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Ages, Generations and the Social Contract

*The Demographic Challenges
facing the Welfare State*



Springer

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The Demographic Challenges Facing
the Welfare State

by

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FOREWORD

This book is a revised and updated version of the French book *Age, générations et contrat social*, published by INED in 2004.

Two chapters have been added to the French text: one by Ronald Lee, first published by *Genus* (volume LIX, No 3–4, July–September 2003, pp. 43–70) and another one by Jacques Véron and Sophie Pennec, prepared for this English version. We thank *Genus* for kindly authorizing us to include Ronald Lee’s text in this book. The paper by Patrick Aubert, Didier Blanchet and David Blau, replacing the text by Didier Blanchet in the French version, was first published in French by INSEE (“Le marché du travail après 50 ans. Éléments de comparaison franco-américaine”, in *L’Économie française. Comptes et dossiers*. Édition 2005–2006, pp. 3–23.).

Jacques Véron and Sophie Pennec

PREFACE

A Few Thoughts on the Concept of Social Contract and Equity Between Generations

I have been asked to preface this collection, yet my competence in the area of public and private transfers between generations is limited at best. I will therefore do so with suitable distance, taking refuge a long way upstream in the chain of concepts, in the manner of philosophers who conceal their ignorance of the social world by conveniently taking an elevated position. My intention is simply to propose a few general remarks on the concept of “social contract”, in the hope that they may help the reader of this book to set the different explanatory models in the context of a long intellectual history—always a useful exercise.

We know that the expression “social contract” did not exist before the publication of Rousseau’s essay in 1762. Historians of political thought and historians of language have certainly sought precedents, but in vain. Rousseau was indeed the inventor of the word and the thing, and that was one of the many facets of his genius. He apparently developed the idea of a social contract from his experience and readings. Initiated into maritime and commercial affairs during his time as secretary to the French ambassador in Venice, he was familiar enough with company law to know that an institution of Roman origin, the *pactum sociale*, allowed the partners in it to play at “lose to win”: each made his contribution in the hope that his sacrifice, joined to those of all the others, would produce common prosperity. Rousseau was also sufficiently versed in Latin to recall that, to the Romans, *socialis* could refer to the relationship between allies (*socii*), as in the Social War (the Republic’s war against her Italian allies in 91–88 B.C.). Rousseau also crystallised a general semantic shift that occurred in the eighteenth century. At that time the concept of “society”, while maintaining its commercial and fashionable connotations (one sought or fled “the society of one’s fellows”), began to appear increasingly frequently in the sense of society in general, as a totality in itself that incorporates individuals. This created ambivalences to dissipate. In *Essays on the Mind* (1758), Helvétius attempted to clarify these concepts by distinguishing “great society” from “small societies”, i.e. the factions and small circles that were an

obstacle to a general vision. By forging the concept of “social contract”, Rousseau played on the harmonics of a plural concept, which, from late Antiquity, had developed along parallel lines: *societas* could be commercial society, a pact of alliance, a bond of sociability, or a universal bond between men, a grand vision of humanity defended by the Stoics, who translated the Greek *koinônia* this way.

Rousseau was also a great reader, as Robert Derathé showed¹. The author of *The Social Contract* had read Huigh de Groot, alias Hugo Grotius (1583–1645), the Dutch legal scholar who fled to Paris at the same time as Hobbes, to write his treatise on the law of war and peace in Latin (*De jure belli ac pacis*, Paris, 1625). Grotius already spoke of a “social pact” as did his populariser and continuator, Puffendorf, whom Rousseau also studied carefully. Grotius recalled that the concept of a pact with the Sovereign had its origin in the roots of time: was it not a metamorphosis of the biblical concept of a Covenant contracted between a people and their God, a concept both military and religious, founded on a logic of give-and-take between two allies?

Nurtured on these references, Rousseau went further and innovated radically. In his scheme, who contracts with whom? And what are the clauses of the contract? Rousseau explained this with great clarity: each person contracts with himself and, by doing so, changes status. There is only one clause: I accept to alienate without reservation everything that I might have acquired in nature through force and, in return for that sacrifice, I obtain the civic guarantee of ownership, i.e. property. My personal identity is thus transmuted into a civic identity. Rousseau’s cause, as Ernst Cassirer explained well, was the depersonalisation of social relations. We must break the chain of personal dependencies to the profit of a civic and general bond, end the arbitrariness of individual judgements so that greatness and dignity are henceforth assigned and certified by the entire social body. Rousseau went as far as imagining, for example, that the reputations of authors, instead of being submitted to the judgement of salons and coteries, would be established within the Republic by a special jury charged with legitimately establishing reputations.

What becomes of the family bond, and more specially, the bond between generations in such a system? Rousseau’s ideas are not without ambivalence in this respect. But they generally remain within a simple dilemma. As long as the family bond perpetuates relations of dependence, it clearly stands in contrast to the civic bond. Conversely, if the family link leads to the emancipation of the individual, and in particular, the emancipation of the generation of children from that of their fathers, then it provides the best introduction to the civic bond and in that case, to use the terminology of Boltanski and Thévenot, there is no contradiction between the “domestic city” and the “civic city”.

Under the Revolution, the Conventionals debated that principle and raised an interesting question: must the social contract, which redefines the horizontal bonds between members of the same society as a civic bond, also apply to the vertical bonds between generations? Tangibly, does the State have any say in the transmission of inheritance? After fierce debates, the revolutionaries reached a compromise: in theory all property handed down from parent to child should by law pass to the State, which would redistribute it. However, because it was necessary to preserve “the tranquility of families”, the State agreed to pass parents’ property on to their children after levying its share. It is necessarily the State that mediates the transmission of inheritance. The Civil Code was embryonic in this first debate; it proclaims the rights of forced heirs and limits testamentary freedom.

In the Anglo-Saxon tradition, whether Hobbes or Locke, the social contract takes quite another form. It is not each individual that contracts with himself, replacing the natural self with the civic self and thereby the chaotic mass of individuals with the sovereign people. In Hobbes’ system, each person contracts with his relatives, neighbours and partners of every kind; he must convince them all to renounce the use of force and reserve it for the monarch. The supreme goal of the social pact in *Leviathan* is not to abolish bonds of personal dependence, but to multiply them and make them reciprocal, which is the only way to ensure each person’s security. If you guarantee me, dear neighbour, that you will renounce the use of violence against me, I assure you that I will do the same for you and we will both be able, by common agreement, to entrust ourselves to the sovereign to ensure our security. The social contract in Hobbes is the consequence of an infinity of pacts between individuals. The sovereign simply reaps the benefit without being himself a party, which gives him unequalled power: he is not bound by contractual obligations.

What Locke introduced into this scheme was the existence of natural rights that are exempt from the social contract. Rousseau’s single clause said that it was necessary to alienate without reservation all one’s particular desires to the profit of a general desire. For Locke, that is impossible: there are natural inalienable rights that are exempt from the social contract, a reserve of individual rights with their basis in nature. They include the right to own property and freedom of conscience, which must not be given away to the Sovereign but which, on the contrary, the Sovereign must guarantee. In this sense, the Declaration of the Rights of Man and of the Citizen, which preserves the right to own property and the right to security, is closer to Locke than to Rousseau. Not that Rousseau neglects individual rights—far from it—but he presents them as the result of the contractual construct and not as a reserve that predates the contract. Family bonds are directly concerned. Among the rights that Locke includes in the reserve is the right to use and enjoy one’s property as one sees fit.

To conclude, I would like to say a few words on the concept of equity, and more specifically, equity between generations. Rousseau says clearly that the social contract cannot be viable if the inequality of conditions is excessive. He was convinced, as the letter to Malesherbes also indicates, that the kingdom of France under Louis XV was too marked by hereditary inequalities to offer the conditions required by the social contract. His writings on the subject are nevertheless limited. Rousseau did not express the question in the terms that Rawls did, i.e. can there be “fair” inequalities and to what extent are they legitimate?

On this point, we are stuck by how late and how recently the issue of inequality between generations² emerged. We only recently acquired the means of comparing the lot of successive generations over several decades, by using longitudinal or quasi-longitudinal series kept by statistical offices. Inevitably, we find that access to goods of all kinds has been unequally distributed between generations: the possibility for women to complete full careers, the ability to enjoy a decent retirement, to enjoy a certain level of income and consumption, and to avoid unemployment. But are the inequalities between generations unjust? Is there any point in comparing the lot of human groups that were not born at the same time and could not have had the same experiences or benefited from the same inventions and achievements? Moreover, if I embark on such a comparison, could I not also deplore the advantages that future generations will enjoy and that I am denied? With a difference of only a year, a cohort can be conscripted or avoid going to war—a radical injustice, if there is one.

Of course, the denunciation of inequalities between generations is not triggered by the observation of inevitable differences related to the mere passing of time and technological progress. It arises when a generation’s hopes of advancement, based on the advancement obtained by previous generations, are disappointed. It becomes particularly acute when the new generation feels it has been disinherited by its elders, whether deliberately or through negligence. Therefore, should we use social engineering to control the transfer of benefits from one generation to another while providing for a form of continuity to smooth the alternation between phases of growth and phases of recession? Must we, for example, endeavour to even out the burdens shouldered respectively by large and small generations, once the parenthesis of the baby boom has closed? Must we try to restore equality between generations that has been upset by the impressive extension of life expectancy? If the answers are affirmative, should the longer-term view that demographic forecasting offers lead to a form of contractualisation that would play the same founding role for the succession of generations that the social contract plays for the horizontal community of citizens? These questions are too serious to be left to philosophers. It is time to invite the reader to

come back down to earth and examine the problems and possible solutions more concretely, as we have invited the authors of this book to do.

François Héran
Director, Institut National d'Etudes Démographiques

NOTES

1. Robert Derathé, *Jean-Jacques Rousseau et la science politique de son temps* (Paris, Vrin, 1974, 2^e éd.).
2. Louis Chauvel, *Le Destin des générations* (Paris, PUF, 1998).

INTRODUCTION

JACQUES VÉRON, SOPHIE PENNEC, JACQUES LÉGARÉ

For several decades developed societies have simultaneously experienced changes in families, transformations of the labour market and ageing of the population. These changes have put to the test the social contract linking individuals by modifying relations between age groups at a given time, as well as between generations within a longer time frame (Wise, 1997; Masson, 1999; National Research Council, 2001).

Family ties are distending, whereas it is more and more frequent for four or five generations to coexist, and traditional forms of solidarity are being called into question. Therefore, how must society adapt? And which adaptations will be possible? To what extent and in what conditions will the Welfare State be able to continue to provide satisfactory social protection in a society where the number and proportion of non-working persons is growing substantially? If progress in the fight against mortality results in a high increase in life expectancy at the age of retirement, which options are politically conceivable and socially acceptable to stop the increase in the cost burden on the working adult population? It is possible, when observing current trends in our societies, to formulate things simply: “Who should look after whom” and “who should pay for whom”? It is also important that the necessary adaptations should not be made to the detriment of certain categories of the population and that they should not increase social inequalities. Equity between generations must also be maintained.

Changes within the family and in the labour market, the increase in the number of elderly people and forms of solidarity interact. How are families reacting, for example, to growing unemployment among young people? What help do parents provide when their children are experiencing problems finding a first job? The greater number of women in the labour force means that their experience in terms of independence is different from that of older generations. Elderly persons are consumers of health care and in that respect they represent a burden on the welfare system, however, at the same time they are able to provide support to their children and grandchildren when necessary (child care

and financial help). As a consequence, all of the relationships between family, work, ageing and social welfare must be taken into account in order to conceive possible changes in social protection systems.

At the level of the planet, patterns associating family, labour force and age structure vary greatly (Kinsella and Velkoff, 2001). At this level of analysis developed countries seem to form a very homogeneous group. However, if the focus is changed, it becomes apparent that beyond largely comparable evolutions there are disparities and singularities. Thus, the proportion of women without children differs from one country to the next; similar global fertility rates may be attained with different distributions in terms of sizes of families (Légaré and Alix, 2004). In the same way the rate of cohabitation out of wedlock or of female labour force participation varies between countries. These special national configurations should be taken into consideration. They show that there is no single social welfare model to be held up as a permanent reference but family and social “arrangements” which condition the relative importance of family and social solidarity.

DEMOGRAPHIC, ECONOMIC AND SOCIAL DYNAMICS: WHAT KIND OF INTERRELATIONSHIPS?

A Plurality of Approaches, Actors and Roles

There are different ways of considering social dynamics and their interactions with population changes. The focus may be centred on the role and the respective responsibilities of the family and of the State in support given to individuals. These questions may also be treated in terms of gender relations: do the behaviours of men and women in the labour force converge? For the same work is there equal pay? And what are the mechanisms which lead to discrimination between men and women at work? Since many more women than men find themselves alone later in life, how do they experience loneliness in old age? What are the proportions of working and non-working people in the population and what role does age play (Guillemard, 2003)? Other elements may also be taken into consideration. How do the perspectives of employees and companies regarding the labour market compare? It is now apparent that the system of early retirement in France, which increased the cost burden on society, had no effect in creating employment for the young, thus showing that a purely arithmetic approach to the dynamics of the labour market is not relevant. Distinguishing work from capital is another way of approaching this issue of social protection or, more specifically, the balance between pension schemes (a great deal of research has been done on the respective advantages of the pay-as-you-go and fully funded pension schemes).

Yet another approach consists of addressing these questions from the perspective of age (changes in the age at which individuals enter and leave the labour force) and of generations (long-term impact of variations in the dependency ratio).

The actors are apparently diverse. Individuals, families, companies and State do not pursue the same objectives and their actions may be set within different time frames. When interests diverge, the different actors are led to confrontation and/or cooperation. An actor may also play diverse roles; this is especially the case of the institutions of State and family.

Each society constitutes a whole and these different approaches should be complementary rather than mutually exclusive. Moreover, if there are no strict “demographic determinants” of social change, an overall view taking interactions into account is needed.

Determinants or New Contexts?

Population ageing undoubtedly creates a radically new economic and social context. The resulting increased cost of social protection is partly responsible for the crisis experienced by welfare States. According to some people, this crisis is all the more acute since the societies concerned are becoming increasingly individualistic. At the same time, the role of elderly people in society is changing. Ageing is no longer an exogenous phenomenon; it is in itself the consequence of two major population changes: fertility decline and decline in mortality at older ages. These two phenomena contribute towards changing economic, social and political contexts¹.

The main relations between population change, economic change and social change appear to us more as relations of interdependence than simply of dependence; therefore the aim in this book is not only to present the possible or probable consequences of population ageing but to also situate the future of solidarities within a more general framework by looking at overall configurations and their dynamics.

One way of ignoring the complexity of the situations, apart from the preference granted to unambiguous relations in analysing change, is to consider that what is possible is most probable. We therefore know that the population dependency ratio will increase considerably in coming decades. The Charpin Report (1999), in its chapter on the effects of ageing on the economic balance of the retirement system in France, refers to the projection of the number of persons aged over 60 for one person of working age (20–60 years): 0.7 in 2040 compared with 0.4 in 2000. The increase in this demographic ratio clearly reflects the ageing of the population. However, these possible evolutions remain partly uncertain even though there is strong inertia; they depend on the

validity of fertility, mortality and migration assumptions. It is difficult to forecast population changes such as those of fertility and migrations for the next 40 years. Moreover, although the population dependency ratio presents the advantage of being precisely defined, it suffers from an overestimation of the importance of age in the distribution between working and non-working people. The age of 60 is a threshold which is largely dependent on decisions made by a given society. If one substitutes the economic dependency ratio for the population dependency ratio, it is easier to understand the evolution in the burden of the non-working population. But projections over several decades appear to be even more risky. How will the labour force participation of men and women and namely the ages at which they enter and leave the labour force evolve? What will the unemployment rate be in twenty or thirty years? Will developed countries resort in a substantial way to the immigration of foreign workers?

