29	180	184	410	1,240	651	625
Population age 30–34	136	236	401	1,231	1,003	729
Population age 35–39	84	208	361	967	1,365	764
Population age 40–44	60	140	270	667	1,290	1,065
Population age 45–49	33	90	154	435	980	1,386
Population age 50–54	20	46	87	272	658	1,283
Population age 55–59	12	25	39	131	418	955
Population age 60–64	6	12	19	47	244	612
Population age 65–69	7	9	14	13	108	363
Population age 70–74	3	4	7	9	36	197
Population age 75–79	2	4	4	5	8	78
Population age 80–84	1	1	2	3	5	21
Population age 85–89	1	2	2	2	2	3
Population age 90–94	0	0	0	1	1	1
Population age 95–99	0	0	0	0	0	0
Population age 100+	0	0	0	0	0	0
Total fertility rate (children per woman)	5.20	3.90	2.40	1.70	1.50	1.50
Life expectancy at birth (years)	69	73	75	77	78	79
Net migration rate	29.5	31.5	43.9	10.9	8.3	7.3
Primary education (years)	6	6	6	5	–	–
Secondary education (years)	6	6	6	7	–	–

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>



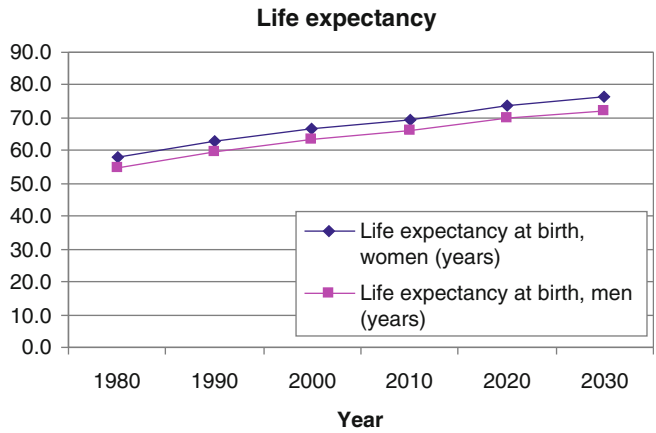
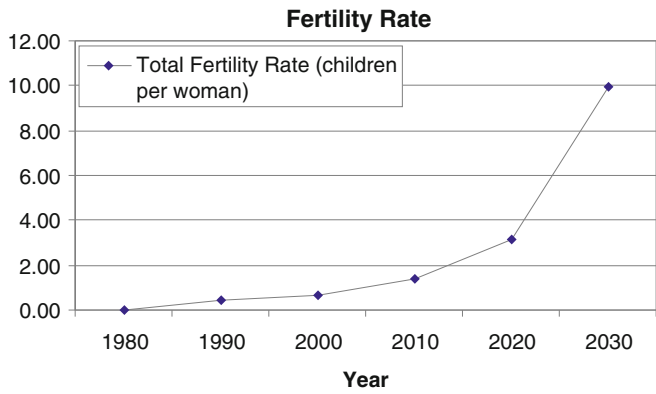
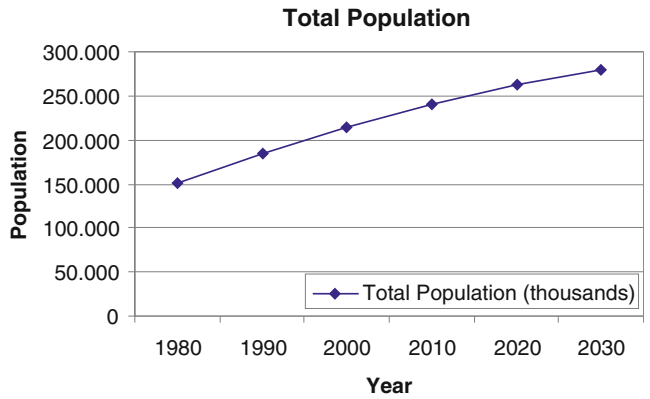


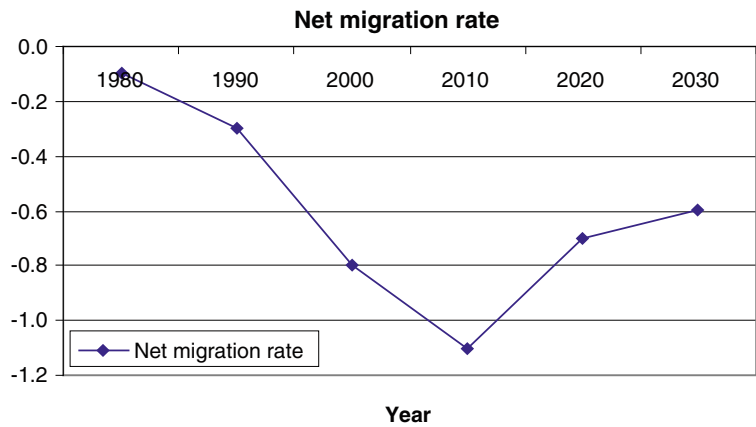
Statistical Annex: Indonesia

	1980	1990	2000	2010	2020	2030
Total population (thousands)	150,820	184,346	213,395	239,871	262,569	279,659
Population age 0–4	22,488	22,625	21,526	21,579	19,717	18,074
Population age 5–9	20,664	22,818	21,904	22,077	20,591	18,702
Population age 10–14	18,829	21,767	22,151	21,197	21,329	19,523
Population age 15–19	16,462	20,294	22,483	21,599	21,851	20,410
Population age 20–24	13,934	18,354	21,166	21,552	20,805	21,001
Population age 25–29	10,838	15,902	19,494	21,589	20,977	21,336
Population age 30–34	8,525	13,384	17,603	20,255	20,820	20,218
Population age 35–39	8,018	10,341	15,228	18,699	20,888	20,416
Population age 40–44	7,401	8,046	12,730	16,860	19,608	20,282
Population age 45–49	6,300	7,450	9,690	14,422	17,977	20,240
Population age 50–54	5,132	6,711	7,363	11,789	15,948	18,758
Population age 55–59	3,864	5,498	6,584	8,667	13,290	16,850
Population age 60–64	2,987	4,225	5,624	6,266	10,443	14,494
Population age 65–69	2,375	2,911	4,249	5,206	7,227	11,510
Population age 70–74	1,609	1,958	2,866	3,944	4,746	8,341
Population age 75–79	866	1,244	1,599	2,450	3,362	5,037
Population age 80–84	527	820	1,135	1,718	2,988	4,469
Population age 85–89	–	592	770	1,204	1,958	2,648
Population age 90–94	–	186	290	404	791	1,294
Population age 95–99	–	37	66	94	205	430
Population age 100+	–	5	8	15	32	87
Total fertility rate ^a (children per woman)	–	0	1	1	3	10
Life expectancy at birth, women (years)	58.0	62.8	66.5	69.4	73.6	76.3
Life expectancy at birth, men (years)	54.7	59.5	63.3	66.3	69.8	72.2
Net migration rate	–0.1	–0.3	–0.8	–1.1	–0.7	–0.6
Primary education (years)	6	6	6	6	–	–
Secondary education (years)	–	6	6	–	–	–

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>

^aTotal fertility rate, Life expectancy at birth and net migration rate are in 5 year steps from 1975–1980, 1985–1990, 1995–2000, 2005–2010, 2015–2020, 2025–2030



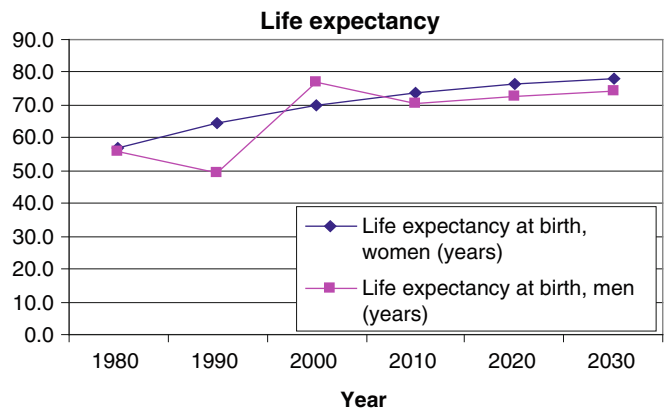
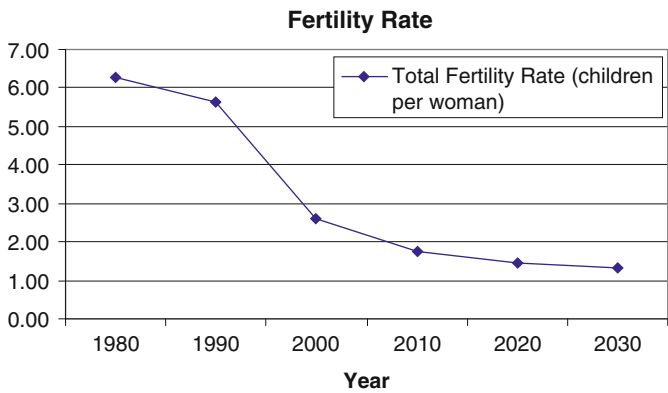
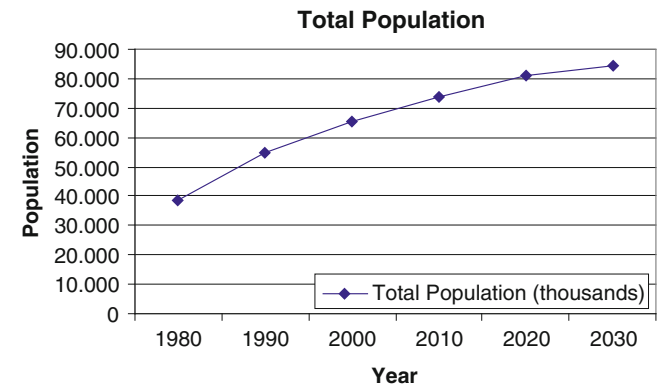


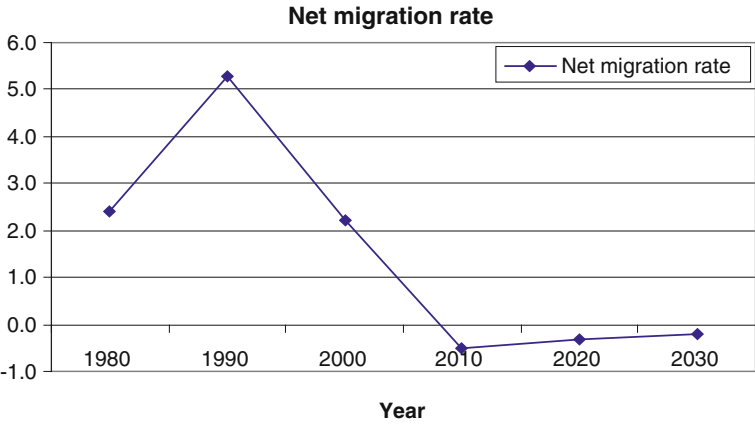
Statistical Annex: Iran

	1980	1990	2000	2010	2020	2030
Total population (thousands)	38,577	54,871	65,342	73,974	81,045	84,439
Population age 0–4	6,744	9,190	6,335	6,149	5,263	3,880
Population age 5–9	5,289	8,751	7,588	5,357	5,927	4,398
Population age 10–14	4,660	7,135	8,938	5,466	6,078	5,231
Population age 15–19	4,119	5,669	8,657	7,146	5,315	5,898
Population age 20–24	3,529	4,583	6,894	9,107	5,390	6,017
Population age 25–29	2,897	3,874	5,369	8,899	7,011	5,227
Population age 30–34	2,095	3,317	4,412	6,754	8,946	5,295
Population age 35–39	1,635	2,765	3,751	5,203	8,754	6,903
Population age 40–44	1,604	2,047	3,196	4,607	6,632	8,810
Population age 45–49	1,587	1,589	2,635	3,966	5,080	8,587
Population age 50–54	1,375	1,492	1,901	3,262	4,448	6,443
Population age 55–59	1,167	1,416	1,437	2,536	3,763	4,859
Population age 60–64	714	1,164	1,311	1,654	3,021	4,161
Population age 65–69	494	936	1,168	1,229	2,240	3,374
Population age 70–74	346	503	853	1,066	1,332	2,490
Population age 75–79	199	263	573	842	852	1,610
Population age 80–84	86	128	231	471	580	767
Population age 85–89	28	41	75	211	307	337
Population age 90–94	6	7	17	45	90	124
Population age 95–99	0	1	2	4	15	25
Population age 100+	0	0	0	0	1	2
Total fertility rate ^a (children per woman)	6.27	5.62	2.62	1.77	1.45	1.34
Life expectancy at birth, women (years)	56.8	64.4	69.7	73.9	76.4	78.2
Life expectancy at birth, men (years)	55.9	49.5	76.9	70.3	72.5	74.2
Net migration rate	2.4	5.3	2.2	–0.5	–0.3	–0.2
Primary education (years)	5	5	5	5	–	–
Secondary education (years)	7	7	7	7	–	–