In the same way, family changes cannot be considered solely from the point of view of their consequences. Families are changing and the number of four or even five-generation families is increasing (? , ?). But the fact that this type of family is becoming more widespread because of the decline in mortality at older ages does not, at first glance, have any impact on changes in family relations: this increase in potential relations may not be accompanied by an increase in effective relations. Linda C. Martin and Susan Culter (1983) demonstrated, in the case of Japan, that the very high increase in the likelihood of belonging to a three-generation household, linked to a decline in fertility and mortality, was accompanied by a lower frequency in cohabitation between generations. To explain this change not only external factors may be invoked, such as urbanisation (the small size and high cost of housing), but also an interaction effect: with the decline in mortality, coexistence between three generations became more frequent, which might make cohabitation less acceptable.

On the other hand, not belonging to the same household does not imply an absence of ties within the extended family. As a consequence such cases involve social interactions and not simply demographic determinants.

The Decline of the Family or a New Family?

In developed countries, the family has undergone in-depth changes with the calling into question of marriage, the development of cohabitation, the increase in the number of births out of wedlock, the increase in divorces, and the increase in the number of one-parent and reconstituted families. Also noticeable is mobility between the different forms of families during the life cycle of individuals.

The family is changing. But what does the future have in store? What is, for example, the nature of the relations between the members of

a reconstituted family? Frances K. Goldscheider and Linda J. Waite (1991) showed, in their book *New Families, No Families*, what they believed to be the two evolutions of the family. The first one concerns the family from the inside and the second from the outside. In one case, according to the authors, one might talk of new families: the roles were changing within the family, men and women starting to share financial responsibilities and domestic tasks. The second revolution within the family, this time extreme, led the two authors to question the very existence of the family. This revolution results from unmarried adults living apart together. It is, in a way, an “alternative to change” since it enables men and women to avoid marriage and parenthood, or even living in families. The objective therefore is to know whether the family is changing or if it is tending to disappear as a core institution in societies. The stakes are high in terms of solidarity. But to answer such a question it is crucial to have data which gives an account of the reality of the exchanges within families (Attias-Donfut, 2000). What about support given to descendants and ascendants? Do parents or grandparents help children or grandchildren by providing financial support or accommodation when they are looking for employment? Do the grandparents contribute to the care of the grandchildren? What is the effect of divorce on intergenerational transfers? There are many answers, especially since responsibility for the care of the very young or of the elderly varies, according to the countries, between the public and private spheres.

Another key question for the future dynamics of systems of solidarity and exchange is that of the future of work.

The Labour Market: Scarcity of Supply and Demand?

A number of authors have asked whether societies should deal with the scarcity of jobs or with that of workers. It is not possible to speculate on the future social contract without addressing the question of the future of work, especially the question of future changes in the amount of time spent working and of the distribution of work.

The substantial use made by French companies of the system for early retirement was justified from a macro-economic point of view by the idea that jobs were rare and that for young people to be given employment the older workers had to stop working. The benefit for companies was only to rejuvenate their age structure, even without hiring new workers, or simply to reduce the number of employees. The cost burden that this corporate policy incurred would have been justified only if it had reduced unemployment among young people. But the competition between young people and older adults in the labour market was not as direct as initially thought since the jobs “freed” by the older workers

did not go to the young people entering the labour force. There was simply a general reduction in the number of people employed and companies made adjustments they judged necessary for reasons of international competitiveness, for example, by charging their cost to society globally through the welfare system.

The history of work also shows that the working population cannot be identified over a relatively long period as the “population of working age”, defined according to age only. Olivier Marchand and Claude Thélot (1997) showed, in the case of France, how the working population evolved between 1800 and 2000, under the effect of population change it is true, but also, and to a substantial degree, because of the variation in labour force participation rates and immigration. Between 1968 and 1990, the increase in female labour force participation would thus have swelled the ranks of the working population, had the participation rate of the under 25s and the over 55s not dropped sharply over the same period. The transformation of employment during these two centuries also took on other forms: increase in purchasing power of the average wages, reduction in working hours, the development of the service sector, etc. The demographic dependency ratio appears as a very rudimentary indicator when it comes to evaluating the effective cost of the economically inactive population.

However, if the future of social protection depends largely on future trends affecting work, no system can be sustainable unless it satisfies the constraints of intergenerational equity.

Ageing, Solidarity and Equity

The growth of the elderly population increases expenses in health care and pensions. This raises two questions. How can sufficient income for elderly people be ensured, given that the standard of living is largely determined by the amount of the retirement pensions and by the way health care is funded? How can these expenses be financed without an excessive increase in the cost supported by the working population?

It is a known fact that population ageing has made pension reform necessary, especially since the large baby boom cohorts will soon start leaving the labour market. Didier Blanchet (2002) redefines the different ways of avoiding a structural imbalance of the pension system. Increased productivity yields, even though substantial, remain neutral if the objective is to maintain relative purchasing power instead of absolute purchasing power for pensioners. In fact certain reforms, in France as well as abroad, result in “a progressive decline in pensions compared with the average income of the working population”. To compensate for this loss in income, individuals are therefore forced to save more and/or to prolong their working life.

The question of pensions may be considered from the three parameters of contributions, benefits and age at retirement, as well as from the standpoint of the relative importance given to the pay-as-you-go or fully funded schemes. But the problem may also be approached from a wider angle, as Xavier Gaullier does (2003) through the “organisation of social times throughout the different ages of life”.

Societies must therefore be capable of establishing a durable system of social solidarity that reduces inequalities and ensures respect for equity between generations. The requirement for solidarity could involve, for example, a guaranteed income for all individuals, so as to protect people from unemployment or poverty. The requirement of social justice should reduce socio-economic and gender inequalities. The problem is posed in partly different terms: the poorest social groups combine, compared with higher social categories, lower pensions and lower life expectancy at the age of retirement. There is therefore no actuarial neutrality, since those who may hope to live longest are those who have the highest pensions. Gender inequalities present different aspects: the women of older cohorts generally have a lower income than men, though their life expectancy is higher. Equality is not ensured if some cohorts benefit from very favourable conditions due to the development of the pay-as-you-go system and low unemployment, whereas more recent cohorts combine problems of entering the labour force and increasing social security contributions.

The future of solidarities in developed countries will therefore depend on the way that family changes, transformations of the labour market and population ageing interact. The primary objective of this book composed of contributions from researchers from different disciplines (demographers, economists, sociologists, law experts, etc.) is to gain a better understanding of how the social contract may be affected by these interactions.

INTERACTION BETWEEN FAMILY AND SOCIAL SOLIDARITIES

This book *Age, Generations and the Social Contract* is divided into five parts. The first is a presentation of the background of intergenerational relationships in an historic perspective and of the current similarities/dissimilarities among developed countries as far as the future of the social contract is concerned. The second part is dedicated to theoretical aspects of the dynamics of solidarity systems and focuses mainly on aspects concerning work. The third part deals with relations between generations within families whilst the fourth part examines questions of redistribution. The changes occurring in social times are dealt with in the fifth part of the book.

Changing Background of Intergenerational Relationships

The first part of *Ages, Generations and the Social Contract* introduces the question of intergenerational relationships, focusing on historical changes and current geographic disparities. In the first chapter, Ronald Lee examines the way redistribution of resources changed through time. He pointed out three dimensions of change: a modification of the shape of the economic life cycle, an alteration of the institutional context of transfers between age groups, a transformation of the age distribution of populations. The effect of this three-dimensional change is a shift of net transfers from top-down to bottom-up, with the elderly receiving from the young (the adults) more than they give. Ronald Lee then examines policy options in terms of support for the elderly and recalls that it is after all a matter of choice, so long as choices are made in “an informed and undistorted way”.

When we compare the demo-economic situation of developed countries nowadays, we conclude that all are faced with family changes and population ageing that challenge the social contract linking the different generations. In the second chapter, Jacques Véron and Sophie Pennec focus on dissimilarities, beyond the major similarities first observed, resulting in national characterization of this issue of the future of intergenerational relationships. The background of these relationships may therefore be looked at from the viewpoint of unity or of diversity, depending largely on the scale of observation.

The second part of the book considers more theoretical issues.

Generations, Social Contract and Labour Force Participation: Theoretical Issues

As an opening to the second part, André Masson gives us an introduction to the economics of the intergenerational issue through two questions concerning the “optimal” level of the redistribution from working generations to the benefit of those who are “dependent” (young or retired) and on the priorities assigned to the Welfare State: to what extent should children, families and the elderly benefit from the resources of the State? A first approach is based on generational accounting and raises, for example, the question of whether older generations have contributed little and consumed a lot. This is the approach of Laurence J. Kotlikoff. In this case State intervention has perverse effects. In a radically different approach, Gary S. Becker considers that although redistribution is high, it remains “balanced” due to dynastic altruism. Pursuing the discussion further, André Masson analyses the different typologies of the Welfare State proposed by Gøsta Esping-Andersen.

The increased cost of the non-working population is one of the arguments put forward to demonstrate the negative consequences of population

ageing. However, on the one hand, the sharing of work according to age is not an intangible aspect, it is socially constructed (Légaré and Desjardins, 1987) and, on the other hand, one should not think only in terms of a sharing of work at a given time but also in terms of life cycle. Bernard Perret therefore studies the modalities and conditions of a reorganisation of the work cycle which is no longer “standard”, in three stages (education, work and inactivity). Bernard Perret shows that the work-retirement transition may take a variety of different forms and he evokes “a right to personal fulfilment coupled with a duty to make oneself useful to society”.

The evolution of the dependency ratio, although not defined in “demographic” but in “economic” terms, depends partly on labour force participation among the 55–64 age group. Patrick Aubert, Didier Blanchet and David Blau compare the supply and demand of older workers in France and United States. From the experience of these two countries, they focus on the way activity responds to the cost of labour (in relation to age-productivity) and examine the effects of the different welfare schemes and policy measures to compensate wage loss.

As a conclusion to this theoretical part, Pierre Pestieau presents the evolution of the effective dependency ratio and the factors behind the declining trend in age at retirement. Adopting a more normative point of view, he addresses the issue of optimal age at retirement, which is complex if health inequality and asymmetry of information between insured and insurers is taken into account. He then considers age at retirement from the angle of political economics.

The third part of *Age, Generations and Social Contract* is dedicated to families and intergenerational relations within them.

Families and Relations Between Generations

Considering the case of Quebec, Renée Joyal looks at the paradoxical changes in the relations between grandparents and grandchildren. On the one hand, a new act introduced in the Civil Code is aimed at consolidating personal relations between grandparents and grandchildren, on the other hand, an act relating to the maintenance obligation for relatives has been repealed. She retraces the principal stages in the evolution of relations between grandparents and grandchildren, explains the reasons behind the apparent contradiction between legal measures and relates these changes to the future of the family and the protection of children.

In the research on ageing, “elderly people” are often considered as a homogenous category. We know that this isn’t the case. Jenny De Jong Gierveld distinguishes between the integration in the family networks of the “young-old” and of the “old-old”, the former living independently and the latter possibly

needing help. Questions of solidarity are therefore not posed in the same terms for these two sub-groups. She also focuses specifically on the population of the “young-old” in the Netherlands and examines their family environment, which conditions the expression of solidarities.

A simplistic analysis of changes might lead to only comparing generations with different behaviours. In the case of Spain, Constanza Tobío shows that grandmothers may be differentiated from mothers in their attitudes concerning work, but that it is more interesting to note that grandmothers actually provide support to their daughters in helping them reconcile work and family life. Constanza Tobío concludes therefore that grandmothers play a fundamental role in the intense changes in labour force participation among women in Spain.

The extent to which elderly people are concerned by intergenerational changes depends on the availability of close relations (grandparents, parents, brothers and sisters, children and grandchildren). Using British data, Emily Grundy studies sensitivity to socio-demographic variations in kin availability and focuses on different forms of intergenerational exchanges such as co-residence, contacts and support provided by adults for their elderly parents.

Leaving the labour force is a major step in an individual’s life. Based on the results of a cohort panel survey “Transitions from working life to retirement”, Christiane Delbès and Joëlle Gaymu study the way solidarity behaviours evolve when pensioners get older. In the fifteen years following transition to retirement, persons interviewed have had the opportunity to experience different family events, such as the death of close relatives or becoming grandparents. The two authors analyse the impact of these events on family solidarities in terms of contacts and exchanges of services.

Relations between generations may be approached, as they are in this part of the book, from the angle of the family, they can also be approached from the angle of society as a whole. This is the objective of the fourth part of the book.

Redistribution and Intergenerational Equity

As institutionalised systems for the redistribution of income between generations, pensions schemes partly determine the standard of living of elderly people in industrialised countries. To compare the redistributive effects of pension schemes in different countries, Christina Behrendt uses data from the *Luxembourg Income Study*. This enabled her to observe that sources of income for elderly households are varied and that although the composition of the income of these households differs according to countries, these differences are smaller than may have been initially believed.

Are these systems of public solidarity, which organise a redistribution of income, equitable? To answer such a question one must, first of all, define this notion of equity. Then one must consider the evolution of public expenditure from the two angles of intergenerational equity and social solidarity. This is what Hervé Gautier does in the case of Quebec. The author also raises the question of the long-term consequences of changes in social spending and on how to fund it.

Using Canada as an example, Susan McDaniel considers the question of intergenerational equity. According to this author, to only take into account public transfers between major age groups is to take too restrictive an approach to this issue of equity: the social contract between generations does not only boil down to public transfers within the framework of nation States. In particular, what relates to the private sphere must be considered. For Susan McDaniel there is “continual tension between the perceptions and the realities of intergenerational questions”.

The fifth and last part of this book examines temporality, a fundamental issue in the expression of solidarities.

Social Times and Age at Retirement

The development of a 24-hours economy, the consequence of the increase in demand for salaried employees to work in the evening, at night and during the weekend, has major effects on family life. Using survey data, Harriet B. Presser reveals the increasing importance of nonstandard working hours in the United States and examines its effects on dual-earner couples or on one-parent families where the adult is a woman. She also notes that observable tensions between working time and time dedicated to family life are likely to increase in future since in the United States an increase in evening and night work is expected.

This question of time in the work-family balance is the object of another chapter written by Evelyne Lapierre-Adamcyk, Nicole Marcil-Gratton and Céline Le Bourdais. The data used by the three authors come from Quebec, from a longitudinal survey conducted in Canada on children and young people. Dual-earner families have become the norm in evaluating economic well-being. But the problem is that the search for this economic wellbeing, even if it is limited, can lead to or constrain the parents to adopt work schedules that conflict with family time and therefore represent an important source of stress.

Finally, the last chapter in the book deals with Canadian transition cycles towards complete retirement. Its author, Leroy O. Stone takes a wider framework of reference than that of the transition towards retirement and examines the modalities of the “cessation of all types of activities”. This approach provides a useful complement to that centred on the transition from paid work to retirement

since it makes it possible to take into account the use of time. Leroy O. Stone writes, “A person retired from all activity does no paid work or unpaid work for organisations, neither does he or she do unpaid work for family or friends”. This wider notion of retirement has the great merit of going beyond the strict framework of the market economy and enables more detailed analyses of what it means to go into retirement.

Far from claiming to be a synthesis of the intergenerational issue which is, as we all know, highly complex, this book *Age, Generations and Social Contract* seeks to analyse in greater depth the interactions between population dynamics, economic evolutions and social changes from the perspective of international comparisons. The latter have the merit of showing, beyond considerations concerning solidarities, whether catastrophic or reassuring in nature, the real constraints and room for manoeuvre in the balance between solidarity and equity that our societies are constantly obliged to maintain.

NOTES

1. To what extent is women’s participation in the labour force linked to family changes? (Cf., for example, in the case of France, Véron, 1988).

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PART I

CHANGING BACKGROUND
OF INTERGENERATIONAL RELATIONSHIPS

CHAPTER 1

DEMOGRAPHIC CHANGE, WELFARE, AND INTERGENERATIONAL TRANSFERS: A GLOBAL OVERVIEW

RONALD D. LEE

1.1 INTRODUCTION

Redistribution of resources across age has always been centrally important throughout human history, but the circumstances have changed in fundamental ways. First, the shape of the economic life cycle has changed, altering the dependent life stages. Second, the institutional context of transfers to fund these stages of dependency has changed. And third, the shape of the population age distribution has changed, which alters the relative weightings of dependency and surplus production. Change in all three dimensions continues and will doubtless continue throughout this century. I will take a broad historical perspective on these changes and discuss their interaction.

1.2 THE CHANGING SHAPE OF THE ECONOMIC LIFE CYCLE

1.2.1 Hunter-Gatherers

Human evolution took the distinctive path of prolonged and heavy investment in children during a period of dependency which apparently lasted for about 20 years, according to studies of contemporary hunter-gatherer groups (Kaplan, 1994; Kaplan and Robson, 2002). To raise a child to this age, including wastage of resources through premature death, took food calories equivalent to about ten years of adult consumption, in addition to the time spent carrying,

guarding and instructing the young. At the other end of the age scale, people continued to produce resources in excess of their consumption into old age, transferring the surplus to their children and grandchildren. The elderly might experience a short period of dependency before dying, with death sometimes coming at the hands of younger members of their group (Kaplan, 1994; Hill and Hurtado, 1996). However, there was no stage of the life cycle corresponding to retirement as it occurs in some agricultural populations and in modern industrial populations. The direction of transfers of food was strongly downward, from older to younger people. Calculation reveals that the average population-weighted age at which a food calorie was produced in these groups was 34 years and the average age at which a calorie was consumed was 23, so that the downward direction of the flow was very pronounced (for a discussion of the interpretation and significance of such average ages, see Willis, 1988, and?, 1994 and 2000).

1.2.2 Agriculture

As settled agriculture replaced hunter-gathering, property rights were established and ownership of land, dwellings, livestock and other goods became widespread. Much property was owned by the elderly, providing an enduring source of power and control. Perhaps because of this, many contemporary intensive agriculturalists do have a life cycle stage of retirement (Mueller, 1976; Stecklov, 1997). The elders might contribute childcare, managerial skills, specialized knowledge and various home production tasks, and it is therefore difficult to assess their economic contribution. However, taking estimates of labor and time use at face value, it appears that resources are transferred from adult children to their elderly parents, often facilitated by co-residence. In surveys administered to Third World agricultural populations around the world, people often list support in old age as a leading reason for having children. At the same time, children in settled agricultural societies become net producers at a younger age than in hunter-gatherer groups and appear to be far less costly to raise. Nonetheless, empirical analysis shows that the net direction of transfers in agricultural societies is also strongly downwards, from older to younger, in every society so far examined (Lee, 2000; Stecklov, 1997; Lee and Kramer, 2002). This downward flow results not only from the shape of the economic life cycle, but also from the young age distribution of the population. Although this result appears to contradict Caldwell's (1976) earlier views about wealth flows, the contradiction may be more apparent than real, since a broader view of children's contributions might change the picture.

1.2.3 Industrialized Societies

Studies of labor force participation rates in the nineteenth century for a number of the currently industrialized countries show that men continued to work to quite old ages (Costa, 1998). It appears, therefore, that full retirement was not a major factor in either the agricultural or the industrial sectors of these countries before the late nineteenth century. For 1900, the male age at retirement in the US has been estimated at 74 years (Burtless and Quinn, 2001; estimated as the age at which the participation rate first falls to 50%). During the twentieth century, and most notably in its second half, this situation changed rapidly. Throughout the industrial world retirement ages were falling (Gruber and Wise, 1999), often by five years or more since the 1960s, and more than this since 1900.

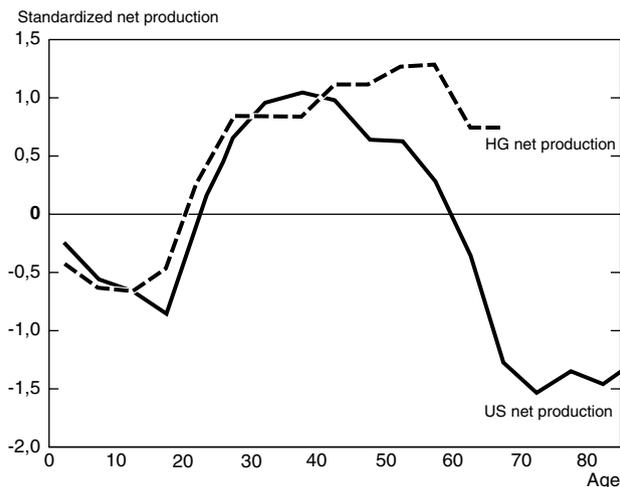
At the younger ages of the life cycle, children were sometimes drawn into early and heavy labor in manufacturing. However, in the longer run education grew in importance and crowded out child labor. Children returned to a longer and more thorough-going stage of dependency while society invested in their human capital.

What was the net effect of increased child dependency together with longer and more complete withdrawal from the labor force by the elderly? A calculation of the average ages of production and consumption for individuals in the US around 1990 shows that now the net direction of flows has shifted from downward to upward. These average ages reflect both the underlying age profiles and the population age distribution. Similar calculations done at the household level also show upward flows in England and Japan, as well as in the US (Ermisch, 1989). This is a sea-change, and it is likely that the change will be strengthened in coming decades as the populations age further.

1.2.4 Comparisons Across Technological Stages

We can compare the economic life cycle in the contemporary US to the average life cycle for the three hunter-gatherer groups studied by Kaplan (1994). To standardize for the vastly different scale of production, I have divided all age schedules by the average level of consumption for individuals at ages 0 to 49. Figure 1.1 shows the result, plotting standardized net production against age. We see that the standardized age profiles are very similar for children and that they continue to be quite similar for adults, up until age 40. After this, net production remains high for the hunter-gatherers, while it drops in the US, becoming increasingly negative after age 60. This divergence of the life cycles at older ages is due in part to the emergence of retirement as a

Figure 1.1. Standardized net production by age for contemporary US and the average of three Amazonian hunter-gatherer groups



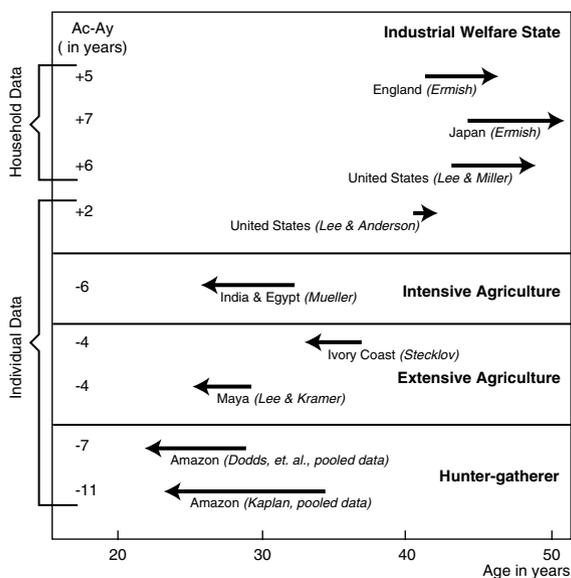
Note: Profiles were standardized by dividing by the average level of consumption below age 50.

Sources: Kaplan (1994) and Lee (2000).

life cycle stage in the US, in part to rising consumption throughout the life cycle in the US, and in part to its lower fertility which means that older adults no longer have children to support and can consume a larger share of their earnings. This life cycle pattern would hold for most or all industrial populations today.

It is also revealing to summarize the direction of resource flows across age in populations at differing technological stages, using an arrow diagram. The tail of the arrow is placed at the average age of producing, and the head at the average age of consuming. These average ages are calculated by weighting the original age schedules by the population age distribution (Willis, 1988; Lee, 1994, 2000) and therefore reflect both the population age distribution and the shapes of the age schedules. Figure 1.2 plots the arrows for hunter-gatherer groups, agricultural groups, and the industrial states, both on an individual basis and by age of household head for the industrial states. When the arrow points to the left, down the age scale, that indicates that the net direction of transfers is downwards from old to young, and conversely. The diagram clearly shows the shift from hunter gatherer groups and agriculture to the current industrial situation.

Figure 1.2. Comparative direction of reallocation of income

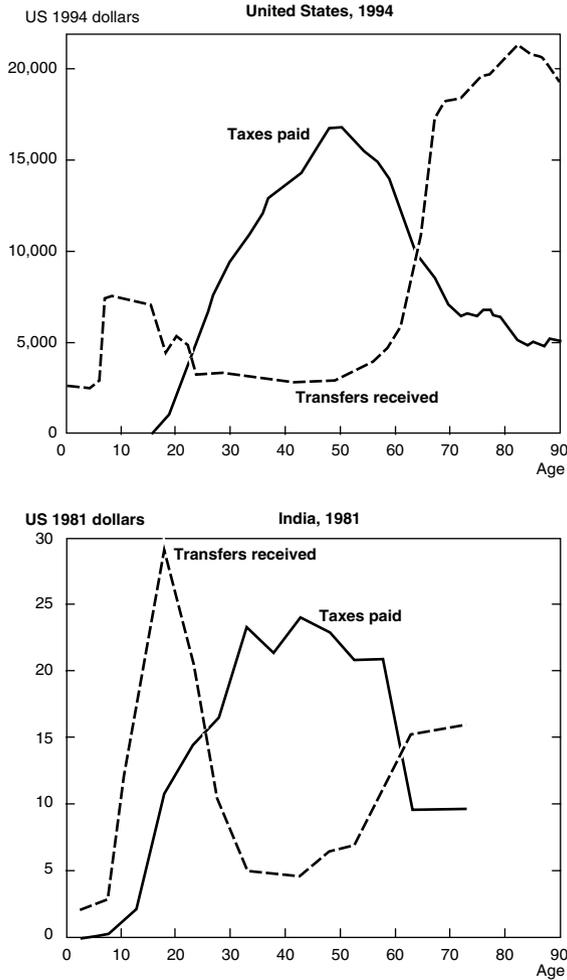


1.3 THE CHANGING INSTITUTIONAL CONTEXT OF TRANSFERS

Hunter-gatherers shared resources within small groups of related families. For example, the hunter-gatherers studied by Kaplan shared food with three or four family households living in clusters. Such sharing evened out random variations in success in foraging for food and thus accomplished horizontal redistribution and served a kind of insurance function. It also redistributed resources vertically, particularly from adults to children, but also on some occasions to the elderly (Simmons, 1945). In these groups, child rearing is a broadly-shared undertaking, done not only by the parents, but also by older sisters and brothers, aunts, uncles and grandparents, and unrelated members of the group. The average infant in an Efe hunter-gatherer group is cared for by 11 people in addition to its parents (Ivey, 2000). In these circumstances, members of the group had an interest in its demographic composition and would sometimes act to eliminate elderly who were becoming dependent or to eliminate children whose father had died (Hill and Hurtado, 1996). The consequences of demographic change were internal to the decision making unit within the group.

Agriculturalists, whose production was less variable (and for whom variations would in any event be quite highly correlated across households due to weather and other general conditions) were less likely to share across households

Figure 1.3. Age Schedule of Public Sector Transfers Received and Taxes Paid per Person in the US and India



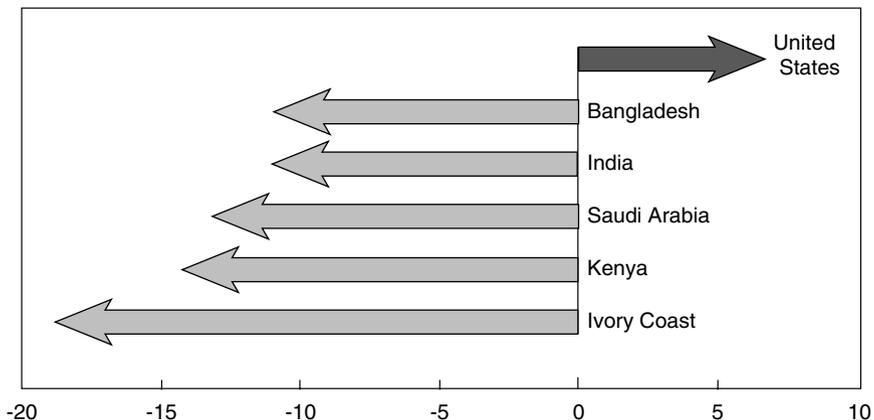
unless elderly family members lived separately (Simmons, 1945). Transfers took place mainly within the family. In this case, too, the consequences of decisions about demographic composition, through fertility and perhaps migration, were internal to the decision-making unit, the household. If the elderly reduced their labor and “retired,” they were sustained by transfers from their adult children, perhaps with help from their grandchildren.

More recently, the public sector in Third World countries has begun to make increasingly extensive transfers, typically downward in direction, for the health and education of children. With the exceptions of Latin American countries and some East Asian countries, public transfers to the elderly are largely limited to civil servants and the military. The second panel of Figure 1.3 shows the age profiles of taxes paid and benefits received in India in 1981, illustrating this characteristic shape.

Industrial nations have moved much farther in this direction, devoting a larger share of *GDP* to age-targeted transfers. On average, the OECD countries spent 19% of *GDP* on age targeted transfers in 2000, with some members such as Sweden and Denmark spending nearly 30% and others such as Poland, Hungary, Austria and the US spending less than 12% of *GDP* (Dang et al., 2001:25). Transfers to the elderly dominate. On average, total expenditures on the elderly are roughly twice total expenditures on children in the OECD. In the US, an elderly person receives four times as much as a child through the public sector. The first panel of Figure 1.3 plots the age schedule of taxes and benefits for the US, which shows a striking contrast to the plot for India.

Once again, average ages in the population provide a convenient summary of the direction of flows. Figure 1.4 shows the difference between the average age of receiving benefits and the average age of paying taxes for a number of Third World countries and for the US. For every Third World country shown, this difference is negative: the age of receiving benefits is lower, implying that taxpayers are transferring resources downward to children. For the US, however, the difference

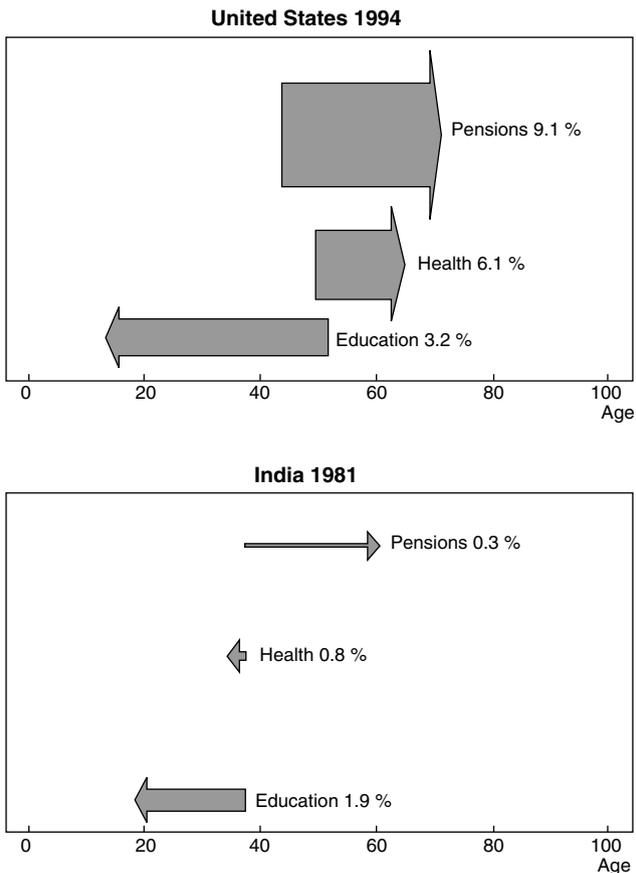
Figure 1.4. Direction of Public Sector Transfers: Difference Between the Average Ages of Receiving Public Sector Transfers and of Paying Taxes



is positive, indicating that taxpayers on average are transferring resources upwards to the elderly. Other OECD countries with older populations and more generous transfers would provide an even stronger contrast.