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>

^aTotal fertility rate, Life expectancy at birth and net migration rate are in 5 year steps from 1975–1980, 1985–1990, 1995–2000, 2005–2010, 2015–2020, 2025–2030



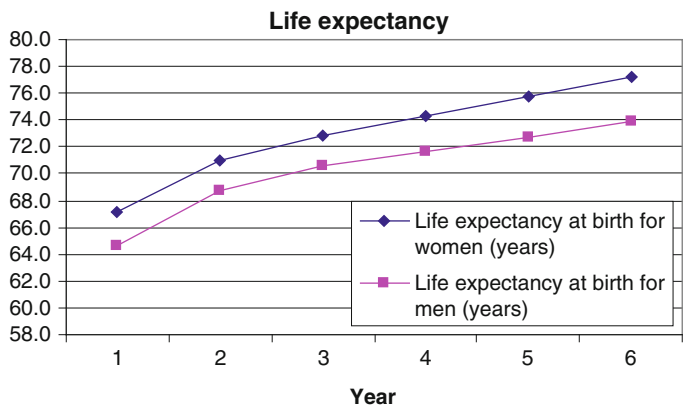
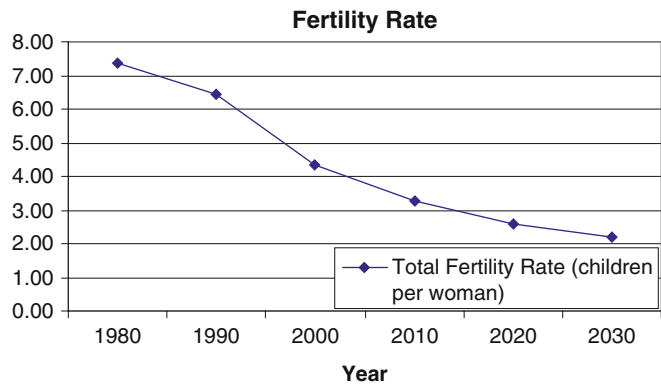
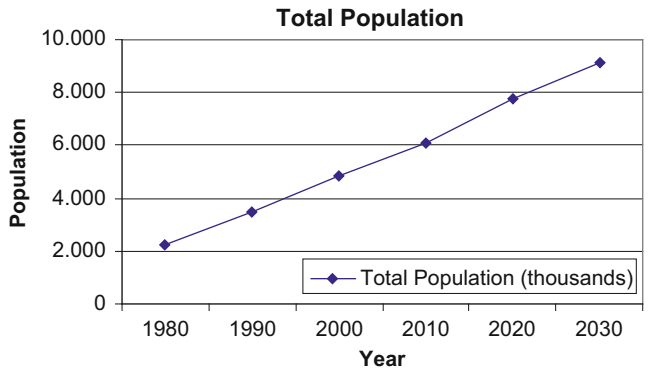


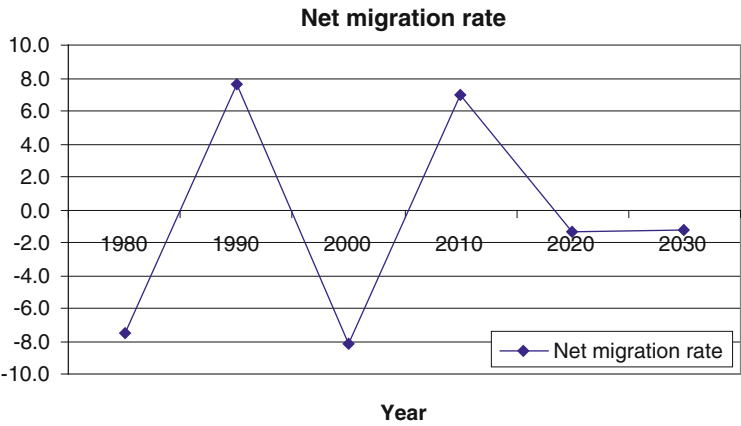
Statistical Annex: Jordan

	1980	1990	2000	2010	2020	2030
Total population (thousands)	2,233	3,468	4,857	6,113	7,737	9,134
Population age 0–4	424	597	695	816	750	729
Population age 5–9	386	538	621	774	740	737
Population age 10–14	312	458	605	731	783	744
Population age 15–19	256	413	560	677	747	733
Population age 20–24	192	326	487	655	705	771
Population age 25–29	131	242	439	563	638	728
Population age 30–34	107	171	355	454	613	682
Population age 35–39	98	127	269	391	546	616
Population age 40–44	91	108	186	279	456	593
Population age 45–49	78	99	132	196	399	527
Population age 50–54	61	89	117	155	301	436
Population age 55–59	47	71	109	137	216	377
Population age 60–64	35	55	91	116	152	276
Population age 65–69	26	43	66	99	113	189
Population age 70–74	22	29	43	70	88	123
Population age 75–79	17	23	27	42	65	78
Population age 80–84	10	17	14	20	36	47
Population age 85–89	4	7	7	8	14	22
Population age 90–94	1	2	3	2	3	7
Population age 95–99	0	0	1	1	1	1
Population age 100+	0	0	0	0	0	0
Total fertility rate ^a (children per woman)	7.38	6.44	4.34	3.27	2.60	2.20
Life expectancy at birth for women (years)	67.1	71.0	72.9	74.3	75.8	77.2
Life expectancy at birth for men (years)	64.6	68.8	70.6	71.7	72.7	73.9
Net migration rate	–7.5	7.6	–8.2	7.0	–1.4	–1.2
Primary education (years)	6	6	6	6	–	–
Secondary education (years)	6	–	6	6	–	–

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>

^aTotal fertility rate, Life expectancy at birth and net migration rate are in 5 year steps from 1975–1980, 1985–1990, 1995–2000, 2005–2010, 2015–2020, 2025–2030





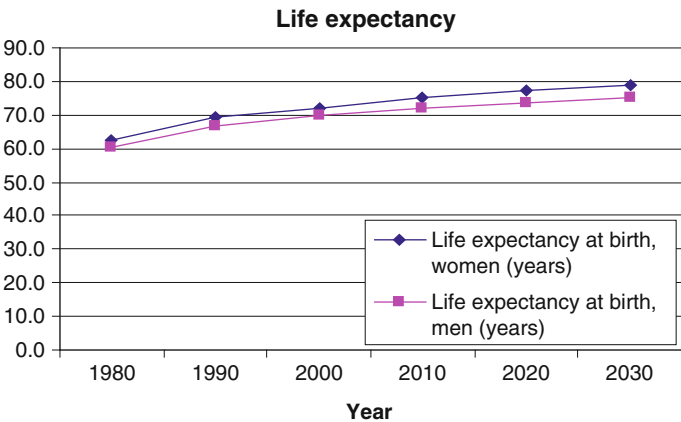
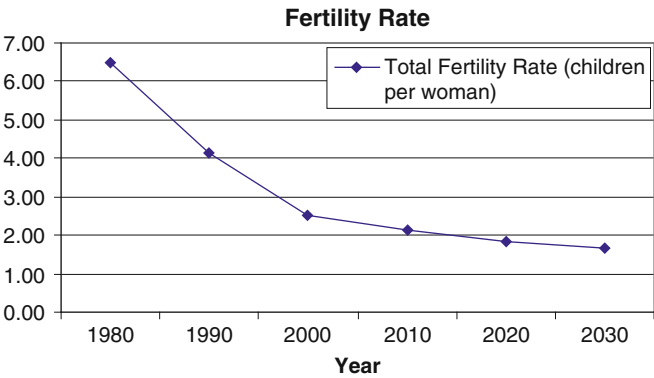
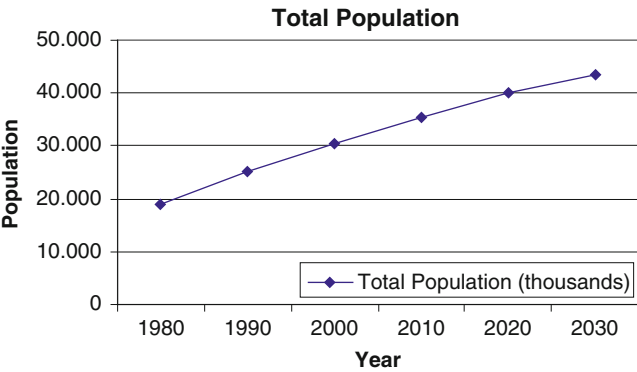
Statistical Annex: Maghreb

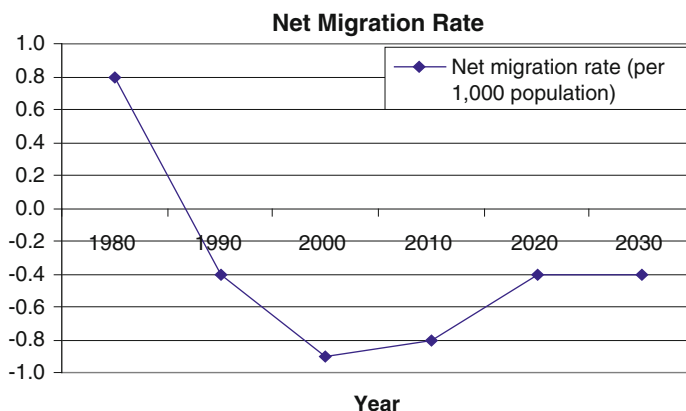
Algeria

	1980	1990	2000	2010	2020	2030
Total population (thousands)	18,811	25,299	30,534	35,468	40,180	43,475
Population age 0–4	3,359	3,859	3,029	3,447	3,251	2,659
Population age 5–9	2,826	3,789	3,621	3,149	3,410	2,938
Population age 10–14	2,437	3,261	3,801	2,998	3,421	3,233
Population age 15–19	2,050	2,770	3,729	3,573	3,110	3,382
Population age 20–24	1,589	2,389	3,184	3,719	2,928	3,372
Population age 25–29	1,350	2,012	2,697	3,639	3,494	3,058
Population age 30–34	953	1,555	2,327	3,111	3,650	2,885
Population age 35–39	748	1,313	1,955	2,633	3,576	3,449
Population age 40–44	746	920	1,503	2,265	3,049	3,598
Population age 45–49	690	716	1,262	1,894	2,570	3,512
Population age 50–54	530	706	873	1,440	2,190	2,969
Population age 55–59	422	634	663	1,183	1,796	2,460
Population age 60–64	354	466	628	789	1,321	2,038
Population age 65–69	277	346	529	564	1,029	1,594
Population age 70–74	228	257	347	483	625	1,077
Population age 75–79	132	165	212	339	379	722
Population age 80–84	78	97	115	164	244	340
Population age 85–89	29	33	44	61	106	134
Population age 90–94	11	9	12	16	26	45
Population age 95–99	1	1	2	2	4	8
Population age 100+	0	0	0	0	0	1
Total fertility rate (children per woman)	6.49	4.13	2.53	2.14	1.82	1.65
Life expectancy at birth, women (years)	62.6	69.1	72.2	75.0	77.1	78.8
Life expectancy at birth, men (years)	60.2	66.6	69.7	71.9	73.7	75.2
Net migration rate (per 1,000 population)	0.8	–0.4	–0.9	–0.8	–0.4	–0.4
Primary education (years) ^a	6	6	6	5		
Secondary education (years)	6	6	6	7		

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>

^aPrimary and secondary education is for all countries year 2009, since 2010 was not available