Figure 1.5 again contrasts India and the US, this time using arrow diagrams to show their composition and direction of the three main transfer programs: pensions, health care and education. This time, the thickness of the arrows indicates the size of the transfer flows relative to *GDP*. When drawn in

Figure 1.5. Direction and Size (% of per capita GDP) of Public Sector Transfers in the US and India



Note: Calculations of resource flows in the US are based on a stationary population, while those for India are based on a stable population.

this way, the area of the arrows measures the “transfer wealth” generated through each of the transfer systems. We can see several things. First, the size of the public sector transfers relative to *GDP* is very much less in India than in the US. Second, expenditures on education stand out in India as more nearly comparable to those in the US than the other transfer flows. Third, we can see once again that downward public transfers dominate in India and upward transfers dominate in the US.

It is important to note that within families, and within the private sphere, the direction of transfers is still strongly downwards in industrial nations: the elderly, on average, continue to make net private transfers to their children. However, transfers through the public sector overwhelm these downward private transfers, so that the net direction of transfers has become upwards.

1.4 A DIGRESSION ON THE THEORY OF TRANSFERS

At this point, it will be useful to introduce some theory. A natural starting point is Samuelson’s (1958) seminal theory of the role of transfers in a simple economy with no durable goods and no life cycle stage of childhood. In Samuelson’s world, a life cycle stage of retirement already exists; people take it for granted as a necessity. But how are they going to be able to consume without working? They can’t store up surplus output during their working years, since nothing lasts. The only possibility is to make some kind of a deal with others. Old people would like to be able to loan some of their production to others when they are young and strong and be repaid when they are old and frail. The problem is that all working age people think the same way: each would like to be loaning output so that he or she could be repaid when old, and there is no one who wants to borrow during their working years. Even if the interest rate were zero, so that a borrower had to repay only on a one-for-one basis, no one would want to do it. If the interest rate becomes sufficiently negative, however, it will be possible to induce the youngest people to borrow some money from the older workers. But the resulting life cycle consumption path is highly distorted and would yield low life cycle utility. Much higher life cycle utility can be achieved through a non-market social contract in which the working age generations are obligated to support the elderly generations through transfers which the elderly will never repay. This transfer system, whether familial or public, can deliver a positive rate of return equal to the rate of population growth plus the rate of productivity growth.

This provides a strong justification for upward flowing transfers in a world with no physical capital, like the world of hunter-gatherers. But we

have seen that hunter-gatherers do not retire, whereas settled agriculturalists and industrial populations do have capital. With capital, everything changes. Capital typically earns a higher rate of return than the transfer system, so workers can do better by saving and investing in real assets or equities – hence the appeal of privatization and funded systems. If capital markets become saturated and rates of return drop below the rate of growth of total output, as may happen with population aging in the OECD countries, then further provision for old age can be achieved through the transfer system. Otherwise, it appears that we can do without transfers altogether. So why are they so important in industrial nations today?

But Samuelson's world doesn't only lack capital, it also lacks children. Workers can save for their retirement, but they also must provide food and shelter for their children. In the later nineteenth and twentieth centuries, as developing economies began to need and reward an educated workforce, children began to need costly education. Becker and Murphy (1988) have developed an interesting theory linking parental transfer decisions to the development of the welfare state. Ideally, parents would invest in the education of their children up to the point where the rate of return to an additional year of education would equal the rate of return on an additional unit of capital. This is the socially optimal amount of investment in children. If parents want to do still more for their children beyond this point, they can bequeath them physical capital earning the market rate of return, higher than additional education would earn. The difficulty is that most parents have competing goals: they want to make their children happy and prosperous, but they also want to provide for their own old age. Balancing off these conflicting goals, they provide less than the optimal amount of education for their children in order to save enough for their own retirement.¹

Children would like to be able to borrow the money needed to complete their education to the optimal level, but no one will loan it to them. Their parents would be happy to loan it, but typically there is no way to enforce the repayment of such a loan, except perhaps in Singapore. Society and individuals are stuck at a sub-optimal level of well-being, because education is too low. This sets the stage for the start of public education. The state taxes the worker-parents to raise the revenues to provide the optimal amount of education for the children. This may be good for the children, but it is bad for the parents. Had they wanted to pay to educate their children optimally, they could have done so to begin with. So to compensate the parents, the state taxes the children, once they are grown into workers, to pay their now elderly parents a public pension. The new transfers from parents to children, through the state, for public education are balanced by new transfers from adult children to their parents for retirement. If the timing of the introduction of these programs is just right, then all generations

will be better off than before. It is true that annual public transfers to the elderly are much larger than to children, but taxes to fund public education are paid on average around age 40, while old age benefits are received around age 70, 30 years later in the life cycle, and consequently should earn a rate of return compounded over many years.

Whether for this reason or some other, all industrial nations have followed this route, introducing public education, public pensions and public health care – which is also a net transfer to the elderly. Third World countries are at various stages of introducing these programs, with all governments providing some degree of public education, most providing health care, and some providing pensions.

Public pensions raise some new issues, since they may affect parental decisions about both saving and childbearing. It is common sense that public pensions will reduce the need for wealth in old age and therefore lead to lower savings (Feldstein, 1974). It is also common sense that if parents once had children in part for security in old age, public pensions would weaken that motivation. Public transfers inevitably change incentives for private behavior and inevitably create a gap between private and social costs and benefits, a gap I will discuss later.

I have touched here only on a part of the theory of intergenerational transfers. Other theoretical work develops the idea that transfers may be undertaken either for altruistic motives or as a form of exchange. From my perspective, transfers undertaken for exchange motives, as when a parent pays for the higher education of a child with the understanding that the child will later repay the parent when elderly, are not truly transfers. Instead they are rather examples of the operation of a familial credit market or insurance market. From my point of view, all true private transfers are motivated by altruism or compelled by social norms. Altruistic transfers may wholly or partially offset the effects of public sector transfers. For example, an elderly parent receiving a public pension may choose to make a private transfer to her child, just offsetting the child's tax payment to the pension system, thereby maintaining the allocation of her resources between herself and her child at what she judges to be an optimal division, unaffected by the public pension system (Barro, 1974). An excellent overview can be found in Luth (2001).

1.5 CHANGING POPULATION AGE DISTRIBUTION

So far, I have talked mostly about the individual economic life cycle and the emergence of a stage of consumption in excess of production. But sheer demographic change also plays an important role here. The later stages of the

demographic transition involve profound population aging, and the industrial world is still early in this process, with major population aging yet to come.

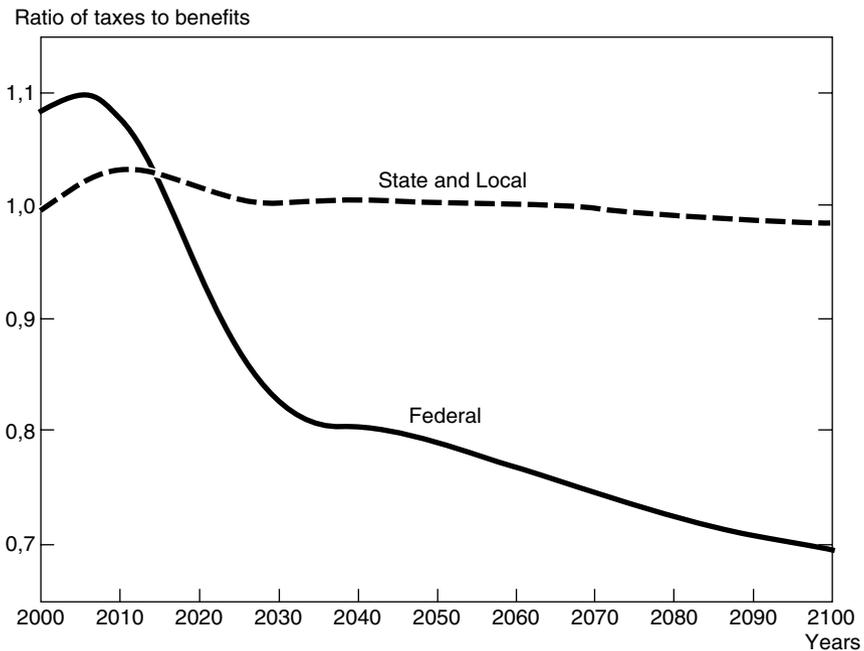
The trends in aging are well known. In what follows, I will draw extensively on a set of fiscal projections by the EU and OECD (Dang et al., 2001). Their demographic component is based on Eurostat and national projections. These imply that the average national old age dependency ratio (65+/20–64) will double by 2050. Since much has been written about these trends in population aging and about fertility trends in the industrial world, I will not discuss either of these further. However, it may be useful to discuss mortality.

According to Dang et al. (2001) the average increase in life expectancy projected for 21 OECD countries and used in the fiscal projections reported below, is 4.5 years. Official government agencies have a history of underpredicting mortality gains at older ages and consequently underpredicting the number of elderly (Keilman, 1997; National Research Council, 2000; Lee and Miller, 2001). Projection of mortality for the G7 countries, based on extrapolation of continuing exponential decline at the historical rate for each age, suggests average life expectancy gains by 2050 of 7.1 years, considerably greater than the average gains in the official projections (Tuljapurkar et al., 2000). If these projections based on historical trends are correct, then population aging will be greater than the official projections once again.

However, there is some reason to think that life expectancy gains may be even greater than these. Two recent articles have found rapid linear increases in life expectancy in the past at a rate of 2.3 years per decade (Oeppen and Vaupel, 2002, average of sexes for record life expectancy, 1840–2000) or 2.1 years per decade (White, 2002, average of sexes, for 21 industrial nations, 1955–1995). At these rates, life expectancy would rise by 10.5 years to 2050 under the White result and by 11.5 years under the Oeppen-Vaupel result. We can take an 11 year increase as representative of this approach, which is 2.4 times as great as the OECD projected increase. Longer run projections would lead to even greater differentials, because most official forecasts assume gains slow or cease after 2050. Later, I will discuss the fiscal implications of more rapid mortality decline.

1.6 INTERACTION OF POPULATION AGING WITH STATIC INTERGENERATIONAL TRANSFERS

As the population grows older, the costliness of our current package of public sector transfers will grow relative to our incomes. Figure 1.6 shows this by plotting a projection of the fiscal support ratio for the US over the twenty-first century. It is based entirely on the current structure of benefits, including current costs per enrollee of health care, although these are expected to rise substantially.

Figure 1.6. The Trade-Off Between Life Cycle Benefits and Taxes

The projected population is weighted by the current age distribution of net tax payments, in the numerator, and by the current age distribution of costly benefits, in the denominator. We can see that it will decline markedly over this century as the population ages and that a declining share of children will not do much to offset this decline.

1.7 HOW POPULATION AGING INTERACTS WITH FUNDED AND UNFUNDED SYSTEMS: CAPITAL OR IMPLICIT DEBT

When retirement exists as a life cycle stage, the elderly require a claim on some portion of current production in order to consume. Such claims may be based on the prior accumulation of ownership of physical assets (homes, stock market equities) in a funded retirement system, or under life cycle saving. In a funded system of this sort, population aging leads to more capital per person and higher labor productivity. Even though aggregate saving rates may decline as the population ages, the population and labor force will grow more slowly, so permitting capital per worker to increase. In our simulations (Lee, Mason and

Miller, 2003) for Taiwan and for the US, we find that population aging induces a strong increase in the capital labor ratio, by 70% or so, under the life cycle saving hypothesis.

The claims of the elderly may also be based on expectations of transfers from an unfunded old age support system, such as familial support or an unfunded public pension program. The net obligations of such a system at any instant are its implicit debt, equal to the difference between expected future contributions by the existing participants and their expected future benefits. The implicit debt in a system may be enormous. For example, Lee, Mason and Miller calculate that in 2000, the implicit debt in Taiwan's family support system equals 2.5 times *GDP*. For the US, they calculate that the implicit debt of the public pension system is 1.7 times *GDP*. Similar levels of implicit debt have been estimated for a number of Latin American pension systems (Bravo and Uthoff, 1999). For transfer systems, population aging is a pure cost, increasing the tax burden on the existing population, and increasing the implicit debt *per capita* and relative to *GDP*.

For one reason or another, the industrial nations established unfunded pension systems, and the existence of these systems is now a given. Some might wish that the systems had been started on a funded basis, but theory tells us that there would be no Pareto improvement in switching to a funded system today by repaying the implicit debt and saving for future retirement.

But that diagnosis is not entirely correct for the situation now faced by the industrial nations. With population aging, implicit debt *per capita* will greatly increase, nearly doubling in the US over this century, for example, and similarly for Taiwan. In a sense, we must create new old age support systems to support the increasing numbers and proportions of elderly. If we chose, we could maintain the existing implicit debt but develop a funded system to deal with the greater support burden that is projected. In practice, this is what would be accomplished by a decision to partially fund our current unfunded public pension systems. In this way we would avoid the questionable project of paying off our existing implicit debt, while capturing the capital building advantages of a funded system for the population aging to come. Furthermore, such an approach may find some justification in the Becker-Murphy theory. Unfunded pension systems can be viewed as a counter-balance to public investments in children, up to a point. With lower fertility, as in the OECD today, and with longer life, this rationale for providing old age support through transfers rather than through saving in advance has run its course. To be sure, there are also problems with funded systems, as illustrated by their earlier failures in Europe. From the point of view of individual planning over the life cycle, as well as from

the social point of view, it may be desirable to have both funded and unfunded sources of old age income, since the risks of the two systems are quite different from one another.

1.8 PROJECTIONS OF POPULATION AGING, PUBLIC PENSIONS AND OTHER BENEFITS

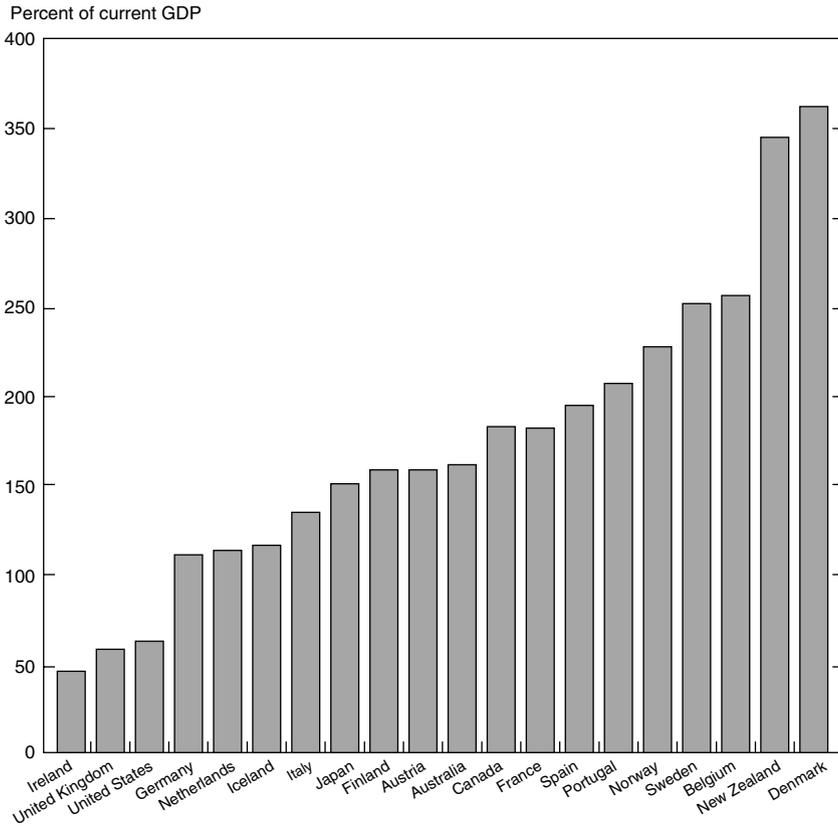
As we have already seen, population aging raises the implicit debt in unfunded pension systems and increases the cost in terms of after tax income of providing a standard set of life cycle benefits. These consequences of population aging are unavoidable features of unfunded public transfer systems. A third consequence is that if taxes and benefits are not suitably adjusted, rising expenditures due to population aging will put long-term finances deeply in the red. This is not intrinsic to unfunded systems. A system can carry a heavy load of implicit debt but still be in long run financial balance. Unfortunately, that is not the case for the OECD countries.

Roseveare et al. (1996) calculated the present value over a 75-year horizon of the expected pension revenues minus their expected expenditures on benefits for the OECD countries. Figure 1.7 plots these net present values as a percent of current *GDP*, assuming a discount rate of 3% and a productivity growth rate of 1%. The median percentage imbalance is 160, for Austria and Australia. Ireland, the UK and the US are in relatively good shape at around 50% imbalance, while New Zealand and Denmark are in bad shape with imbalances about seven times as great, near 350% of *GDP*. These are very large discrepancies, reflecting very large imbalances in long term finances, imbalances that must be addressed in one way or another.

The second set of OECD projections (Dang et al., 2001), issued five years later, projects changes in public pension spending as a share of *GDP* over the next 50 years, along with similar changes in the costs of other transfer programs. The pension projections take into account “reforms legislated but not yet implemented”. Figure 1.8 gives an idea of the effects of implementing these reforms. It plots the increased pension spending as a percent of *GDP* in 2050 along with the increase that would have been projected based on rising Old Age Dependency Ratios alone. On average, pension spending would rise by 5.2% of *GDP* under demographic pressures, but the projected total increase is only 3.4%. About one third of the demographic increase is projected to be offset by policy reforms that are already legislated. In the EU states, about half of the demographically driven increase is expected to be offset by reforms.

Figure 1.9 shows an example of these legislated reforms, projected reductions in the generosity of pension benefits relative to *per capita GDP*. On average, these countries have legislated a 30% reduction in benefit generosity.

Figure 1.7. Net Present Value of Pension Debt Over 75 Years as Percent of GDP



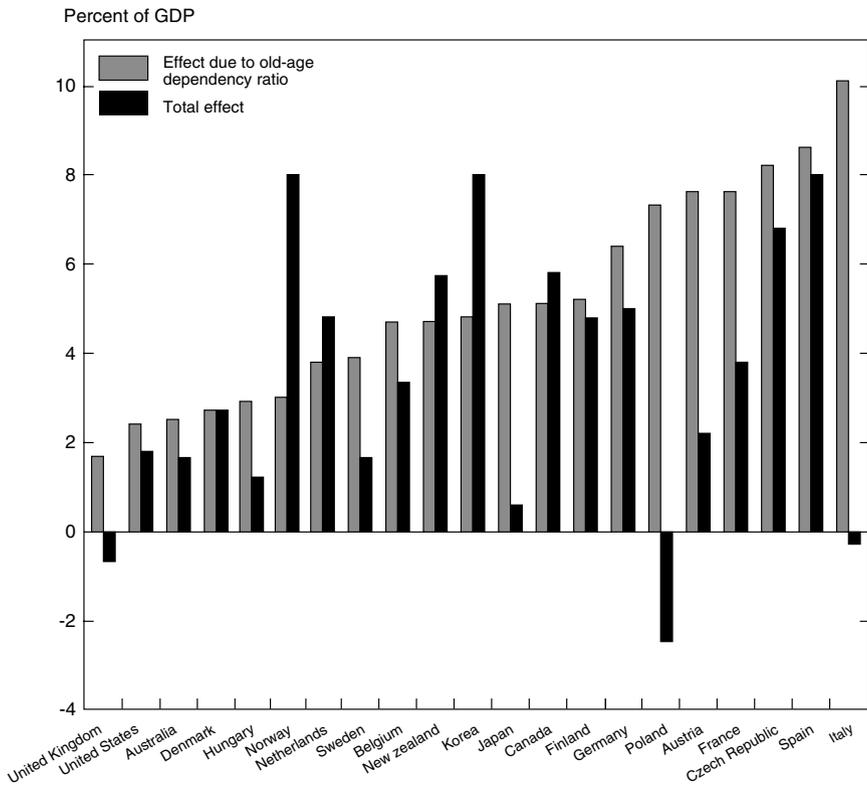
Note: the discount rate is 3% and the productivity growth rate is 1%.

Source: Roseveare et al. (1996) OECD.

There are additional changes in eligibility and employment rates. It remains to be seen whether it will actually be politically possible to implement these changes. Atkinson (2001:235–236) notes: “Failing [a build up in private pension saving], lower incomes and increased poverty among the elderly raise the risk of political pressure for a reversal of these policies...”

Public pensions are only one of the six programs assessed by Dang et al.; the others are early retirement programs, health care, long-term care, child and family benefits and education. These programs account for 19% of GDP

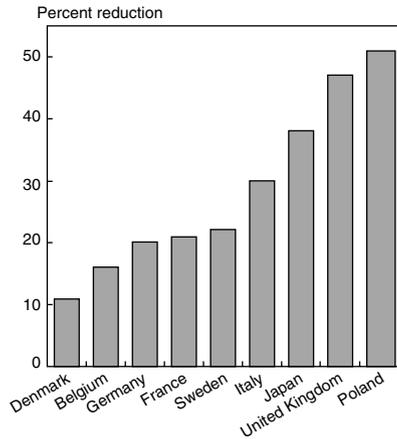
Figure 1.8. OECD Projections of the Effect of Rising OADR on Pension Spending are Much Greater than the Total Projected Pension Spending, Reflecting Anticipated Offsets in Benefits, Eligibility and Employment



Source: based on OECD projections, reflecting assumption of unchanged policy, including reforms legislated but not yet implemented (Dang et al., 2001, Table 5, p. 26).

on average in 2000, with pensions accounting for 7.4% of that total. The other large programs are health care and education. In total, expenditures on these age-related programs are expected to rise by 7% of GDP over the next 50 years, after taking into account program reforms that have already been legislated as discussed earlier for pensions. Fiscal balance will require that taxes as a share of GDP be raised by the same amount, assuming benefits are not further reduced. Seven percent of GDP is a daunting amount. In the US, political storms are

Figure 1.9. Projected Reductions in the Generosity of Pension Benefits Relative to Per Capita GDP in Selected OECD Countries, as Incorporated in the OECD Projections



Source: based on OECD projections (Dang et al., 2001, p. 26).

generated by a projected 2% increase in the cost of public pensions. Nonetheless, this 7% figure may understate the actual increases that would be implied by keeping program structures as currently legislated, in part because mortality may fall faster than anticipated, and in part because health care costs may rise much faster than anticipated, as I will discuss next.

1.9 HOW FAR AND FAST WILL LIFE EXPECTANCY RISE, AND WHAT WILL IT COST?

The new possibility of linear life expectancy improvement is one we should gladly welcome, provided it comes with similarly improving health at older ages. However, rapid life expectancy gains would add more years of life during the retirement stage that is currently not productive, extending consumption needs. Longer life would certainly increase the adverse fiscal impact of population aging. Using the sensitivity tests provided in Dang et al. (2001), we can assess the implications, as shown in Table 1.1.

The more rapid decline projected for the G7 by Tuljapurkar would imply that pension costs would rise by 1% more as a share of *GDP* and total costs by 1.4% more. Under the linear life expectancy forecasts, pension costs would rise by 2.2% more as a share of *GDP* and total age targeted costs by

Table 1.1. Fiscal Implications of Official and Alternative Mortality Forecasts

Source of Mortality Projection	Increase of Life Expectancy at Birth (e_0) to 2050	Pension Cost Increase (%GDP)	Total Age Targeted Increase (%GDP)
OECD (official)	4.5 years	3.4	6.9
Trend decline in age-specific death rates (Tuljapurkar et al.)	7.5 years	4.4	8.3
Linear trend (Oeppen et al.)	11.0 years	5.6	10.0

Note: Tuljapurkar et al. (2000) forecast e_0 gains for the G7 that are 3.6 years above official forecasts to 2050. I have taken 3.0 as the difference for this table, because the average increase in the official projections reported in Dang et al. (2001) is about one year greater than those reported in Tuljapurkar et al. The projected increases under different mortality forecasts are calculated using the sensitivity tests for e_0 reported in Dang et al. (2001:52).

an additional 3.1%. Any projection is speculative and uncertain, but this one requires only the extension of a trend that has already held for 160 years.

1.10 HEALTH CARE AND LONG TERM CARE

Although both Roseveare et al. (1996) and Dang et al. (2001) project public health care expenditures, the assumptions on which the projections of costs per individual of a given age are based are not clear, and the projected increases appear quite modest. By contrast, for the US both my own projections and official projections indicate massive increases (Lee and Miller, 2002). For example, the program for health care for the elderly currently costs 2.2% of *GDP*, but Lee and Miller forecast that it will be 4.3% by 2030, 5.7% by 2050, and 7.9% by 2075. To 2050, we project it will increase by a factor of 2.6 ($=5.7/2.2$). These forecasts are based on an analysis of the historical growth of health costs per person in a given health status and on a forecast of health status that is based on time until death for the older members of the population. For the average OECD country in the Dang et al. (2001) forecasts, the increase is only by a factor of 1.55, or by about one third as much ($.34 = (1.55-1)/(2.6-1)$). Between 1961 and 1999, health costs as a share of *GDP* for 15 European countries increased by a factor of 2.1, from 3.8% to 8.2%. Over the same period, US health costs increased their share from 5.3% to 13.6%, by a factor of 2.55. Although the share has been higher in the US, the pattern of growth of the share has been quite similar.

Common sense suggests that health care costs per age-adjusted person cannot and will not continue to rise at rates substantially above *per capita* income growth. But this may be wrong. Research in the US has found that prices for any particular medical treatment have been falling over time, and the reason for the increase in expenditures per person is that new and better technologies are constantly being developed and these are more costly. It does seem possible that expenditures on health could keep rising if individuals and society decide that higher quality health care is worth it.

If costs in the OECD rose by the same factor as projected for the US, public expenditures on health in 2050 would reach 13.8% of *GDP*, a level equal to the current total expenditure on health care in the US, public plus private. We get virtually the same result if we simply assume that *per capita* public health costs grow 1% per year faster than in the OECD projection, resulting in an increase by a factor of $\exp(50 \cdot .01) = 1.65$ in 2050, to a level of 13.7% of *GDP*. The implied increase in health care spending is 5.4% of *GDP* greater than in the OECD baseline forecast, nearly equal to the entire projected increase in total age targeted spending.

We have already seen that linear increases in life expectancy would cost an additional 3% of *GDP*. Combined with the costs of more rapidly rising health costs, this could mean that total age-targeted expenditures will rise by an additional 8% of *GDP* above the baseline forecast, more than doubling the projected increase of 6.9% in the baseline projection (Dang et al., 2001:25). That would bring the OECD average age-targeted spending in 2050 to 34% of *GDP*. That is, age targeted spending would nearly double relative to *GDP*.

1.11 WILL PUBLIC EXPENDITURES ACTUALLY INCREASE THIS MUCH?

It is important to realize that the projections I just presented will not come to pass. They are contingent on current program structure, and current program structure will surely change. In truth, population aging in the past has played only a small role in the phenomenal increase in public spending on the elderly. Most of the change has been due to increased generosity of benefits and eligibility.

Empirical analysis of the experience of the OECD nations over the past 30 years by Gruber and Wise (2001) finds that as the population aged, only about half the impact was passed on to public expenditures, with the other half absorbed as declining benefits per elderly person – not absolute declines, but declines relative to what benefits would have been without population aging. Furthermore, although expenditures on the elderly did rise to cover half of the increase implied by demographic aging, total government expenditures were

unaffected, so that public expenditures on other aspects of the budget were reduced (Gruber and Wise, 2001).

This kind of response to population aging should not be surprising. We can think of individuals and society as choosing between a basket of life cycle government benefits corresponding to the current programs, and the goods and services that can be purchased with after-tax income. Earlier, we saw that the elderly support ratio based on current programs would decline by a third at the central government level in the US, which tells us that tax rates in the future would have to be 50% higher to pay for that basket of life cycle benefits. We can interpret this as a demographically driven price increase for the basket provided by current programs. Its cost, in terms of reduced after-tax income, will rise by 60%. As a result, we would expect individuals and society to substitute away from the basket of benefits and towards after tax income. A lower level of the basket of benefits will be chosen, and the tax rate could either rise or fall. This is consistent with the Gruber and Wise empirical findings.

1.12 SOCIAL SPILL-OVER COSTS FOR FERTILITY AND IMMIGRATION

Once the resource sharing unit shifts from the family or household to the national transfer system, gaps inevitably are created between the costs and benefits of demographic behavior accruing to the decision maker and to society as a whole. This is certainly true of childbearing, where children impose costs for health care and education on society, but also provide benefits as taxpayers who help support the elderly and spread the costs of public goods (Lee, 1990; Lee and Miller, 1990). Population aging raises these externalities by increasing the need for taxes to help support the elderly. In earlier work, Lee and Miller (draft of Chapter 7 for Smith and Edmonston, 1997) evaluated these externalities as shown in Table 1.2. They calculated that a child born to parents who have a high school education had a net fiscal present value of \$171,000 in 1996.

This large positive fiscal externality reflects in large part the fact that the family does not benefit directly from old age support when it has a child, although society does. It is possible, although perhaps not likely, that this externality is partly responsible for the low fertility observed throughout the industrial nations today.

Fiscal externalities also arise in the case of an immigrant, and these have again been evaluated by Lee and Miller (Smith and Edmonston, 1997), as reported in Table 1.3. Calculating a weighted average across age of arrival and education, with weights equal to the distribution of immigrants to the US for these characteristics, they found an average fiscal externality of +\$80,000. At the state and local level, which funds education, the externality was negative,

Table 1.2. Net Present Value of the Fiscal Impact of an Incremental Birth and All Its Descendants, by Education of the Parents and Real Discount Rate

Education of parent	Net Present Value in 1000s Of 1996\$, by Real Discount Rate				
	2%	3%	4%	6%	8%
< high school	362	92	12	-32	-39
high school	495	171	61	-10	-28
> high school	621	245	106	9	-18

Source: Smith and Edmonston, (1997). Empirical intergenerational educational transition matrices are used to project the probability distribution of eventual educational attainment of the original birth and all subsequent descendants. See Smith and Edmonston, (1997: Appendix 7A for details).

Table 1.3. Net Present Value of the Fiscal Impact of an Incremental Immigrant and All Descendants, by Education and Age at Arrival in the US

Education of immigrant or parent	Net Present Value in 1000s of 1996\$, by Age at Arrival ($r = 3\%$)			
	0	20	40	70
< high school	60	33	-141	-166
high school	92	146	-32	-255
> high school	117	288	132	-149

Source: Smith and Edmonston, (1997). For children, the educational attainment is that of their parents. Empirical intergenerational educational transition matrices are used to project the probability distribution of eventual educational attainment of the original birth and all subsequent descendants. See Smith and Edmonston, (1997:Appendix 7A for details).

but at the federal level, which funds old age transfers as well as various public goods, the externality was overwhelmingly positive.