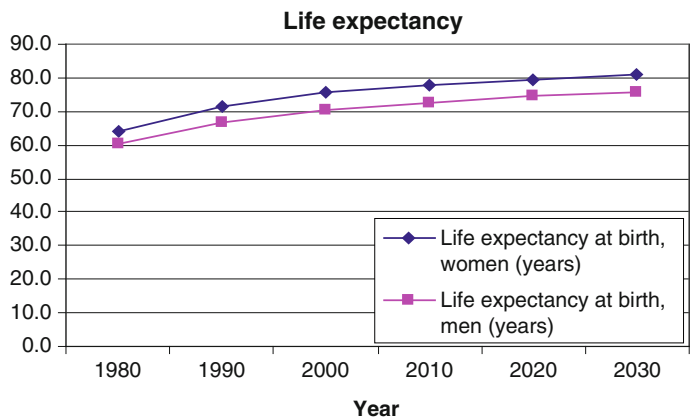
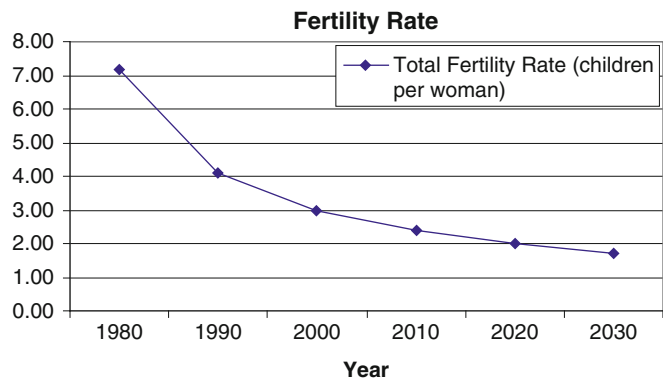
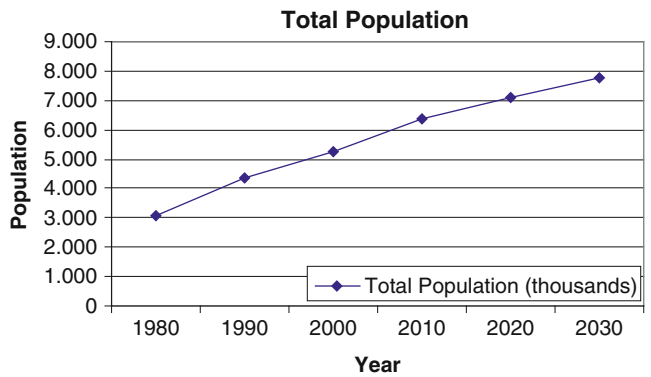


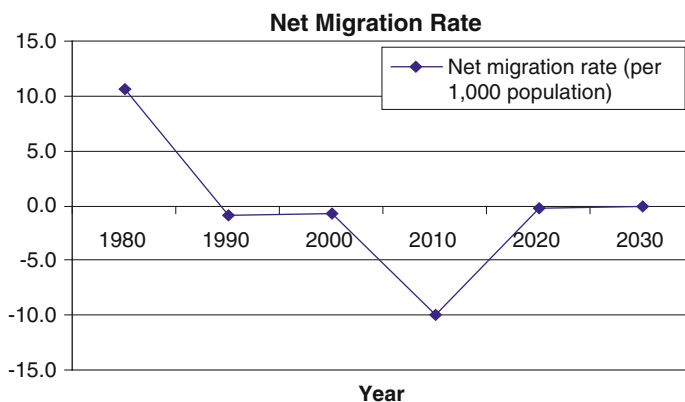


Libya

	1980	1990	2000	2010	2020	2030
Total population (thousands)	3,063	4,334	5,231	6,355	7,083	7,783
Population age 0–4	573	588	564	716	625	508
Population age 5–9	480	698	545	656	692	549
Population age 10–14	389	599	584	562	714	623
Population age 15–19	298	513	695	543	654	691
Population age 20–24	260	403	595	581	554	711
Population age 25–29	230	325	507	689	521	651
Population age 30–34	189	275	395	587	539	550
Population age 35–39	152	218	316	498	631	516
Population age 40–44	128	173	262	382	525	530
Population age 45–49	107	148	202	300	433	617
Population age 50–54	83	117	156	244	322	508
Population age 55–59	63	96	132	185	251	413
Population age 60–64	45	70	101	139	211	299
Population age 65–69	32	50	77	110	160	223
Population age 70–74	20	31	49	76	109	172
Population age 75–79	11	18	30	49	75	114
Population age 80–84	4	8	14	25	41	63
Population age 85–89	2	3	6	10	19	31
Population age 90–94	0	1	1	3	6	10
Population age 95–99	0	0	0	1	1	2
Population age 100+	0	0	0	0	0	0
Total fertility rate (children per woman)	7.18	4.10	3.00	2.41	1.98	1.72
Life expectancy at birth, women (years)	64.2	71.7	75.7	77.9	79.4	80.8
Life expectancy at birth, men (years)	60.6	66.9	70.5	72.7	74.4	75.8
Net migration rate (per 1,000 population)	10.7	–0.9	–0.7	–9.9	–0.3	–0.1
Primary education (years)	6	6	6	6		
Secondary education (years)	6	6	6	7		

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>

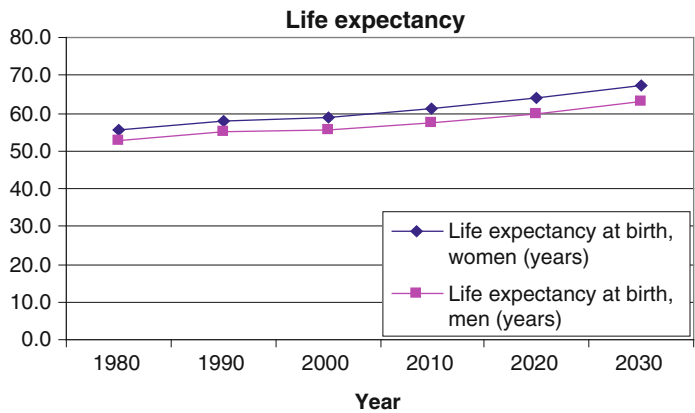
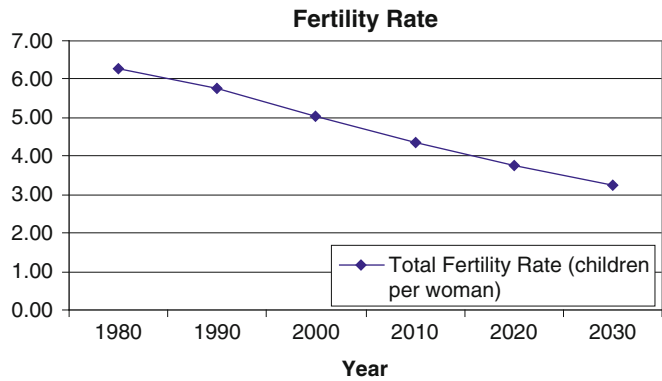
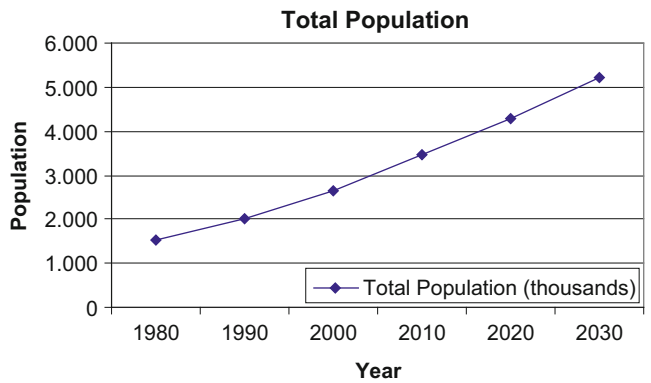


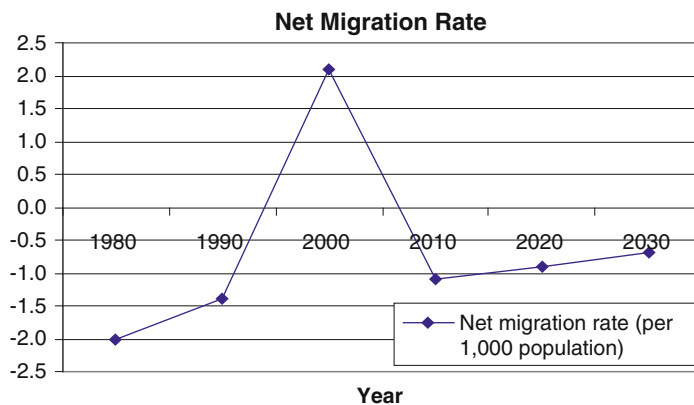


Mauritania

	1980	1990	2000	2010	2020	2030
Total population (thousands)	1,518	1,996	2,643	3,460	4,298	5,200
Population age 0–4	273	345	427	513	576	629
Population age 5–9	227	293	373	457	532	590
Population age 10–14	193	257	329	409	494	558
Population age 15–19	163	220	288	367	448	523
Population age 20–24	136	182	251	325	396	480
Population age 25–29	107	149	212	285	350	430
Population age 30–34	87	122	174	249	307	378
Population age 35–39	73	95	141	209	269	333
Population age 40–44	62	78	115	169	235	292
Population age 45–49	53	65	89	135	195	254
Population age 50–54	45	55	71	107	155	218
Population age 55–59	36	46	58	80	120	176
Population age 60–64	27	36	46	60	91	134
Population age 65–69	19	26	34	44	61	95
Population age 70–74	11	16	22	28	39	61
Population age 75–79	5	8	11	15	20	31
Population age 80–84	2	3	4	5	8	12
Population age 85–89	0	1	1	1	2	3
Population age 90–94	0	0	0	0	0	0
Population age 95–99	0	0	0	0	0	0
Population age 100+	0	0	0	0	0	0
Total fertility rate (children per woman)	6.28	5.78	5.04	4.36	3.74	3.25
Life expectancy at birth, women (years)	55.6	57.9	58.8	61.0	64.0	67.4
Life expectancy at birth, men (years)	52.8	54.9	55.6	57.4	59.9	63.0
Net migration rate (per 1,000 population)	–2.0	–1.4	2.1	–1.1	–0.9	–0.7
Primary education (years)	6	6	6	6		
Secondary education (years)	6	6	6	6		

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>

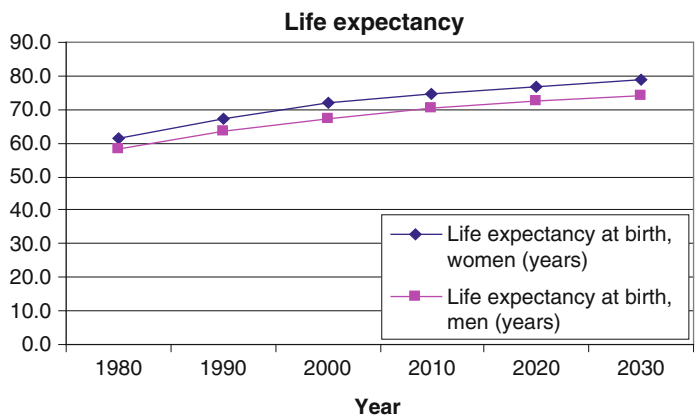
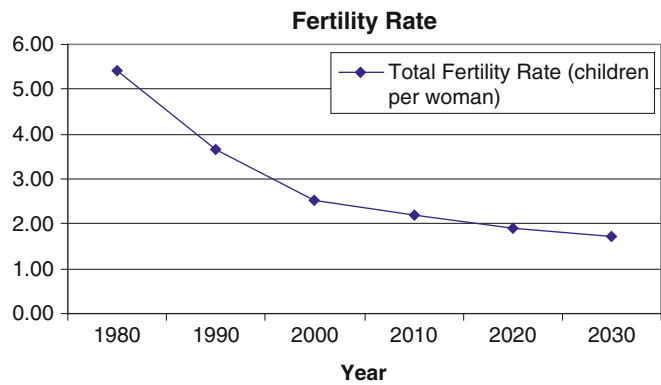
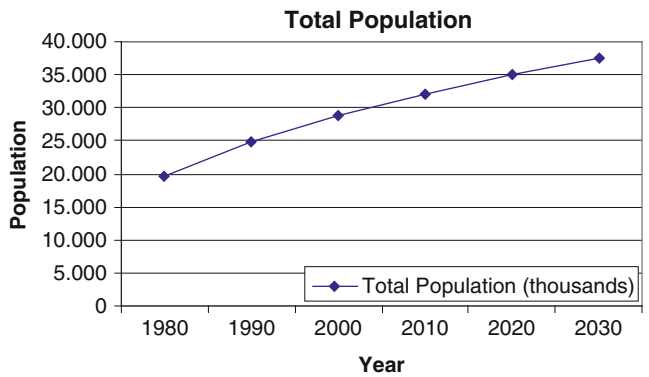