1.13 CONCLUSIONS

Humans evolved over the millennia to invest heavily in their children, who did not begin to produce enough to feed themselves until a surprisingly late age, around twenty in contemporary hunter-gatherer populations. Adults,

including elderly adults, helped with this heavy investment in children, remaining net producers until near the time they died. It appears that during the agricultural phase, at least as we can observe it now, the role of the elderly has changed somewhat, with the emergence of a life cycle stage in which the elderly withdraw from labor of the usual sort, and begin to consume more than they produce. Nonetheless, because until recently the numbers of elderly have been small, and the degree of their dependence has been limited, the net flow of resources in agricultural societies as in hunter-gatherer groups has been strongly downward, from older to younger.

This situation changes strikingly due to several roughly coincident developments: (1) populations age in the later stages of the demographic transition; (2) incomes increase steadily; (3) societies develop public transfer programs for pensions and health care for the elderly; and (4) the age at retirement declines dramatically. As a result, the direction of net transfers shifts from downwards to upwards. Society changes from being an engine for producing and redistributing resources to children, to one that at least equally produces and redistributes resources to the elderly. Although transfers within families remain strongly from old to young, these flows are counterbalanced by the flows from young to old through the public sector. And yet modern industrial societies will continue to age in the future, with old age dependency ratios doubling over the next 50 years, and then continuing to climb thereafter. What will this mean for the future of these countries?

So far as the public sectors are concerned, research suggests that public expenditures on the elderly will not increase in proportion to their numbers. As population aging makes it more costly to provide benefits to an average elderly person, we would expect a substitution away from such transfer programs, and indeed this seems to have happened in the past. Estimates suggest that increased proportions of elderly will be met by increases in spending that are roughly half as large, so that *per capita* benefits fall while total elderly benefits may rise, but less than might be expected. Unfortunately, it appears that these demographically driven increases in total spending on the elderly tend to come at the expense of other government expenditures, presumably including expenditures on children. It may fairly be expected that continued population aging will place considerable increased pressure on governmental programs for children, including health, education, and poverty relief.

Where does this overview of the history of intergenerational transfers and of future demographic pressures leave us, as we think about the current situation and our policy options? First, there is no reason at all we should live today like hunter-gatherers, working until we die. Their behavior provides perspective, but not guidance. There is nothing wrong with society devoting substantial resources to the support of the elderly, provided the choice is made

in an informed and undistorted way. Second, there is no reason why society, or individuals within society, should not choose to have a protracted stage of leisure at the end of life, as is now the case in industrial nations, provided again that the decision is made in an informed and undistorted way. Third, even if we decide to reduce public support for retirement at an early age, there will still be very substantial demographic pressures arising from population aging, pressures which will be felt in spending for investment in the health, education, and economic well-being of children. If expenditures on the elderly are viewed by the public as competing for a fixed total of tax dollars as the population ages, that will be very bad news for children as well as for other government activities. Transfers to the elderly are a legitimate and I think desirable activity of the government. However, they should be viewed as falling in a different category than other government programs. In particular, programs for investment in children should be shielded from the increasing pressures arising due to population aging.

So what policies might be pursued if we do choose to preserve other governmental programs, including programs for children, in the face of population aging? First, we may consider whether population aging is inevitable, or whether the fiscal costs of population aging might be avoided or at least ameliorated through demographic counter-action in the form of higher fertility or increased immigration. As we saw earlier, there are in fact very substantial long run fiscal net benefits from either the birth of a child, or from the immigration of an educated worker. However, there are many other important issues around the desirability of either a pro-natalist or pro-immigration government policy which are beyond the scope of this paper. I should add that, at least in the context of the US, although the fiscal benefits per individual immigrant appear large, nonetheless the fiscal impact of even quite a major increase in immigration is very modest.

To my mind, a desirable policy in the face of population aging would be first, to remove the incentives for early retirement that are currently built into the structures of many public pension programs and public insurance programs for disability and long term unemployment. Workers should be faced with an actuarially fair tradeoff regarding their chosen age of retirement. If they still choose to retire early, all well and good; the costs of doing so will be born by them, and not by society at large. Reforms of this sort are already in place in a number of European countries and are under consideration in others. However, these reforms address only one part of the problem: early retirement. The budgetary pressures generated by population aging, and by the growing costs of health care, will have to be addressed in other ways, and one can only hope that other government activities will be preserved as well, including social investment in children.

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NOTE

1. If parents leave intentional bequests to their children, this indicates that they have first invested optimally in their education. The fact that most parents do not appear to intend to leave bequests to their children indicates that they are investing less than the optimal amount in their children's education.

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CHAPTER 2

DEMOGRAPHIC CONTEXT OF THE SOCIAL CONTRACT IN DEVELOPED COUNTRIES: UNITY AND DIVERSITY

JACQUES VÉRON AND SOPHIE PENNEC

2.1 INTRODUCTION

Everybody knows that, in the developed countries, the demographic context has dramatically changed -and will continue to change in the future- with the increase in life expectancy, the persistence of low fertility and the transformation of the family structure. All the developed countries are confronted by the ageing of their society. *Ceteris paribus* the constant increase in the probability for anyone of still being alive at age 80 or 90, or of becoming a centenarian, has very important economic, social, psychological and political consequences. As the changes are not limited to mortality but affect all forms of demographic behaviour (fertility, nuptiality, divorce), the conditions in which familial and social solidarities are expressed are changing radically: when society is considered as a whole, these changes are necessarily connected. These demographic changes are introducing new constraints in the functioning of the system of solidarity and exchange, but they do not in themselves determine future socio-economic changes; all the interactions between demographic and socio-economic variables have to be taken into account.

The developed countries are experiencing similar trends. However, when the situation of each of them is considered in more detail, many specificities appear. For example, the level of fertility and the proportion of childless women vary from one country to another. The situation on the labour market may also be different from one country to another. The same is true for the speed of population ageing.

This doesn't mean that the challenges facing the developed countries will be really different, but the high level of female childlessness in Germany,

the relatively low female labour force participation rate in Italy, the high speed of population ageing in Japan give specificities to the context of intergenerational relationships in these countries. Each may be characterized by a specific democio-economic pattern, such that demographic changes challenge the social contract in a particular way.

In this chapter we recall the main trends likely to affect the social contract binding together the different generations.

2.2 PERSISTENT LOW FERTILITY AND RECENT FAMILY CHANGES

In all developed countries, the total fertility rate is below the replacement level (Table 2.1). The national situations are diverse: fertility is particularly low in countries such as Japan, Germany, Italy, Greece and Spain with a total fertility rate of less than 1.4 children per women in 2004, and still relatively high in Ireland, France and Finland with 1.8 or more children per women. This effect is not only a tempo effect, but has been observed for quite a long time now, and the younger birth cohorts at the end of their childbearing age will not reach their replacement level. This is the case for women born in the 1940s and onward in Germany and Sweden, and for women born 20 years late for countries like France, Norway, USA, Japan (Sardon, 2004).

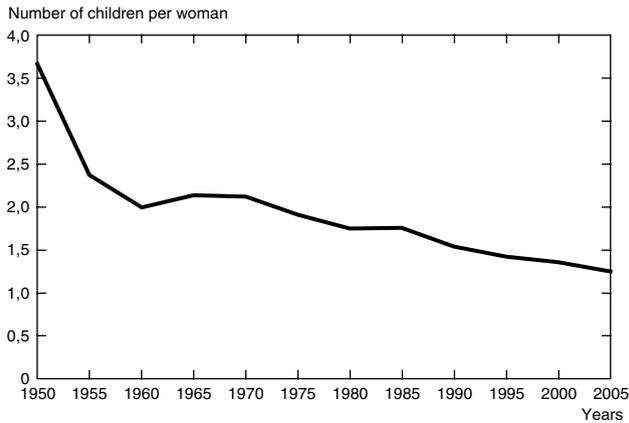
To assess the importance of change in some countries, let us consider, for example, the fertility trends in Japan since 1950. In about fifty years, the number of children per woman has decreased from a little more than 3.6 to 1.25 (Figure 2.1). The family relationships are evidently deeply affected by this sharp decline in fertility, even in the absence of other demographic changes. But in this case, the decline in mortality has a combined effect on familial and social solidarity. National differences in numbers of children per woman are often associated with differences in numbers of childless women. This is obviously a major issue with regard to intergenerational relationships inside the family. It means that for certain women (and also for men, though less information is available concerning them) the forms of familial solidarity will necessarily be very different in the future from those observed for the baby-boomer cohorts where childlessness was the lowest.

Again, we note major differences between countries. The proportion of childless women varies, for the 1965 female birth cohort, from less than 11% in Denmark to more than 22% in Austria and over 23% in England and Wales. If we compare the 1945 and 1965 birth cohorts, we see a substantial increase in infertility. In Finland, for instance, the proportion of childless women has more than doubled (8.7% for the 1945 birth cohort to 20.5 for the 1965 birth cohort). In France, the level of childlessness is similar to the level observed for women born in the first half of the twentieth century, but the main difference in terms of

Table 2.1. Trends in Total Fertility Rate, From 1994 to 2004

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Austria	1.47	1.42	1.45	1.39	1.37	1.34	1.36	1.33	1.40	1.38	1.42
Canada	1.62	1.62	1.62	1.62	1.52	1.51	1.49	1.51	1.51	1.51	1.51
Denmark	1.81	1.80	1.75	1.75	1.72	1.73	1.77	1.74	1.72	1.76	1.78
Finland	1.85	1.81	1.76	1.75	1.70	1.74	1.73	1.73	1.72	1.76	1.80
France	1.66	1.76	1.73	1.73	1.76	1.79	1.87	1.88	1.87	1.87	1.90
Germany	1.24	1.25	1.32	1.37	1.36	1.36	1.38	1.35	1.31	1.34	1.37
Greece	1.35	1.32	1.30	1.31	1.29	1.28	1.29	1.25	1.27	1.28	1.29
Ireland	1.85	1.84	1.88	1.94	1.95	1.91	1.90	1.94	1.97	1.98	1.99
Italy	1.21	1.18	1.20	1.22	1.19	1.22	1.24	1.25	1.26	1.28	1.33
Japan	1.50	1.42	1.44	1.44	1.38	1.40	1.36	1.33	1.37	1.38	1.38
Luxembourg	1.72	1.69	1.76	1.71	1.68	1.73	1.76	1.66	1.63	1.63	1.70
Netherlands	1.57	1.53	1.53	1.56	1.63	1.65	1.72	1.71	1.73	1.75	1.73
Portugal	1.44	1.41	1.44	1.47	1.48	1.50	1.55	1.45	1.47	1.44	1.42
Spain	1.21	1.18	1.17	1.19	1.15	1.20	1.24	1.26	1.27	1.30	1.32
Sweden	1.88	1.73	1.60	1.52	1.50	1.50	1.54	1.57	1.65	1.71	1.75
United Kingdom	1.74	1.71	1.72	1.72	1.71	1.68	1.64	1.63	1.64	1.71	1.74
United States	2.04	2.02	2.04	2.06	2.00	2.05	2.06	2.03	2.06	2.07	2.07

Source: Eurostat, epp.eurostat.ec.europa.eu/

Figure 2.1. Trend of the Total Fertility Rate in Japan (1950–2005)

fertility is that, on average, the number of children is lower and in particular the number of large families has fallen considerably. This means that whereas care could have been provided by a “spare niece or nephew” for childless persons born before WWII, this is and will not be the case, or to a lesser extent, for the elderly in the future.

The decrease in the number of children is driven not only by a higher level of childlessness but also by a decrease in the number of families with 4 children or more; the two-child family tends to be the norm. However considerable diversity of patterns can be observed. In some countries the smaller family size results mainly from a growing proportion of women remaining childless, especially well-educated women. In other countries most women have children but only one or two (Letablier et al., 2000).

When considering the way that family changes may challenge the social contract binding the different generations, we also need to examine the attitudes regarding marriage. We know that people marry less often than before: while the marriage rate – number of marriages per 1000 population – was 9.5 in Germany in 1960, it is around 5 now. Sweden had a marriage rate of 4.5 in 2000. When people get married they do so much later: mean age at first marriage is around 30 years for men in a lot of countries (Austria, Finland, France, Germany, etc.). It is even higher in Denmark (32.5 in 2000) but much lower in Portugal (27.2). Regarding the mean age at first marriage for women, it varies from 25.7 years in Portugal to 30.2 in Sweden. Cohabitation or de facto union has evolved in the last decades. It is no longer only a phase that precedes marriage but has become a new form of union. It is more widespread in northern European countries where 20% of couples are in a union of this type, and whereas it concerned only 4% of couples

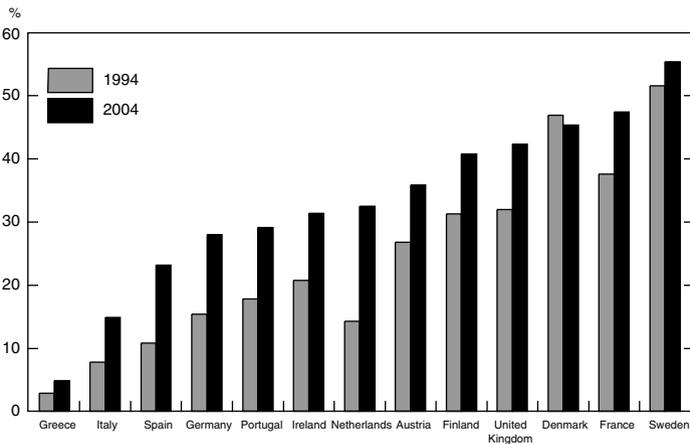
in Mediterranean countries, the practice is gradually spreading. This change in the union context is associated with a change in the childbearing context, as the proportion of children born in these non-marital unions is increasing in all countries and shows a strong geographical pattern: the proportion of live births outside marriage (as a percentage of live births) was less than 5% in Greece in 2004 and more than 55% in Sweden (Figure 2.2). Some countries experienced a substantial change in this ten-year period: the proportion of live births outside marriage doubled in Spain and in the Netherlands for example.

The family structure is also affected by the increase in divorce. In France or in Germany for example, the proportion of marriages ending in divorce for the 1980 marriage cohort is twice the level for the marriage cohort of 1960. Again, there are large disparities within developed countries: the proportion of marriages ending in divorce for the 1980 birth cohort is only 12% in Greece and Spain and more than 40% in the Scandinavian countries and in United Kingdom.

The family structure may also be characterized by the proportion of lone-parent families among all families. The latest figures available are quite old, but in the mid-1990s, the highest proportion was 15%, for Ireland and the United Kingdom.

This redefinition of the contract between members of a couple and their children has effects over the short term – single-parent families are often less well-off than the others – but also in old age. Among persons aged 75+, divorced

Figure 2.2. Proportion of Live Births Outside Marriage (as Percentage of Live Births), in 1994 and 2004



Source: Eurostat, op. cit.

men receive less support than others, all other things being equal, and divorced children provide less support to their elderly parents (Delbès and Gaymu 2003, Grundy, 2006).

Among the new constraints affecting the social contract, the other most important demographic trend is the steady mortality decline.

2.3 LONGER LIFE AND POPULATION AGEING

In all countries, life expectancy at birth and life expectancy at age 60 continue to rise each year, but at very different speeds. In Spain, for example, female life expectancy at birth in 2003 exceeded the level observed in 1993 by 2.6 years. In 2003, female life expectancy at birth topped 80 years almost everywhere. For men the values vary from 75 years to 78 years, depending on the country. There are no “regional” specificities: life expectancy at birth in Denmark and Finland is among the lowest while Sweden reaches the highest level (Table 2.2).

Table 2.2. Life Expectancy at Birth and at Age 60 in 2003

	Life Expectancy at Birth		Life Expectancy at Age 60	
	Men	Women	Men	Women
Austria	75.9	81.6	20.2*	24.1*
Belgium	75.9	81.7	19.6*	23.9*
Canada	76.2**	83.1**		
Denmark	75.1	79.9	19.3	22.7
Finland	75.1	81.8	19.5	24.0
France	75.9	82.9		
Germany	75.7	81.4	19.9	23.9
Greece	76.5	81.3	20.6*	23.2*
Ireland	75.8	80.7	19.6	23.1
Italy	76.8	82.5	20.4***	24.8***
Luxembourg	75.0	81.0	19.3	23.2
Netherlands	76.2	80.9	19.7	23.7
Portugal	74.2	80.5	19.4	23.3
Spain	76.9	83.6	20.6*	25.2
Sweden	77.9	82.5	21.0	24.6
United Kingdom	76.2	80.7	19.9*	23.2*

*2002

**2001

***2000

Source: Eurostat, op. cit.

At age 60, men have still about 19–20 years to live and women around 23, with a level of slightly more than 25 years in the most favourable case (i.e. in Spain).

The proportion of elderly people increases when fertility declines, as was the case in the former decades. The proportion but also the number of old people increase when old-age mortality is lower, as is now the case. As a result of the combined fertility and mortality declines, in the more developed countries, the proportion of the population aged 60 years or over increased from 12% in 1950 to 19% in 2000, and it is expected to reach 32% in 2050 (United Nations, 2005). Among those aged 60 or over, the proportion of the population aged 80 or over was 9% in 1950 and 16% in 2000, and could reach 29% in 2050. No changes in demographic behaviour will significantly alter these figures, since fertility is unlikely to increase strongly, nobody foresees a worsened trend in mortality and, as shown by certain studies, migration cannot provide a solution (Leridon, 2000).

At a national level, the demographics of ageing is in fact quite contrasted. If the speed of ageing is estimated through the number of years required for the percentage of population aged 65 and over to rise from 7% to 14%, we can see that in France 115 years were necessary for this doubling of the proportion of over-65s, but only 65 years in Canada, 45 years in Spain and 26 years in Japan (Table 2.3).

Fertility and mortality changes explain, partly through changes in the distribution of marital status, the changes in living arrangements of elderly people. The postponement and lessening of disability is another factor. But there are also some societal factors in the resulting changes. Thanks also to a higher percentage of the elderly being not disabled and a higher percentage of married

Table 2.3. Speed of Ageing in Some Developed Countries (Number of Years Required or Expected for Percent of Population Aged 65 and Over to Rise From 7% to 14%).

Country	Period of Time	Number of Years
France	1865–1980	115
Sweden	1890–1975	85
Australia	1938–2011	73
United States	1944–2013	69
Canada	1944–2009	65
United Kingdom	1930–1975	45
Spain	1947–1992	45
Japan	1970–1996	26

Source: Kinsella and Velkoff, 2001

people at older ages, they have been able to live either alone or with partner. The percentage living in institutions has remained constant and we observe a decrease in those living with others persons, i.e. mainly in a multi-generation household. Here again, geographical disparities are observed: in Denmark, in the mid 1990s, 39% of the household population aged 60 and over was living alone whereas this proportion was only 14% in Spain and less than 13% in Japan (Table 2.4). “Cohabitation with adult children has fallen increasingly out of favour, though it remains a highly prevalent arrangement in some countries, especially in southern and eastern Europe, where institutionalization has not been developed so far” (Festy, forthcoming).

The proportion of the household population aged 60 or over living alone is very different for men and women. Living alone mainly concerns women, as the percentage of women in this living arrangement is two or three times higher than for men. This can be explained by marital status differentials: women are less likely to live with a partner in old age than men. They are more often widows due to the higher mortality of men and to the fact that on average they are younger

Table 2.4. Proportion of the Household Population Aged 60 or Over Living alone by Sex

	Date	Percentage Living Alone		
		Total	Male	Female
Austria	1995	30.7	12.9	42.0
Belgium	1994	29.3	16.2	38.9
Canada	1991	24.4	13.7	32.9
Denmark	1994	39.1	27.7	50.0
Finland	2000	35.2	21.0	45.3
France	1994	28.7	15.1	38.4
Germany	1994	33.6	15.1	45.5
Greece	1994	18.3	8.9	26.1
Ireland	1994	26.4	21.4	30.4
Italy	1994	22.6	10.0	31.9
Japan	2000	12.7	–	–
Netherlands	1994	34.5	16.9	47.4
Portugal	1994	15.8	9.2	20.6
Spain	1994	14.0	7.4	19.2
Sweden	1990	37.1	24.3	47.3
United Kingdom	1994	34.7	21.5	44.7
United States	2000	25.9	14.9	34.5

Source: United Nations, 2005.

than their spouse. They are also less likely than men to remarry when widowed or divorced. The particularly high percentage of women living alone in the Netherlands compared to men results most likely from the higher level of institutionalization, of disabled persons in particular (Gaymu et al., 2006; Festy, forthcoming).

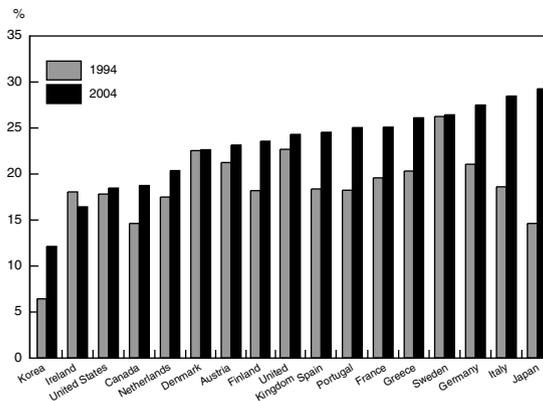
For both men and women, the proportion of the household population aged 60 or over living alone differs considerably between developed countries. The smallest percentage of men living alone is observed in Italy (10%), Portugal (9.2), Greece (8.9) and Spain (7.4). The largest is observed in Sweden (24.3) and Denmark (24.7%). For women the minimum is observed in Portugal (20.6) and Spain (19.2) and the maximum in Sweden (47.3), Netherlands (47.4) and Denmark (50%). We observe a clear north-south differentiation that results partly from a higher level of multi-generation cohabitation in the South.

All countries have to face the ageing of their society; the demographic trends of the last decades are new constraints of the socio-economic system of intergenerational exchanges, though each national case is to some extent specific.

2.4 DEPENDENCY RATIOS AND LABOUR FORCE DYNAMICS

The simplest indicator to appreciate the challenge of the past and future demographic trends in terms of old-age support is the demographic old-age dependency ratio. Figure 2.3 gives the proportion of the population aged 65 and above to the population aged 15–64 years in 2004 and the change in comparison with the year 1984.

Figure 2.3. Proportion of the Population Aged 65 or Over to the Population Aged 15–64

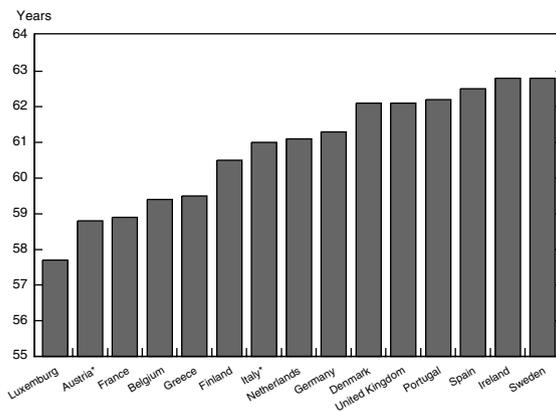


Source: Computed from OECD Data (OECD, 2005).

This ratio is around 25% in 2004, varying from 17% in Ireland to more than 28% in Italy and 29% in Japan. The change has been particularly rapid in these two countries: the proportion of the population aged 65 or over to the population aged 15–64 was, in 2004, 1.5 times higher in Italy than in 1984 and twice as high in Japan.

To assess recent and future constraints of the systems of solidarity and exchange, labour market behaviours also need to be considered. The dynamics of the labour force depends on demographic trends but also on participation rates and unemployment rates. In this respect, the developed countries may experience very different situations. The economic old-age dependency ratio, defined as the proportion of old people to economically active people aged 15–64, is related to the age structure of a population but also to the age at which people become inactive. The average exit age from the labour force varies from 58 years in Luxembourg to about 63 years in Ireland and Sweden (Figure 2.4). The level of female participation also has a strong effect on the economic old-age dependency ratio. While the male participation rate is very high and relatively similar in all countries, the female rate is quite diverse. If we compare the participation rate of women aged 35–44, an age when it may be difficult to reconcile family and working life, we note substantial contrasts between developed countries. The participation rate is quite high in Scandinavian countries: the participation rate of Swedish women in this age group fluctuates around 87–88%. On the other hand, it is relatively low in Spain and in Japan, with levels of respectively 69% and 66%. During the period 1984–2004, some countries experienced an

Figure 2.4. Average Exit Age From the Labour Force in 2004



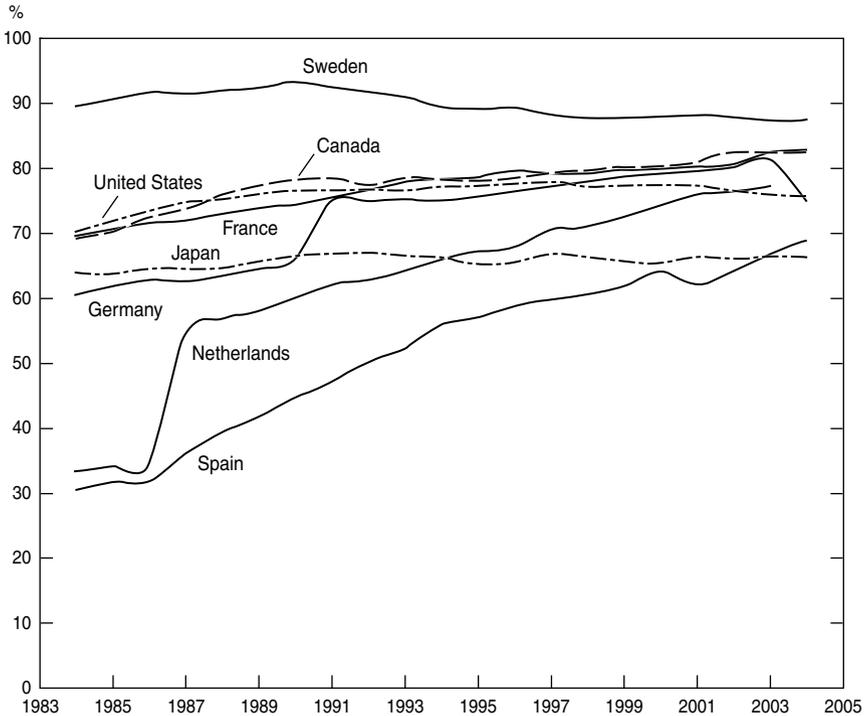
Source: Eurostat, op. cit.

important change in terms of women's behaviour on the labour market: this is the case in the Netherlands and Spain. Figure 2.5 shows the sharp increase in the participation rate of women aged 35–44 in these two countries.

Gender differences cannot be ignored when analysing participation rates: part-time employment is much more common for women than for men. Male part-time employment as a percentage of male employment is highest in Australia with 16%, while for women, this proportion is only 11% in Greece, rising to 19% in United States, 29% in Italy, 42% in Japan and 60% in Netherlands (Figure 2.6).

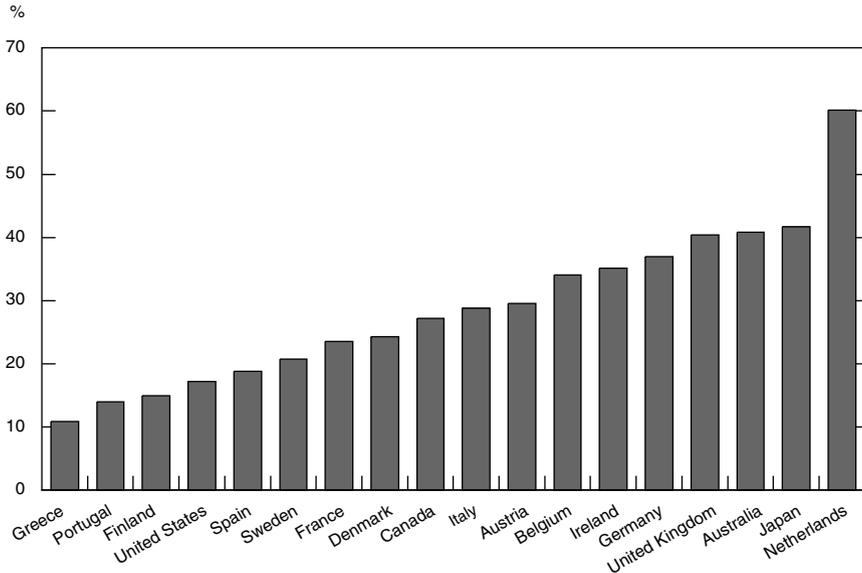
Furthermore, the participation rates do not all have the same economic signification since not all people included in the labour force are actually employed. Therefore, the relationship between age structure and labour force is mediated by the probability that people looking for a job will be employed.

Figure 2.5. Participation Rates of Women Aged 35–44 Years



Source: OECD, op. cit.

Figure 2.6. Female Part-Time Employment as a Percentage of Female Employment in 2004



Source: OECD, op. cit.

Again, we observe contrasts between developed countries. The unemployment rate in 2004 was below 5% in Japan and 5.5% in United States, but stood at 10% in France and 12% in Belgium. There are also large differences between countries in the duration of unemployment: few people remain unemployed for more than one year in Canada but the number is high in France or Spain. The unemployment rates are different for men and women but the differences are not always of the same type. In Spain, the male unemployment rate of the year 2004 for the 20–24 age group is 16.5% versus 24.1% for females; in Sweden the figures are respectively 15.5 and 13.5%.

2.5 SOCIETIES AS SYSTEMS

We have observed substantial differences between countries as far as fertility, family patterns, mortality, rhythm of ageing and labour force dynamics are concerned. But what makes comparisons between countries really difficult, when we want to determine more precisely the way demographic changes challenge the social contract, is the degree of linkage between different

phenomena. Family changes are related to fertility (number of children per woman) but also to mortality (probability of being alive at age 60, 80, etc.). Likewise the age at childbearing is linked to the situation of women on the labour market, and particularly to the availability of stable jobs.

It seems important to think in terms of demographic, social, economic and political configurations. Some configurations are viable, others are not. For example, if the level of fertility is closely related to the probability for a woman of being active, in the sense that it would be very difficult for a working woman to raise several children, a configuration characterized by a (relatively) high level of fertility and high female participation rates would be practically impossible, even with a generous family policy. However we know that this relationship between fertility and female labour market participation is much more complex, and the degree of incompatibility between paid employment and fertility varies from one country to another.

We may also question the ability of social and economic policies to address national specificities: would it be possible, for instance, for a Japanese population policy –an exact copy of the French one- to achieve a higher level of fertility in Japan? The present value system of Japanese society may be an insurmountable obstacle to higher fertility. We may also wonder whether it would be possible now, in France, with an appropriate policy, to increase the participation rate of people aged 55–64 with the objective of reducing the burden of inactive people, considering the practises of the companies and the desires of employees. It is by no means certain. Not all socio-economic configurations are possible everywhere.

We cannot therefore reason on the basis of a clear set of links between causes and consequences, with the same causes inducing systematically the same consequences: societies are systems, i.e. large sets of interdependency relationships. The dynamics of intergenerational relationships is for this reason complex. The recent French experience of early retirement, sponsored by the social protection system (mechanism of “*préretraite*”), in order to open up new opportunities for young people entering the labour market shows the limits of administrative measures based on an purely arithmetical view of labour force dynamics: the early retirement of workers aged 55 or more didn't bring down unemployment among young adults.