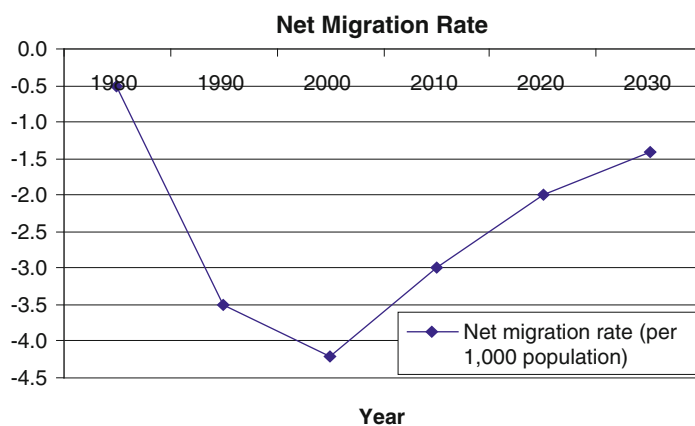


Morocco

	1980	1990	2000	2010	2020	2030
Total population (thousands)	19,567	24,781	28,793	31,951	35,078	37,502
Population age 0–4	3,124	3,440	3,074	3,022	2,871	2,518
Population age 5–9	2,776	3,402	3,238	2,914	2,938	2,692
Population age 10–14	2,412	3,002	3,351	3,013	2,972	2,836
Population age 15–19	2,106	2,705	3,304	3,155	2,859	2,900
Population age 20–24	1,935	2,303	2,783	3,113	2,896	2,891
Population age 25–29	1,447	1,981	2,410	2,934	2,962	2,731
Population age 30–34	1,068	1,816	2,054	2,456	2,889	2,750
Population age 35–39	821	1,359	1,822	2,196	2,741	2,832
Population age 40–44	843	1,007	1,713	1,913	2,322	2,788
Population age 45–49	687	774	1,287	1,743	2,105	2,661
Population age 50–54	681	797	954	1,656	1,842	2,253
Population age 55–59	432	643	728	1,214	1,655	2,015
Population age 60–64	420	606	721	867	1,518	1,712
Population age 65–69	321	352	538	620	1,048	1,463
Population age 70–74	220	296	445	548	676	1,221
Population age 75–79	163	178	206	331	405	716
Population age 80–84	79	81	118	193	260	347
Population age 85–89	22	32	38	50	92	129
Population age 90–94	9	6	7	12	24	41
Population age 95–99	1	1	1	1	2	5
Population age 100+	0	0	0	0	0	0
Total fertility rate (children per woman)	5.40	3.66	2.52	2.18	1.90	1.73
Life expectancy at birth, women (years)	61.4	67.5	71.8	74.9	77.0	78.7
Life expectancy at birth, men (years)	58.0	63.5	67.5	70.3	72.3	74.0
Net migration rate (per 1,000 population)	–0.5	–3.5	–4.2	–3.0	–2.0	–1.4
Primary education (years)	5	5	6	6		
Secondary education (years)	7	7	6	6		

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>

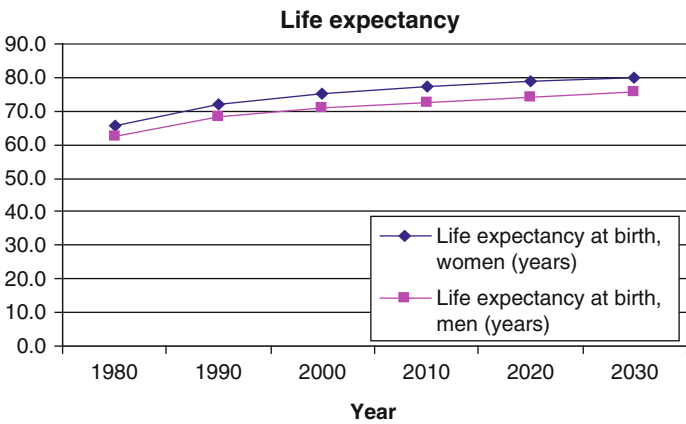
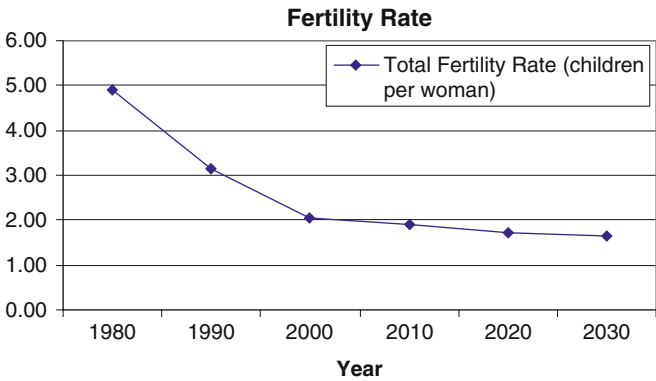
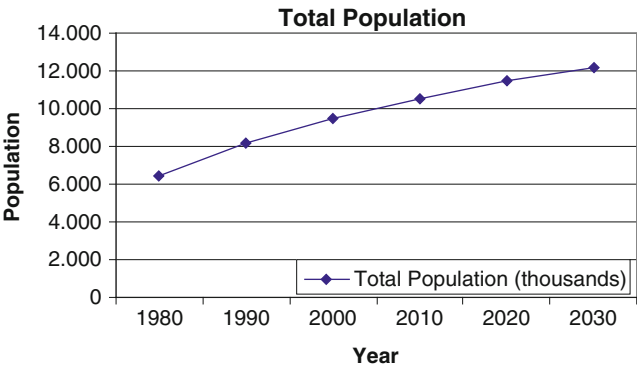


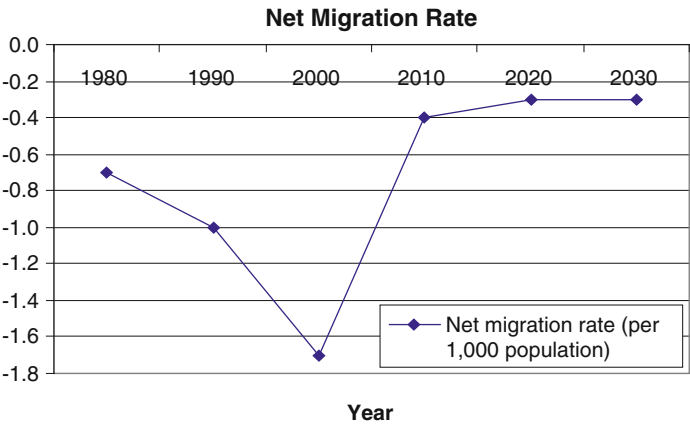


Tunisia

	1980	1990	2000	2010	2020	2030
Total population (thousands)	6,457	8,215	9,456	10,481	11,518	12,212
Population age 0–4	1,003	1,105	818	868	841	703
Population age 5–9	885	1,056	961	785	868	775
Population age 10–14	823	969	1,059	806	863	837
Population age 15–19	737	860	1,023	951	780	863
Population age 20–24	625	785	931	1,043	798	855
Population age 25–29	475	689	804	999	938	769
Population age 30–34	311	578	711	905	1,029	786
Population age 35–39	255	456	632	780	985	926
Population age 40–44	293	323	569	690	890	1,015
Population age 45–49	269	267	478	612	764	968
Population age 50–54	227	287	340	548	670	869
Population age 55–59	175	254	266	452	586	736
Population age 60–64	137	210	265	313	511	631
Population age 65–69	113	152	234	233	402	530
Population age 70–74	68	106	183	213	257	430
Population age 75–79	39	71	112	162	168	300
Population age 80–84	13	35	52	91	114	147
Population age 85–89	7	11	19	27	45	55
Population age 90–94	1	1	3	4	9	16
Population age 95–99	0	0	0	0	1	2
Population age 100+	0	0	0	0	0	0
Total fertility rate (children per woman)	4.92	3.13	2.04	1.91	1.72	1.65
Life expectancy at birth, women (years)	65.7	72.1	75.1	77.1	78.8	80.2
Life expectancy at birth, men (years)	62.7	68.3	71.1	72.6	74.2	75.6
Net migration rate (per 1,000 population)	–0.7	–1.0	–1.7	–0.4	–0.3	–0.3
Primary education (years)	6	6	6	6		
Secondary education (years)	7	7	7	7		

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>





Statistical Annex: MENA

Population ^a				
Country	Total population 2009 (in thousands)	Total population 2025	Total population 2050	Population age 0–14, 2009 (%)
Afghanistan	29.803		73.9	46
Algeria	34.895	43.7	49.6	45
Bahrain	791	1.6	2	32
Cyprus	871	1.6	2	25
Djibouti	864	1.6	1.1	45
Egypt, Arab Rep.	82.999	99.1	129.5	42
Iran, Islamic Rep.	72.904	88	100.2	45
Iraq	31.494	43.3	61.9	46
Israel	7.6	9.1	11.4	28
Jordan	5.951	7.1	9.6	47
Kuwait	2.795	4	5.2	37
Lebanon	4.224	4.1	5.3	37
Libya	6.42	8.1	9.8	47
Malta	415		0.4	24
Morocco	31.993	36.6	42.6	42
Oman	2.845	4.1	5.3	45
Pakistan	169.708	246.3	335.2	43
Qatar	1.409	1.8	2.3	28
Saudi Arabia	25.391	35.7	49.8	42
Somalia	9.133	13.9	23.5	45
Sudan	42.272	56.7	75.9	45
Syrian Arab Republic	21.092	28.6	36.9	49
Tunisia	10.433	12.2	13.9	40
Turkey	74.816	87.4	97.4	39
United Arab Emirates	4.599	6.7	9.1	30
West Bank and Gaza	4.043	6	9.4	47

(continued)

Population ^a				
Country	Total population 2009 (in thousands)	Total population 2025	Total population 2050	Population age 0–14, 2009 (%)
Yemen, Rep.	23.58	34.5	52.1	51
ESCWA Region	232.7		371.8	
North Africa	212.9		321.1	

Sources: UN, annual reports from WHO, UNFPA, the World Bank, UNESCO and ILO.

^aTotal population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship – except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin. The values shown are midyear estimates

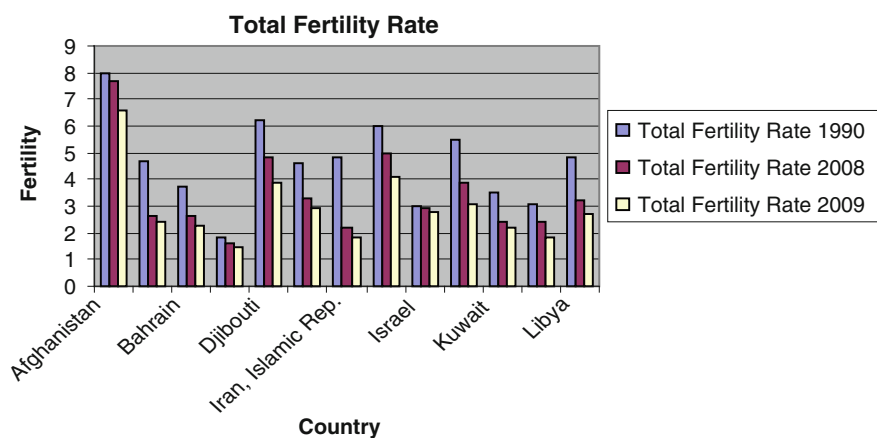
Population				
Country	Population age 15–64, 2009 (%)	Population age 65+, 2009 (%)	Population change 2009–2050 (%)	Net migration 2010
Afghanistan	52	2		1,000,000
Algeria	68	5	43	–140
Bahrain	71	2	61	20
Cyprus	69	13		25
Djibouti	61	3	0	0
Egypt, Arab Rep.	63	5	56	–340
Iran, Islamic Rep.	71	5	37	–500
Iraq	56	3	106	–576.999
Israel	62	10	49	85
Jordan	62	4	62	250
Kuwait	74	2	76	120
Lebanon	67	7	37	–12.5
Libya	66	4	56	20
Malta	70	14		5
Morocco	66	5	35	–425
Oman	66	3	71	20
Pakistan	59	4	85	–1,415,580
Qatar	83	1	64	562.055
Saudi Arabia	65	3	74	150
Somalia	52	3	158	–250
Sudan	57	4	80	135
Syrian Arab Republic	62	3	68	800
Tunisia	70	7	34	–20
Turkey	67	6	30	–44.272
United Arab Emirates	80	1	79	342.979
West Bank and Gaza	52	3	140	–10
Yemen, Rep.	54	2	128	–135

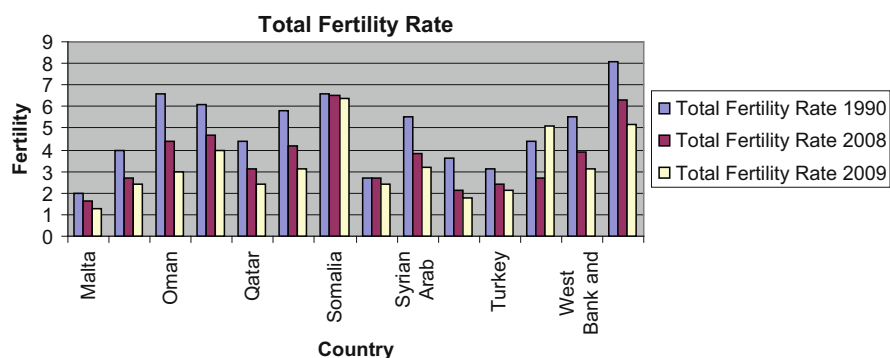
Sources: UN, annual reports from WHO, UNFPA, the World Bank, UNESCO and ILO.

Fertility ^a					
	Total fertility rate 1990	Total fertility rate 2008	Total fertility rate 2009	Fertility growth rate (annual), 1988–1998	Fertility growth rate (annual), 1998–2008
Afghanistan	8	7.7	6.6	8	7.7
Algeria	4.7	2.6	2.4	4.7	2.6
Bahrain	3.7	2.6	2.3	3.7	2.6
Cyprus	1.8	1.6	1.5	1.8	1.6
Djibouti	6.2	4.8	3.9	6.2	4.8
Egypt, Arab Rep.	4.6	3.3	2.9	4.6	3.3
Iran, Islamic Rep.	4.8	2.2	1.8	4.8	2.2
Iraq	6	5	4.1	6	5
Israel	3	2.9	2.8	3	2.9
Jordan	5.5	3.9	3.1	5.5	3.9
Kuwait	3.5	2.4	2.2	3.5	2.4
Lebanon	3.1	2.4	1.8	3.1	2.4
Libya	4.8	3.2	2.7	4.8	3.2
Malta	2	1.6	1.3	2	1.6
Morocco	4	2.7	2.4	4	2.7
Oman	6.6	4.4	3	6.6	4.4
Pakistan	6.1	4.7	4	6.1	4.7
Qatar	4.4	3.1	2.4	4.4	3.1
Saudi Arabia	5.8	4.2	3.1	5.8	4.2
Somalia	6.6	6.5	6.4	6.6	6.5
Sudan	2.7	2.7	2.4	2.7	2.7
Syrian Arab Republic	5.5	3.8	3.2	5.5	3.8
Tunisia	3.6	2.1	1.8	3.6	2.1
Turkey	3.1	2.4	2.1	3.1	2.4
United Arab Emirates	4.4	2.7	5.1	4.4	2.7
West Bank and Gaza	5.5	3.9	3.1	5.5	3.9
Yemen, Rep.	8.1	6.3	5.2	8.1	6.3

Sources: UN, annual reports from WHO, UNFPA, the World Bank, UNESCO and ILO.

^aTotal fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific fertility rates





Life expectancy at birth (years)									
Country	Total 1990	Total 2000	Total 2009	Women 1990	Women 2000	Women 2009	Men 1990	Men 2000	Men 2009
Afghanistan	43	42	44	44	44	44	42	41	44
Algeria	66	69	73	68	71	74	65	67	71
Bahrain	74	73	76	74	74	78	73	72	75
Cyprus	76	77	80	78	79	82	74	75	77
Djibouti	58	59	56	60	61	57	56	57	54
Egypt, Arab Rep.	62	67	70	64	69	72	61	66	69
Iran, Islamic Rep.	63	67	72	66	70	73	60	65	70
Iraq	66	67	68	69	69	72	64	64	65
Israel	77	79	82	78	81	84	75	77	80
Jordan	68	71	73	70	73	75	66	69	71
Kuwait	73	76	78	75	76	80	72	75	76
Lebanon	66	70	72	69	73	74	63	68	70
Libya	69	71	75	71	74	77	67	69	72
Malta	76	78	80	78	80	82	74	76	78
Morocco	65	70	72	68	72	74	63	67	69
Oman	70	73	76	73	76	78	68	71	75
Pakistan	63	64	67	61	62	67	58	61	67
Qatar	75	76	76	76	76	77	75	76	75
Saudi Arabia	68	71	73	71	75	74	66	69	73
Somalia	46	48	50	49	49	51	44	47	48
Sudan	57	57	58	57	57	60	58	57	57
Syrian Arab Republic	67	71	74	70	74	76	65	69	73
Tunisia	70	73	74	72	75	77	69	71	73
Turkey	65	70	72	67	73	75	62	67	70
United Arab Emirates	73	76	78	75	78	79	72	75	77
West Bank and Gaza	68	71	74	70	73	75	66	69	72
Yemen, Rep.	57	61	63	58	62	65	56	60	62
Region	61	63	65	62	65	66	59	62	63
World	64	66	68	66	68	70	62	64	66

Sources: UN, annual reports from WHO, UNFPA, the World Bank, UNESCO and ILO.

Employment rate	
Country	Employment rate, age 15–64
Afghanistan	55
Algeria	49
Bahrain	61
Cyprus	58
Djibouti	
Egypt, Arab Rep.	43
Iran, Islamic Rep.	49
Iraq	37
Israel	50
Jordan	38
Kuwait	65
Lebanon	46
Libya	49
Morocco	46
Oman	51
Pakistan	52
Qatar	77
Saudi Arabia	48
Somalia	67
Sudan	47
Syrian Arab Republic	45
Tunisia	41
Turkey	42
United Arab Emirates	76
West Bank and Gaza	30
Yemen, Rep.	39

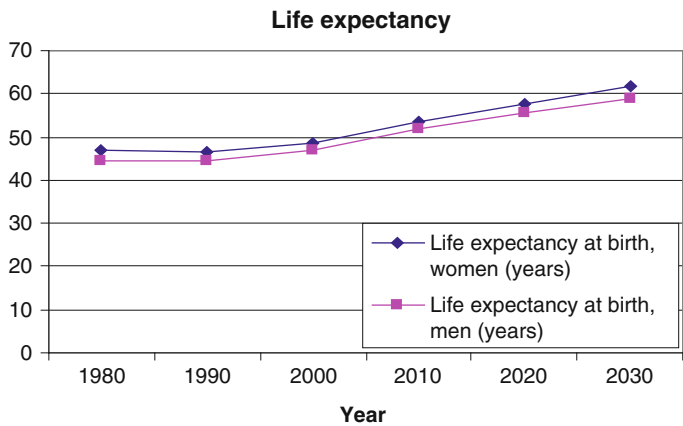
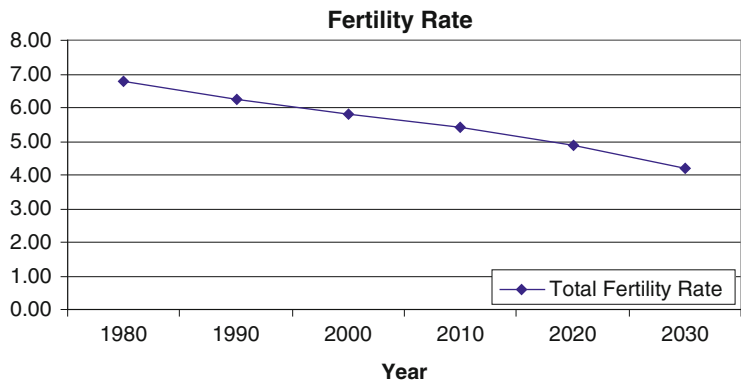
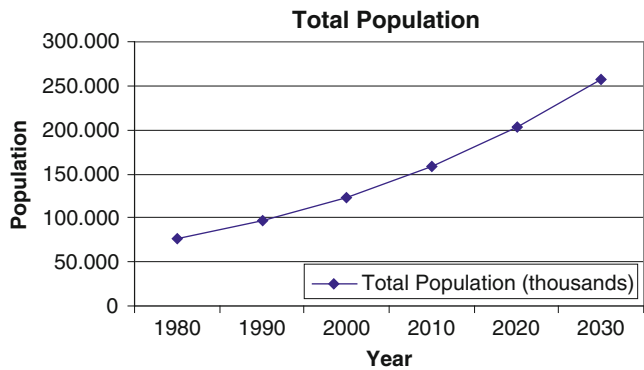
Sources: UN, annual reports from WHO, UNFPA, the World Bank, UNESCO and ILO.

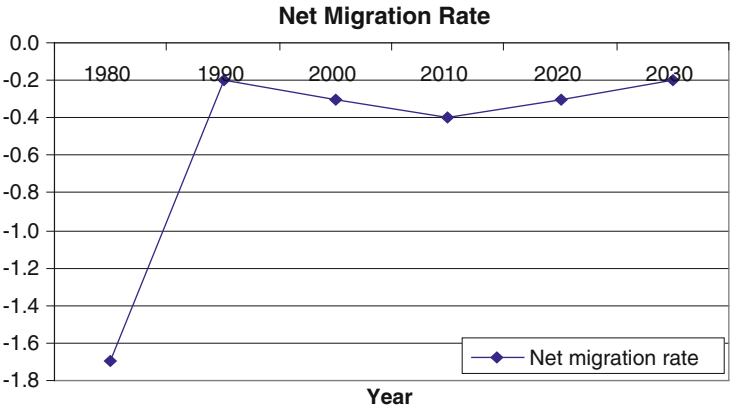
Statistical Annex: Nigeria

	1980	1990	2000	2010	2020	2030
Total population (thousands)	75,543	97,552	123,689	158,423	203,869	257,815
Population age 0–4	13,865	17,228	20,897	26,569	32,762	37,688
Population age 5–9	10,731	14,327	17,219	22,315	28,344	33,987
Population age 10–14	8,689	12,162	15,235	18,944	24,675	31,028
Population age 15–19	7,516	10,054	13,500	16,382	21,437	27,481
Population age 20–24	6,428	8,160	11,512	14,535	18,191	23,874
Population age 25–29	5,424	6,921	9,288	12,643	15,504	20,481
Population age 30–34	4,632	5,833	7,356	10,517	13,514	17,123
Population age 35–39	4,034	4,876	6,167	8,237	11,550	14,375
Population age 40–44	3,387	4,141	5,180	6,400	9,472	12,358
Population age 45–49	2,816	3,580	4,314	5,345	7,333	10,439
Population age 50–54	2,331	2,950	3,618	4,487	5,636	8,463
Population age 55–59	1,888	2,374	3,042	3,690	4,632	6,438
Population age 60–64	1,461	1,862	2,376	2,976	3,756	4,789
Population age 65–69	1,041	1,373	1,740	2,309	2,876	3,693
Population age 70–74	683	905	1,165	1,566	2,038	2,664
Population age 75–79	380	500	668	909	1,272	1,670
Population age 80–84	175	221	299	424	613	855
Population age 85–89	52	69	93	141	212	324
Population age 90–94	9	15	19	30	47	76
Population age 95–99	1	2	2	4	6	10
Population age 100+	0	0	0	0	0	1
Total fertility rate	6.76	6.23	5.79	5.43	4.86	4.20
Life expectancy at birth, women (years)	47	47	49	53	58	62
Life expectancy at birth, men (years)	45	44	47	52	56	59
Net migration rate	–1.7	–0.2	–0.3	–0.4	–0.3	–0.2
Primary education (years) ^a	6	6	6	6		
Secondary education (years)	6	6	6	6		

Sources: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm> and the World Bank 2010

^aPrimary and secondary education is 2009, not 2010



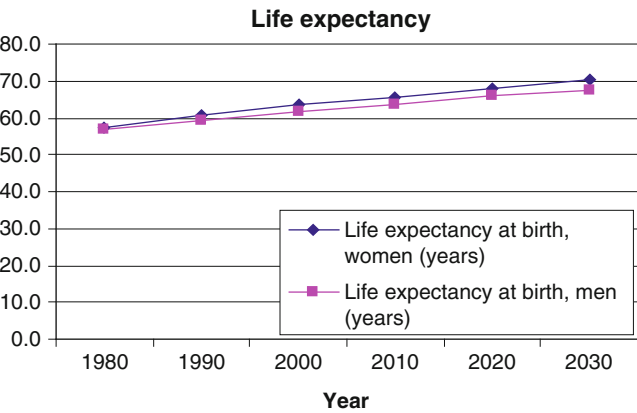
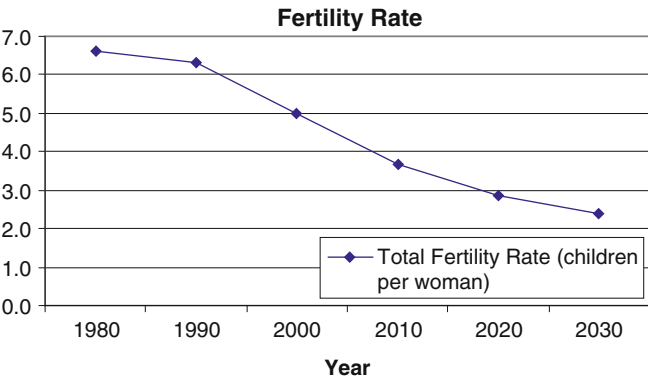
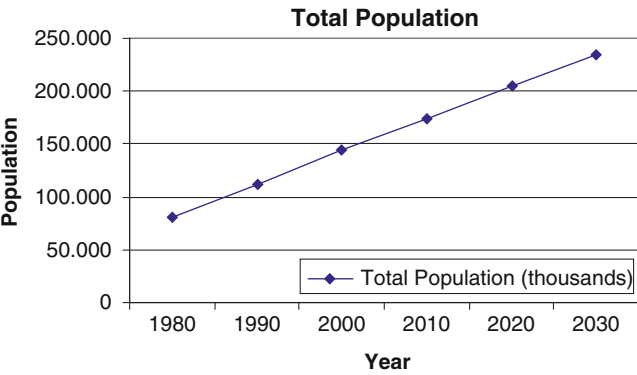


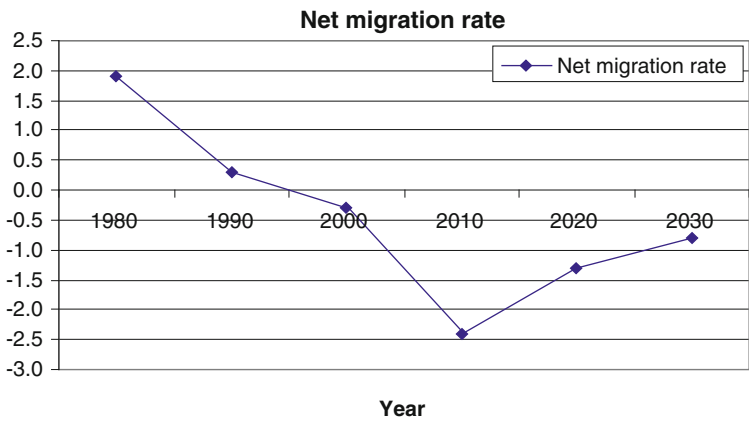
Statistical Annex: Pakistan

	1980	1990	2000	2010	2020	2030
Total population (thousands)	80,493	111,845	144,522	173,593	205,364	234,432
Population age 0–4	14,008	19,422	21,176	21,418	22,238	20,971
Population age 5–9	11,341	16,044	19,938	19,515	21,683	21,482
Population age 10–14	9,573	13,452	18,673	20,465	20,839	21,771
Population age 15–19	8,132	11,194	15,763	19,446	19,170	21,414
Population age 20–24	6,830	9,563	13,035	17,810	19,917	20,444
Population age 25–29	5,586	8,249	10,618	14,760	18,753	18,684
Population age 30–34	4,675	6,900	9,052	12,256	17,155	19,434
Population age 35–39	4,275	5,554	7,859	10,061	14,220	18,306
Population age 40–44	3,622	4,589	6,561	8,573	11,790	16,697
Population age 45–49	3,070	4,135	5,228	7,385	9,618	13,734
Population age 50–54	2,572	3,436	4,249	6,068	8,086	11,231
Population age 55–59	2,119	2,825	3,731	4,705	6,795	8,947
Population age 60–64	1,677	2,255	2,966	3,659	5,338	7,222
Population age 65–69	1,257	1,723	2,269	2,992	3,845	5,675
Population age 70–74	848	1,209	1,611	2,114	2,667	4,006
Population age 75–79	519	749	1,018	1,335	1,819	2,429
Population age 80–84	258	372	526	694	955	1,273
Population age 85–89	101	140	198	266	374	551
Population age 90–94	26	31	45	62	91	140
Population age 95–99	3	3	5	7	11	18
Population age 100+	0	0	0	0	1	1
Total fertility rate ^a (children per woman)	6.6	6.3	5.0	3.7	2.9	2.4
Life expectancy at birth, women (years)	57.3	60.7	63	65.4	68.1	70.3
Life expectancy at birth, men (years)	56.7	59.5	62	63.8	65.8	67.5
Net migration rate	1.9	0.3	–0.3	–2.4	–1.3	–0.8
Primary education (years)	5	5	5	5	–	–
Secondary education (years)	7	7	7	7	–	–

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>

^aTotal fertility rate, Life expectancy at birth and net migration rate are in 5 year steps from 1975–1980, 1985–1990, 1995–2000, 2005–2010, 2015–2020, 2025–2030



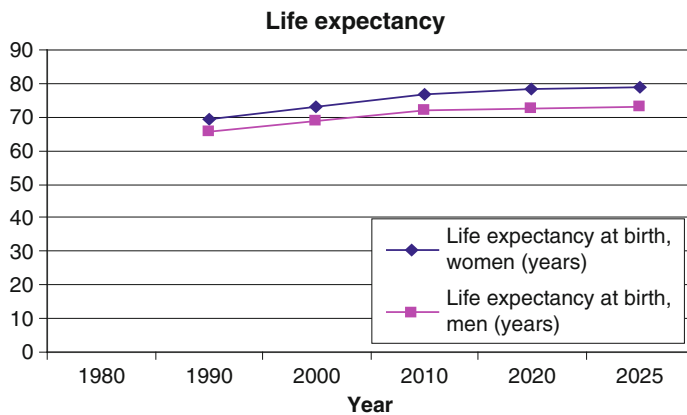
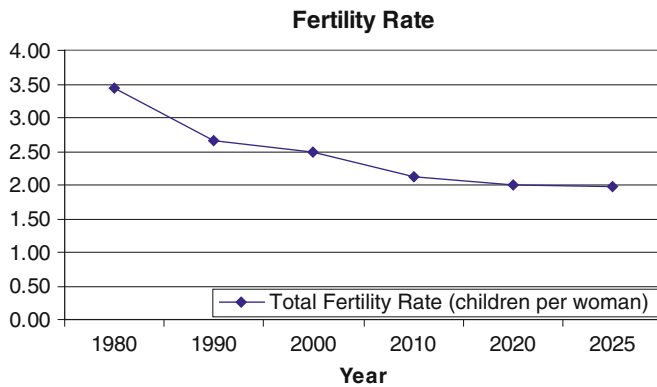
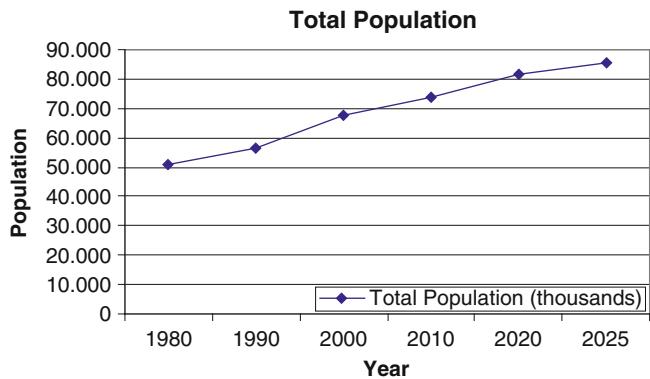


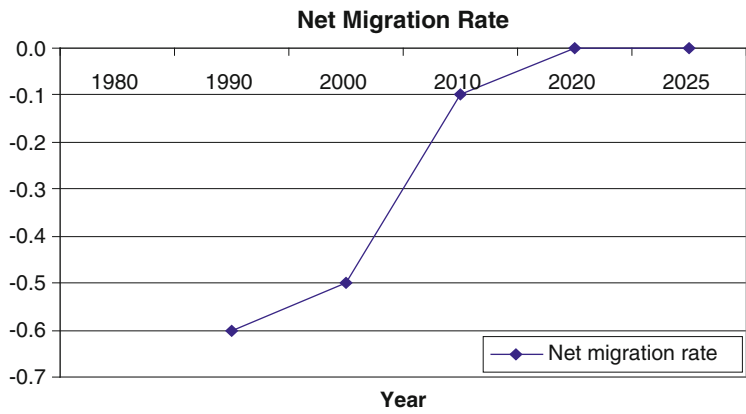
Statistical Annex: Turkey

	1980	1990	2000	2010	2020	2025
Total population (thousands)	50,664	56,473	67,803	73,722	81,778	85,407
Population age 0–4	6,582	6,545	6,564	6,413	5,944	5,663
Population age 5–9	5,799	6,790	6,554	6,242	6,199	5,935
Population age 10–14	5,232	6,344	6,438	6,526	6,392	6,194
Population age 15–19	4,925	5,669	6,700	6,516	6,223	6,383
Population age 20–24	3,994	5,047	6,196	6,367	6,491	6,208
Population age 25–29	3,545	4,716	5,510	6,613	6,470	6,472
Population age 30–34	2,646	3,830	4,915	6,118	6,320	6,450
Population age 35–39	2,025	3,397	4,593	5,437	6,558	6,296
Population age 40–44	1,958	2,610	3,710	4,834	6,051	6,522
Population age 45–49	2,007	1,972	3,258	4,485	5,347	5,997
Population age 50–54	1,673	1,906	2,457	3,571	4,698	5,262
Population age 55–59	1,145	1,844	1,800	3,060	4,270	4,570
Population age 60–64	767	1,411	1,659	2,222	3,291	4,080
Population age 65–69	765	883	1,489	1,532	2,677	3,053
Population age 70–74	574	510	996	1,269	1,777	2,351
Population age 75–79	300	395	494	942	1,038	1,418
Population age 80–84	138	197	195	452	643	698
Population age 85–89	27	54	81	128	292	324
Population age 90–94	5	10	17	22	65	96
Population age 95–99	0	1	1	3	6	12
Population age 100+	0	0	0	0	0	1
Total fertility rate (children per woman)	3.45	2.65	2.50	2.11	2.01	1.97
Life expectancy at birth, women (years)		70	73	77	78	79
Life expectancy at birth, men (years)		65	69	72	73	73
Net migration rate		–0.6	–0.5	–0.1	0.0	0.0
Primary education (years) ^a	5	5	5	5		
Secondary education (years)	6	6	6	6		

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>

^aPrimary and secondary education is 2009, not 2010



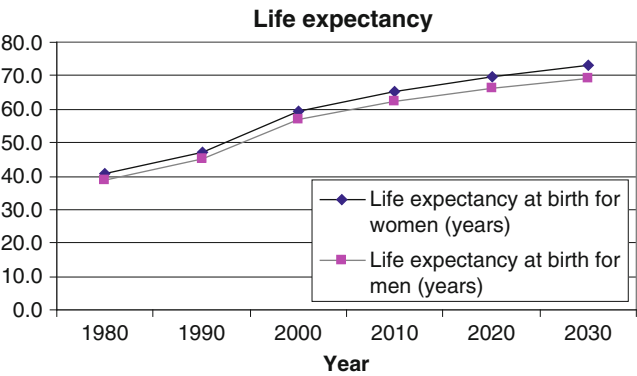
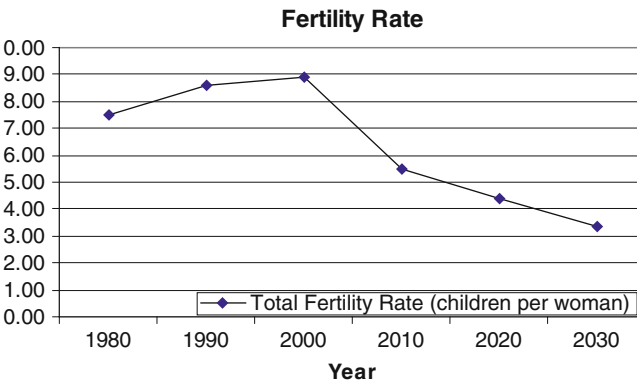
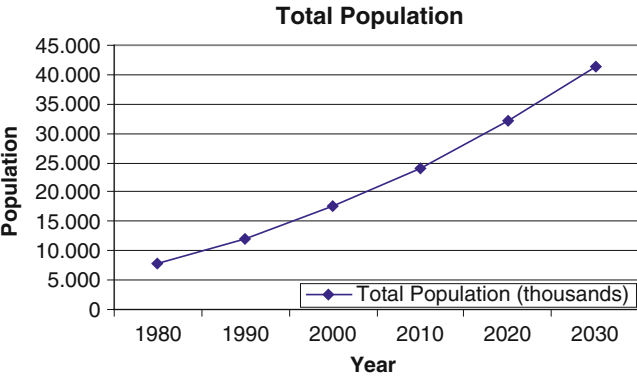


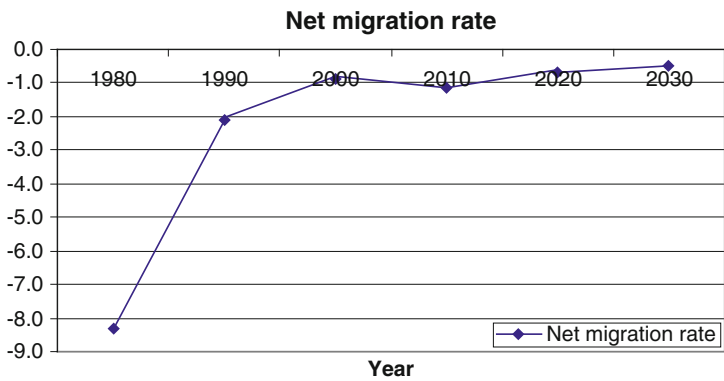
Statistical Annex: Yemen

	1980	1990	2000	2010	2020	2030
Total population (thousands)	7,945	11,948	17,723	24,053	32,232	41,342
Population age 0–4	1,697	2,603	3,191	4,057	4,926	5,417
Population age 5–9	1,207	2,137	2,924	3,480	4,563	5,155
Population age 10–14	1,021	1,596	2,530	3,102	3,992	4,880
Population age 15–19	843	1,170	2,114	2,872	3,440	4,529
Population age 20–24	680	975	1,559	2,455	3,039	3,937
Population age 25–29	541	788	1,083	2,020	2,783	3,367
Population age 30–34	452	627	893	1,472	2,364	2,963
Population age 35–39	338	494	773	1,015	1,940	2,712
Population age 40–44	274	410	644	834	1,406	2,297
Population age 45–49	227	303	517	717	959	1,870
Population age 50–54	188	241	438	588	776	1,334
Population age 55–59	155	193	342	458	650	886
Population age 60–64	122	151	257	370	509	689
Population age 65–69	90	113	186	266	368	540
Population age 70–74	59	77	131	175	262	377
Population age 75–79	32	44	82	101	153	224
Population age 80–84	14	20	40	50	71	116
Population age 85–89	4	6	15	18	24	40
Population age 90–94	1	1	3	4	5	9
Population age 95–99	0	0	0	1	1	1
Population age 100+	0	0	0	0	0	0
Total fertility rate ^a (children per woman)	7.52	8.58	8.93	5.48	4.39	3.36
Life expectancy at birth for women (years)	40.8	47.3	59.6	65.4	69.7	73.2
Life expectancy at birth for men (years)	38.8	45.0	57.1	62.5	66.3	69.2
Net migration rate	–8.3	–2.1	–0.9	–1.2	–0.7	–0.5
Primary education (years)	6	6	6	6	–	–
Secondary education (years)	–	–	6	6	–	–

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects, The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>

^aTotal fertility rate, Life expectancy at birth and net migration rate are in 5 year steps from 1975–1980, 1985–1990, 1995–2000, 2005–2010, 2015–2020, 2025–2030





Biographical Sketches

Mohammad Jalal Abbasi-Shavazi is Professor of Demography at the Department of Demography of the University of Tehran; and Future Fellow, Australian Demographic and Social Research Institute (ADSRI), Australian National University (ANU). Professor Abbasi's main research has been focused on Iran's fertility transition but he has also worked on other areas including family change, reproductive health, Muslim demography, international migration/ethnicity, and Afghan refugees in Iran. His 2005 co-authored paper with Gavin Jones on 'Socio-economic and Demographic Setting of Muslim populations' discussed the growing size, diverse picture, and different composition of Muslim populations. Abbasi's co-authored book on *Fertility Transition in Iran: Reproduction and Revolution* published by Springer in 2009 documented that Iran's fertility decline has been the largest and fastest fall in fertility ever recorded. Professor Abbasi's current research focuses on demography of refugee and forced migration.

Abbasi served as the Head of the Department of Demography of the University of Tehran during 2002–2006. He is currently a member of several international research organizations and study groups including a Member of Board of Trustees, International Center for Diarrhoeal Diseases, Bangladesh (ICDDR,B), a member of the International Advisory Board of the journal of *Asian Population Studies*, a member of Developmental Idealism Study Group at the University of Michigan, and Research Associate of the Economic Research Forum based in Egypt. He was instrumental in the establishment of the Asian Population Association (APA), and is now the President of the APA for 2011–2012. Professor Abbasi is the Laureate of the 2011 United Nations Population Award.

Ebba Augustin, CEO of the Philanthropy Advisory *SAANED*, based in Amman/Jordan, is a Political and Social Scientist with 20 years of work experience as project manager, advisor, management coach and consultant in the Middle East. Her engagement started in the late 80s with her Ph.D. research on Women Political Mobilization during the first Palestinian Intifada. For 8 years she managed projects and programs for bilateral German government aid in Poverty alleviation, Gender and Employment Promotion in the Middle East, Europe and Africa and later

provided consultancy services for international and national organizations in the Balkans, Asia, Europe and the Maghreb. In 2000 she represented the Graduate School-USDA in Washington as Country representative in Egypt. Since 2001 a resident of Amman-Jordan her work has focused on advisory services, research, strategic planning, impact monitoring and moderation of high level meetings and conferences for public and private sector actors, civil-society groups, international and multi-national organizations in the Arab Region and Europe. Ebba Augustin received her education in Gender in the Development Planning Unit, University College London and has since the early 90s conducted gender studies in the Middle East Region and conceptualized and advised gender projects and programs. She has served as board member and provides voluntary services to Middle Eastern philanthropic organizations.

Christian Blickenstorfer is ambassador and earned his Ph.D. in modern history and international law at the University of Zurich in 1972. He joined the Swiss Foreign Service in 1974. His assignments included i. a. Cairo (1975–1976), Deputy Chief of Mission at the Embassies of Switzerland to the Kingdom of Thailand in Bangkok (1980–1983), in the Islamic Republic of Iran in Teheran (1983–1985) where he was also representing US-interests and in Washington, DC (1989–1993). From 1993 to 1997, he served as Ambassador of Switzerland to the Kingdom of Saudi Arabia, the United Arab Emirates, the Sultanate of Oman and the Republic of Yemen. From 1997 to 2000, he was Head of the Political Division II in the Ministry of Foreign Affairs, responsible for relations with Africa, the Middle East, Asia, Oceania and Latin America. In 2000, he was appointed Political Director in the Federal Department for Foreign Affairs. From 2001 to 2006 he served as Ambassador to the United States of America and from 2006 to 2010 as Ambassador to Germany.

Nicholas Eberstadt holds the Henry Wendt Chair in Political Economy at the American Enterprise Institute (AEI) in Washington, DC, and is also Senior Adviser to the National Bureau of Asian Research (NBR) in Seattle, WA. Over the past three decades he has published extensively on a wide range of issues in demography, development and international security. His most recent book is *Russia's Peacetime Demographic Crisis: Dimensions, Causes, Implications* (2010).

Banu Ergöçmen is an Associate Professor of Demography at Hacettepe University, Institute of Population Studies, which is the only academic institution in Turkey, providing postgraduate degree programs in the field of demography. At present, she is the deputy director of the Institute and also, head of the Department of Economic and Social Demography.

She received her bachelor degree in Sociology from the Middle East Technical University, Ankara, Turkey. She, then, received her M.A. and Ph.D. degrees in Demography from Hacettepe University Institute of Population Studies, Ankara, Turkey.

Besides her academic studies in demography as a lecturer, she has over 25 years of experience in carrying out quantitative and qualitative research on the demographic issues and related aspects of population. She has participated in and been responsible for a significant number of national field surveys in Turkey. To illustrate, she was the technical director of the 1998 and 2003 *Turkey Demographic and Health Surveys* and technical coordinator of the *National Research on Domestic Violence against Women in Turkey*. *Migration and Displaced Persons Survey in Turkey* (2005) and *National Maternal Mortality Study in Turkey* (2008) were among the surveys in which she is responsible from the qualitative part.

As an experienced demographer and lecturer, she has taken part in several demography courses both in Turkey and abroad. She has a large number of publications in the field of demography.

She is a member of several professional bodies including International Union for the Scientific Study of Population (IUSSP) and European Association for Population Studies (EAPS).

Hans Groth, MBA is Senior Director of Healthcare Policy and Market Access for the Oncology Business Unit from Pfizer Europe and Member of the Executive Board for Pfizer Switzerland. He has been working with Pfizer for 24 years and has comprehensive experience in over 30 healthcare markets including Western Europe, Eastern Europe, the USA and Canada. His responsibilities have included medical affairs, clinical research, regulatory, marketing and sales as well as international public affairs including negotiating pricing and access conditions with government authorities as well as healthcare payers.

In 2003, he was appointed “Pfizer Global Health Fellow” by UNAIDS to conduct case studies in Central Asia and Siberia in order to quantify the threat potential of HIV/AIDS/TB in that region. For his subsequent commitment towards supporting public health infrastructure projects in Southeast Siberia and Kirgizstan, he received in 2008 the “Pfizer Global Health Fellow Award”.

For the past 10 years, Hans Groth has been studying the interaction between global demographic change, economic development, wealth and societal stability. The focus of his research has built upon theories of economic development and productivity and employing the value of health as a sustainable tool to unlock new ways to tackle the imminent challenges of demographic change. His numerous publications as books, position papers and newspaper articles can be downloaded from www.demographic-challenge.com.

Since 2009, Hans Groth has worked as a guest lecturer at the University of St. Gallen/Switzerland with the topic “Megatrend: Global Demographic Change”. He is also Chairman of the Board of the Demographic and Ageing Forum (WDA) at the University of St. Gallen and elected member of the “Global Agenda Council on Global Population Growth” for the World Economic Forum (WEF).

Daniel M. Hofmann joined the International Association of Insurance Supervisors (IAIS) in April 2011 after retirement from Zurich Financial Services (Zurich) where he had been Chief Economist since 2001. The IAIS is the global body of

national insurance supervisors including more than 140 jurisdictions. Prior to Zurich Daniel Hofmann spent a productive career as financial editor for the Swiss daily news-paper *Neue Zürcher Zeitung*, which included a 9-year assignment as White House Correspondent in Washington (from 1985 to 2004).

Daniel Hofmann was also a docent for international monetary affairs at the Zurich Management School. He has published in international journals and contributed essays to a number of books. He was a member of the Economic Advisory Committee of the International Institute of Finance. Other professional memberships included the American Economic Association, the National Association of Business Economists (in the U.S.), and the Conference Board's European Council of Economists, which he chaired in the 2004/2006 period.

He received advanced degrees in economics from the University of Zurich in Switzerland and Brown University, Providence, R.I., (USA).

Meimanat Hosseini-Chavoshi is Research Fellow at the Australian Demographic and Social Research Institute in the Australian National University (ANU), and former Senior Officer of the Iran Ministry of Health. Meimanat Hosseini-Chavoshi obtained her Ph.D. in Demography from the ANU where she completed her Ph.D. thesis on Fertility Regulation in Iran, and undertook her post-doctoral research on Abortion in Iran funded by the Wellcome Trust.

Prior to her research at the ANU, she worked in the areas of population policies, reproductive health and family planning programs at the Iran Ministry of Health and Medical Education. She was focal point person for designing, implementing and data analysis of several national reproductive health surveys during the 1990s, as well as for the 2000 Iran DHS. She has been collaborating with Abbasi-Shavazi and McDonald in several research projects resulting in a number of co-authored publications including a book on *Fertility Transition in Iran: Reproduction and Revolution*. This book was published by Springer in 2009, and won the 2011 World Prize for the best book of the Islamic Republic of Iran.

Meimanat Hosseini-Chavoshi is currently working on a research project on the Projection of Social, Economic and Demographic Characteristics of Older persons in Australia funded by Australian Research Council (ARC) award through the Centre of Excellence in Population Ageing Research. She is also member of two research teams working on a comparative study of abortion in Iran and Indonesia funded by the World Health Organisation, and a newly ARC funded project on Demographic Consequences of Disasters in several Asian countries including Iran.

Terence (Terry) Hull is Professor of Demography in the Australian Demographic and Social Research Institute (ADSRI) and Adjunct Professor of the National Centre for Epidemiology and Population Health (NCEPH). In the latter position he holds the JC Caldwell Chair in Population, Health and Development. He researches widely across the full field of demography, including population dynamics, reproductive health, maternal and child mortality, sexuality and cultural determinants of population change. He concentrates his studies on Indonesia, but has also working in China, Vietnam, Thailand, Philippines and Iran. His most

recent work has been on issues of data interpretation in Asia, where he has been an adviser on problems of data in national censuses.

Shada Islam is Head of Policy at Friends of Europe, a leading independent think tank in Brussels. Shada is responsible for oversight of Friends of Europe's activities, including publication of policy briefs and the organization of conferences, seminars and roundtable discussions.

Before joining Friends of Europe, Shada Islam worked as Senior Programme Executive at the European Policy Centre.

Shada Islam has worked in Brussels for 25 years as EU, NATO and WTO correspondent for the Far Eastern Economic Review, Asia's leading weekly news magazine as well as chief EU correspondent for the English language section of the German News Agency, dpa.

She is an experienced journalist, columnist, policy analyst and communication specialist with a strong background in geopolitical, foreign, economic and trade policy issues involving Europe, Asia, Middle East, Africa and the United States. In addition to working at Friends of Europe, she is a regular contributor to Asian, African and Middle Eastern publications, including DAWN Newspaper (Pakistan), Business Times (Singapore), YaleGlobal (USA) and Bulletin (Belgium).

Shada Islam writes on issues relating to the EU, including foreign policy, security issues, economic and monetary union, immigration, institutional reform and enlargement. Other areas of expertise include global trade and the EU's growing network of links with foreign countries as well issues as related to European minorities.

Her extensive broadcast experience includes work for the BBC, Radio France Internationale and Radio Netherlands. She is a frequent speaker at international and European conferences and is a regular contributor to academic journals on EU foreign and security policy, relations with Asia, the WTO and NATO.

Gavin Jones is a demographer in the Asia Research Institute, National University of Singapore, where he is research team leader on the changing family in Asia. After working with the Population Council in New York, Thailand and Indonesia, he returned to Australia, where he was with the Demography and Sociology Program at the Australian National University for 28 years, serving as head of program for an 8-year period, and conducting research mainly on South-East Asia. He has conducted joint research with many colleagues on a wide range of topics in the broad area of population and development. More recently, his research focus has been on determinants of marriage and fertility, issues of ageing, cross-boundary marriage, and urbanization. In 2005, his book, *Islam, the State and Population*, co-edited with Mehtab Karim, was published by Hurst and Company, London.

Zeinab Khadr has a Ph.D. in population studies from the Population Studies Center of the University of Michigan in 1997. Her Ph.D.'s dissertation was entitled "Living arrangement and social support systems in Egypt." She is currently professor at the Department of Statistics, Faculty of Economics and Political Science and

Associate research professor at the Social Research Center of the American University in Cairo.

Her main areas of research are population aging and health inequities. In 2004, she acted as Co Principle Investigator of the research project “Aging, health and gender”, examining health status and access to health care service among aging population in Egypt. This study was the first study that incorporated both a comprehensive social study of the aging population as well as objective test of physical performance. The study covered a wide array of detailed self-reported health measures and access to health services. In 2005, she also was the principle investigator (PI) of the “Urban inequity study”, examining differentials and inequity in urban living arrangements within Cairo Governorate and their impact on individual’s well being in general and health in particular. In 2006–2009, she chaired the International Union of Scientific Studies of Population (IUSSP) scientific Panel on “Health Equity and Policy in the Arab World”. Main research interest is health inequity in the Arab region. In 2008, she was the principle investigator (PI) of the “Health equity and integrated health and poverty alleviation policies project” aiming at evaluating the health impact of different models and approaches adopted for poverty alleviation in Egypt including a pilot CCT program in a poor urban setting in Cairo Governorate and upgrading a poor urban squatter area in Cairo. She has many publications in the area of population aging and health inequities and gender differences in health.

Nabil Kronfol is a Professor of Health Policy and Management and the President of the Lebanese HealthCare Management Association, a not-for-profit professional association that focuses on the further development of policies and health systems in Lebanon and the MENA Region. He is also a co-founder of the recently established “Center for Studies on Ageing” in Lebanon and the MENA Region.

Born in 1944 in Beirut, Lebanon, Nabil Kronfol received the medical degree with the Penrose Award from the American University of Beirut (AUB) in 1969. Following residency training at AUB and at the Harvard Children’s Hospital in Boston, United States, Nabil Kronfol became a diplomate of the American Board of Pediatrics in 1972. Nabil Kronfol then joined the Harvard School of Public Health in Boston and was graduated with a Doctorate in Public Health in Health Services Administration.

Nabil Kronfol joined the American University of Beirut in 1974 and moved through the academic ladder to become full Professor, Chairman of the Department of Health Services Administration (now Health Policy and Management), Assistant Dean for Allied Health and finally Deputy Vice President for External Programs in Health.

While on the professional tenure, Nabil Kronfol established the College of Health Sciences in the State of Bahrain, four schools of nursing in the United Arab Emirates and the Planning Unit at Lebanon’s Ministry of Health. He also played a key role in the establishment of several faculties of Medicine and Public Health in the MENA Region.

Nabil Kronfol received the International McGaw Award in 1984, the Fullbright International scholar Award in 1985 and lately the Shusha Award from the World Health Organization (2007). He is a member and past president of the Alpha Omega Alpha Honor medical society and the Sigma Phi science society.

Nabil Kronfol served as chief advisor to Lebanon's Ministers of Health (since 1980), to the Minister of Health of the United Arab Emirates (1992–1995), and continues to be a frequent consultant to the World Health Organization, the World Bank, UNICEF, UNDP, ESCWA – in health systems design, human resource development, quality assurance and the health of the older populations. He was also one of the founders of the Arab Board for Medical Specializations. He served for 10 years as a member of the Board and the Chairman of the Program Committee of the Board of the Aga Khan University.

Ghazy Mujahid holds a doctorate in economic development from the University of Cambridge (UK). He has over 30 years experience working in an advisory capacity with the Government of Saudi Arabia and the United Nations. During the 1980s he taught at the Riyadh University in Saudi Arabia and was later an Advisor to the Manpower Council of Saudi Arabia and to the Deputy Minister of Planning. He started working with the United Nations as the Chief Technical Advisor for the Manpower Planning Project of the International Labour Organisation in the National Planning Council of Jordan. As a Consultant to the International Labour Organisation he prepared a study on the prospects of Asian workers in the GCC countries. He worked as a UN Advisor on population policy to the governments of The Gambia and Malawi. His last assignment before retirement from the United Nations was as Regional Advisor on Population Policies and Development for East and South-East Asia. He is currently based in Canada and is associated with the *York Centre for Asian Research*. His research has covered a wide range of population and manpower issues in the Middle East, Africa, East Asia and Southeast Asia. He has published extensively on the subject and his publications include *Population Ageing in East and South-East Asia: Current Situation and Emerging Challenges* (2006); *The Impact of Social Pensions: Perceptions of Asian Older Persons* (2008) and *Demographic Prognosis for South Asia: a future of rapid ageing* (2009), published by the United Nations Population Fund (UNFPA). His most recent works are “*The Senior Population in Peel Region (in Canada): Trends, Characteristics and Issues (1996–2006)*” published by the Social Planning Council of Peel and *Assuring Income Security in Old Age (Mongolia)* published by UNFPA-Mongolia in 2010.

Rainer Münz is Head of Basic Research (Erste Group) and Senior Fellow at the Hamburg Institute of International Economics (HWWI). He is an expert on population change, international migration and demographic aging. He earned his Ph.D. in 1978 at Vienna University. Until 1992 he was director of the Institute of Demography at the Austrian Academy of Science. Between 1992 and 2003 he was head of the Department of Demography at Humboldt University, Berlin. He was visiting professor at the Universities of Bamberg (1986), University of

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Rainer Münz has worked as consultant for the European Commission, the OECD and the World Bank. He served as an advisor to the Greek (2003), Dutch (2004) and Slovene (2008) EU presidencies. In 2000–2001 he was member of the German commission on immigration reform (Süssmuth commission). Between 2008 and 2010 he was Member of the high level “Reflection Group Horizon 2020–2030” of the European Union (so-called “EU Group of the Wise”).

Rainer Münz is member of several boards and advisory boards; among them: Brussels Institute for European and Global Economic Affairs (Bruegel, Brussels), Center for Migration, Integration and Citizenship at Oxford University (COMPAS, Oxford, UK), European Policy Centre (Brussels), European Forum Alpbach, Institute for the Danube Region and Central Europe (IDM, Vienna), International Metropolis Project (Ottawa-Amsterdam), International Organization for Migration (IOM, Geneva), SOT Accountants (Vienna-Graz-Munich), VBV Pension Insurance (Vienna), STUWO AG (Vienna), Vienna City Museum (Vienna), World Demographic and Aging Forum (WDA, St. Gallen).

Muhammad Ali Pate (born 6th September 1968) is Minister of State for Health in Nigeria. His appointment in July 2011 follows his success as the Executive Director of the National Primary Health Care Development Agency (NPHCDA), in Abuja, Nigeria. He also serves on the agenda committee of the World Economic Forum. Muhammad Ali Pate is an American Board-Certified MD in both Internal Medicine and Infectious Diseases, with an MBA (Health Sector Concentration) from Duke University USA. He also has a Masters in Health System Management from the London School of Hygiene and Tropical Medicine, UK. He is currently an Adjunct Professor of Global Health of the Duke University Global Health Institute. He is also a member of several International Expert Panels on Global Health.

Zeba Sathar is a Pakistani national who was educated in the United States and the United Kingdom (where she received her Master’s and Doctorate degrees) and elected to return and work in her own country. She has spent more than 15 years at the national premier research institution, the Pakistan Institute of Development Economics where she held the position of Chief of Research in Demography. She also has considerable international experience having worked with the World Bank, World Fertility Survey, the London School of Hygiene and Tropical Medicine and the Population Council in New York and in Pakistan. She has published widely in books and peer reviewed journals and has diverse academic interests in population ranging from the more pure demographic topics of fertility and mortality to issues of gender and their association with demographic processes. She has also worked extensively on education and poverty and their associations with demographic outcomes.

Zeba Sathar has advised and assisted the Government of Pakistan in formulating the Population Policies of 2002 and 2010. Currently working for the Preparation of 10th Five Year People's Plan 2010–2015 and Taskforce on Population as a National Development Priority in conjunction with the Planning Commission, Government of Pakistan, Islamabad. She was instrumental in forming the Population Association of Pakistan and was elected its President from 2002 to 2004. She is the first elected member from Pakistan on governing council of the International Union for the Scientific Study of Population (IUSSP). While living and working in Pakistan, Zeba Sathar has considerable international standing. She has worked with the Population Council from 1994 and is currently its Country Director in Pakistan. In recognition of her meritorious services to the development sector in Pakistan, she received the award of *Tamgha-I-Imtiaz* by the President of Pakistan on March 23, 2006.

Apoorva Shah is a Research Fellow at the American Enterprise Institute. A graduate of Rice University, he has been working in Mexico and Brazil with social entrepreneurship initiatives, and was awarded a Fulbright Scholarship, before joining AEI.

Abla Sibai is Professor of Epidemiology and Population Health at the Faculty of Health Sciences (FHS), American University of Beirut (AUB), the Chair of the FHS Research Committee and the founder and current Director of the “Center for Studies on Aging” in Lebanon. During the past 15 years, Abla Sibai has led the way to placing older adult issues at the forefront of the national agenda and in the region. Her interest in aging research falls in a number of interrelated clusters: socioeconomic position and health, household composition and living arrangements, care giving and elder abuse, social and psychological dimensions of aging, and chronic disease and risk factors focusing on cardiovascular diseases and obesity. She has been the principal investigator of a comprehensive survey of older persons' health in three impoverished areas of the outskirts of Beirut, the national Burden of Disease Study and more recently the Chronic Disease Risk Factor Surveillance national study in Lebanon. She is a member of several local, regional and international committees, groups and societies that advocate for older adults, promoting their cause in research, practice and policy. She is a frequent consultant to the Ministry of Social Affairs in Lebanon, WHO, UNFPA and ESCWA, and has frequently been commissioned to prepare technical papers, reports and briefs on population aging in Lebanon and the Arab countries from a social and policy perspective. She is currently co-leading the development of a new outreach program, the AUB ‘University for Seniors’, the first of its kind in the region. Abla Sibai is the author of over 150 scholarly articles in prestigious journals, book chapters and reports. She holds an MSc from the American University of Beirut (1986) and Ph.D. (1997) from the London School of Hygiene of Tropical medicine.

Alfonso Sousa-Poza holds a Professorship in Economics at the University of Hohenheim in Stuttgart (Germany), and is a Director at the Institute for Health Care and Public Management. He is also a lecturer in economics at the University

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Fatemeh Torabi is Assistant Professor at the Department of Demography of the University of Tehran. She obtained her MA in Demography from the University of Tehran, and completed her Ph.D. at the London School of Hygiene and Tropical Medicine. Her areas of interests are marriage, fertility and women's labour force participation. Her co-authored publication on fertility discussed the pathways by which different cohorts of Iranian women succeeded from one birth to the next in Iran. Jointly with Abbasi, Torabi is currently involved in the study of women's education in Islamic countries as well as an analysis of time use and family formation among women in Iran.