Finally, societies may be affected by the ageing of their population in different ways for different reasons: because social policies may be specific, because the value systems are not the same, and because interactions are not of the same nature. Though we observe many similarities in the developed countries, we also observe particularities; it still remains difficult to determine the importance of particularities compared with similarities and to what extent they make the situation of each developed country unique.

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PART II

GENERATIONS, SOCIAL CONTRACT AND LABOUR FORCE PARTICIPATION: THEORETICAL AND EMPIRICAL ISSUES

CHAPTER 3

ECONOMICS OF THE INTERGENERATIONAL DEBATE: NORMATIVE, ACCOUNTING AND POLITICAL VIEWPOINTS

ANDRÉ MASSON*

The economics of relations and transfers between generations focuses on a particular field of analysis, that of *growth*, viewed primarily on the macroeconomic scale and from a long-term viewpoint. This growth is analysed mainly in two forms:

1. “*sustainable*” growth, based on the rational management of non-renewable resources for the sake of future generations;
2. “*optimal*” growth, generated by an accumulation of capital which obliges present generations to sacrifice a share of their resources for the benefit of future generations.

These two basic transfer mechanisms are associated with others, which may be private (bequests or inheritances, aids or gifts), public (debt, pay-as-you-go pensions) or *combined*, involving both the family and the state: education of young children, support for elderly parents. Taking place in most cases between overlapping (contemporary) generations, these transfers are often a topic of controversy, lying at the very heart of the debate on intra- and – more recently – inter-generational equity (Schubert 1995).

Economists studying intergenerational relations and the foundations of growth, invariably attribute the specificity of these questions to two factors: – the limits inherent to the *market*, which only permits exchanges, even deferred, between *contemporaries*, with all private contracts requiring the simultaneous presence of both contracting parties;

*I would like to thank François Héran for the idea of linking the three types of welfare state with the classical philosophers, Hobbes, Locke and Rousseau.

– time *irreversibility* engendered by the succession of generations which, here again, raises the question of the place or the fate of those who are *absent*, namely past and, above all, future generations.

The first part of this chapter, which adopts a *normative* approach, considers the implications of these two specific factors by examining the role of an *ideal* State with respect to *future generations*: is it the State's role to represent those who are absent, as Pigou believes, or should we rely on the market by first trusting individuals and their *altruism* for their descendants, as suggested by Marglin? In this case, how can the State be the “guarantor of solidarity between generations”, i.e., defend the *interests* of our successors, while ensuring their full *cooperation*? This is the combined problem of the fair inheritance and the fair claim.

The second part, more pragmatic and *positive*, focuses on the actual behaviour of the *real* State as the mediator between generations. The challenge is to achieve generational *equity* in redistribution policies and to ensure the long-term *viability* of transfer regimes such as pensions or health insurance. The debate begins with issues of a purely accounting nature, with an assessment by generation or birth cohort of the discounted net balance of benefits received and taxes paid throughout the life cycle. But as shown by the opposing views of Kotlikoff and Becker on transfer policies, this *generational accounting* is not just a simple arithmetical exercise: it can produce very different results depending on assumptions regarding spending on children's education, trends of changes in the welfare state, etc.

The third and last part is more concerned with the *political* and even ideological debate. To explain social transfers and understand the role of the Welfare State, how should we approach the analysis of relations between overlapping generations? In terms of *cooperation* or social contract, as argued by the advocates of inter-generational solidarity in particular, but also by Becker? Or rather in terms of *struggle* or socio-political conflict, in which the elders of our ageing societies always come out on top, to the dismay of supporters of generational *equity* such as Kotlikoff or Preston? To resolve the controversy, we can no longer neglect the role of the *family* as a unit of reproduction and education of children and as a network for the protection of elderly parents: the assessment of intergenerational distribution policies depends notably upon the modes of interaction assumed to exist between public and private transfers.

We will see that Becker's position in favour of *generous* public inter-generational redistribution, while surprising on first sight, does not necessarily signify that this Chicago-based economist is espousing the views of a left-wing social democrat. It rather reflects his neo-Marshallian paternalism and his somewhat forced allegiance to a “familial-corporatist” concept of the welfare state (*cf.* Esping-Andersen, 1999)¹.

3.1 THE *IDEAL* STATE AND JUSTICE WITH RESPECT TO FUTURE GENERATIONS

To remedy the insufficiencies of loan markets – source of the “generation dilemma” – and the time irreversibilities linked to the succession of generations, two options are available. The first, private, is based on the dynastic *altruism* of agents. The other, public, designates the State as guarantor of the interests and cooperation of future generations. It uses intergenerational mechanisms of *indirect reciprocity*, a system of generalized exchanges which lead to repetition of the same type of transfer by mobilizing *three* generations: you do not pay back the person who gave to you, but a third person, from a different generation; you do not receive from the person to whom you gave, but from a third person (belonging to a third generation).

3.1.1 Debt Constraint and the Generation Dilemma

Exchanges on markets involve a liquidity or borrowing constraint, called *C*, which plays a fundamental role in overlapping generation models. No individuals can make a *negative bequest* to their children. In other words, it is impossible to leave behind a private debt or to borrow against the resources of one’s descendants.

The *generation dilemma* results from this absence of a long-term private contract between generations. The general framework is that of a *JAV* life cycle divided into three periods, including two of *dependence*: youth (*J*), retirement in old age (*V*) and an intermediate period of activity (*A*) with all three generations coexisting at any one time. With no claim nor rights over the future resources of their offspring, nothing permits parents (age *A*) to commit their children (age *J*) to a contract of the type “I educate you today and in return you (when you reach age *A* must meet my needs when I grow old (age *V*)”.

If he is “selfish”, the child has no incentive to meet the final payback obligation. Knowing this in advance, the parents, even when concerned for the well-being of their children (i.e., altruistic), are likely to limit their investment in the education of their children (contrary to what they would do if they had a guarantee that the amounts invested would one day be repaid). In a steady-state system, each generation is thus *under-educated* during youth and *under-protected* during old age, whereas mutually beneficial intergenerational cooperation would result in a higher level of well-being.

Of course, parents are able to invest in shaping the preferences of their young children and inculcating values, such as a sense of duty or filial obedience – or even feelings of guilt if no support is provided. But this type of transmission is problematic and, furthermore, expensive (Becker, 1993 and 1996).

3.1.2 Irreversibilities: Disenfranchisement and Chronological Injustice

The succession of generations gives rise to *two* canonical forms of time irreversibility which hinder the action of future generations, too young or not yet born. It is important to distinguish between them as they each call for specific remedies:

IR1: Future generations cannot claim their due retrospectively, or modify *ex-post* the decisions made today in their name – including those which concern their respective *size*². They may thus become victims of the laxism or improvidence of their predecessors, and be obliged to submit to their choices without giving their opinion or “taking part in the vote”. This is the notion of *disenfranchisement*.

IR2: Future generations cannot modify (improve) the lot of present generations, nor make up for a previous sacrifice of their predecessors. This is the only case envisaged by Rawls (1971), under the term of *chronological injustice*: “we can work for our posterity, but it can do nothing (in return) for us”.

The first form, *IR1*, corresponds to the question of *fair inheritance* and concerns more broadly *downward* intergenerational transfers (education, bequests, etc.). It comes into play notably in the case of natural or non-renewable resource management. The *interest* of future generations is at stake.

The second form on the other hand, *IR2*, concerns *upward* transfers (pensions, public debt, support for the elderly, etc.). Though Herzen and Kant were shocked that future generations could benefit, at no cost, from the accumulated capital and sacrifices of their elders, Rawls (1971), on the contrary, is quite unperturbed by a situation that he sees as “unalterable”. In fact, the question is to determine whether present generations can be granted public or social “drawing rights” on future growth to “reward” them for their efforts and encourage them, above all, to work even more. . . This problem of the *fair claim* aims to bypass the debt constraint *C* of the markets (no private debt allowed). In this case, the interest of contemporaries, dependent upon the *full cooperation* of future generations, is at stake.

3.1.3 Altruism for Descendants Versus the State as Representative of Future Generations

Economic theory has come up with two broad answers to the problems raised, be it the (overlapping) generation dilemma or the two forms of irreversibility concerning future generations.

The first is based on a specific form of *altruism* of agents towards their offspring, defined by Becker, following on from Barro (1974), as follows: parents obtain satisfaction from the presence and well-being of their children.

Reflecting the desire for immortality – to survive beyond death – this altruism provides a means to live on through one's descendants and thereby extends the decision-making horizon beyond the agent's individual existence. In its *dynastic* form - when offspring are expected to show the same altruistic attitude towards their own children and so on *ad infinitum* – parental altruism provides agents with an *infinite* horizon.

There are nevertheless *two types* of altruism, free or constrained, depending on whether the borrowing constraint C is saturated or otherwise.

To constitute the desired panacea, altruism must be *free*, resulting in *positive bequests* (and even a continuous intergenerational chain of positive bequests in the dynastic form). In this case, the parents achieve the desired intergenerational smoothing of consumption. There is no longer a generation dilemma since, if necessary, they can oblige a child, even a selfish one, to refund their investment in his or her education. To increase their own consumption, or face up to the contingencies of life (health, longevity, dependence, etc.) they simply reduce the planned bequests by the corresponding amount (so long as they remain positive). In fact, by playing with the “nest egg” of planned bequests, they can reap a share of future growth and obtain the cooperation of their children. Even against their will, the children help to support their elderly parents, who thus escape the ill effects of chronological injustice *IR2*.

In addition, Becker's altruistic model assumes that along “a long-term equilibrium path”, the descendants of the “benevolent patriarch” (as defined by Becker) are, to all intents and purposes, clones of the patriarch himself. Pursuing a common objective in perfect harmony, they form a single decision-making unit – a single dynasty. In this case, the interests of future generations are preserved in advance (*IR1*). In particular, bequests can serve as a *buffer* to ensure that a less able or unlucky child receives a consumption amount more in proportion to that of his more well-endowed parents.

Free altruism thus provides a means to overcome all difficulties (borrowing constraints, generation dilemma, irreversibilities). With an infinite horizon, possessing all necessary information and controlling in advance the actions of all members of his dynasty, the patriarch makes optimal (from his viewpoint) positive bequests that he can even modify at will, according to Barro's “Ricardian equivalence principle” (1974), in order to offset and neutralize, at no cost, any necessarily unwelcome redistribution by the State. *Optimality* and *neutrality* are the cardinal virtues of this free and autonomous altruism, whose paradoxical consequences we will examine later.

But when *constrained* by the impossibility (C) of leaving a private debt, altruism loses its miraculous properties. The trans-generational chain of transfers is broken. Prevented from making a negative bequest (their preferred choice due to inadequate resources or insufficient altruism), the parents leave nothing

behind them and, for want of an alternative, adopt behaviour similar to that of selfish agents, largely ineffective due to the generation dilemma.

In this case at least, State intervention appears legitimate, providing a means to lift the borrowing constraint C and to acquire, through pay-as-you-go pension schemes, a claim on the next generation. More precisely, public spending on education for young people and on pensions or healthcare for the elderly gives rise to cooperation that is mutually beneficial to both parents and children (Becker and Murphy, 1988).

What's more, even in the case of free altruism, can the head of the family really be trusted to safeguard the interests of his children and grandchildren, and can contemporaries be trusted to act likewise with regard to their successors? Is the hypothesis of an *ideal* degree of altruism not simply a petition of principle?

In terms of political philosophy, the debate extends beyond the strict framework of economic argument. It concerns the legitimacy of *tutelary* State intervention.

For Marglin (and libertarian liberals) this intervention is not justified since, in a democracy, the government must consider only the preferences of individuals who are actually *present*. Indeed, for the "libertarians", who incidentally also support the market, "if the stakeholders want it, then it is fair" (Kolm, 1985).

For Pigou, on the other hand, the State must protect the interests of those who are *absent*, be they the "future selves" of impatient, improvident or short-sighted agents or again, and more importantly, future generations. In the first case, all we have to know is whether individuals, having at their disposal the long-term contracts offered by the market, are truly *responsible* for themselves, and under what conditions they may be denied the right to sacrifice their own interest for immediate profit. In the second case, on the other hand, the market can do nothing for subjects who are not yet born, and who can hardly be held to account for the wrong choices of their elders. Prices, interest rates and market allocations reflect nothing other than the values and preferences of living people; yet very often, the interests of descendants, who are not directly "represented" (*disenfranchisement*), are very imperfectly defended by those alive today.

3.1.4 The State as Guarantor of the *Interests* and *Cooperation* of our Successors

So let us assume that public intervention is necessary to remedy the insufficiencies of the market and of altruism. How should the State exercise its role as the "representative" of future generations, as guarantor of intergenerational solidarity? What principles should be applied to guide us in the choice of

a fair inheritance which makes up for irreversibility *IR1* in the interest of our successors who do not vote? And what fair claim can we impose upon them to make up for chronological injustice *IR2* and obtain their mutually beneficial cooperation? Solidarity between generations requires that both demands be satisfied simultaneously.

(i) *fair inheritance* (backward-looking and downward indirect reciprocity)

For *utilitarianists*, whose aim is to maximize a sum of utilities, the problem can be summed up in the following question: what weight should the State attribute, in its social welfare function, to the utility of unborn individuals compared with that of living individuals (assuming that we can compare and aggregate levels of utility)? In other words, what *social discount rate* should be applied to the well-being of future generations?³

But this simple procedure leads to an *impasse*. A *constant* discount rate (“exponential” discounting), if positive, sacrifices the interest of distant generations (with an annual rate of 3.5%, a loss of well-being in 200 years counts as only one-thousandth of an equivalent loss today). On the contrary, if this rate is *zero* (no discounting), it is the contemporaries who get a raw deal: any minimal gain in utility received by an infinity of future generations – even if they are already richer – could “offset” a major loss of well-being for present generations. Intuitively, the annual discount rate that corresponds best to our moral concerns should *decrease* over time, starting high but becoming much lower later on and falling practically to zero beyond a sufficiently distant time horizon: there would be little difference between saving a life in 200 years or in 250 years. But this “hyperbolic” discounting results in *time inconsistency* of the choices made: our successors in 200 years will not agree with the decisions made for them today since, like us, they will prefer to give priority to the near future, i.e., save a life in 2200 rather than in 2250...

Faced with the drawbacks of utilitarianism, certain authors (Buchanan, Harsanyi, Rawls, Kolm...) follow a different route: to infer the principles of generational justice, they resort to the artifice of *social contracts* between generations, which must be unanimously approved by all participants. This contractual approach uses the fiction of the “choice of a constitution” adopted by all agents in a hypothetical situation where they are free and motivated by interest alone, and yet where they agree not to use their knowledge of themselves or of others to their own advantage. The most well-known formulation is *Rawlsian*, with common rules decreed in the “original position”, behind the “veil of ignorance”, (Rawls, 1971).

Its application to an intergenerational framework is nevertheless difficult. The choice of the fair savings principle for future generations must be established, behind the veil of ignorance, by *contemporary* individuals, and who know themselves to be such, even if they do not know the particularities of

the generation to which they belong. The problem is that these contemporaries, motivated by self interest, will not leave anything under these conditions to their successors (or too little if we take account of generational overlap).

To resolve this contradiction, Rawls (1971, § 25) first tries to transform these individuals into “patriarchs...concerned, at the very least, for their immediate descendants”. This recourse to minimal *family altruism* is particularly inopportune (from the standpoint, first and foremost, of Rawls himself). It removes family relations from the domain of justice while making numerous concessions to the libertarian or anti-statist approaches supported by Marglin. Furthermore, it totally contradicts one of the central messages of Rawls’ philosophy: i.e., that with regard to fair rules, *mutual interest* (i.e., in the original position) works better than informed benevolence...⁴

Aware of these inconsistencies, (Rawls, 1993, pp. 54–55) has since developed a more satisfactory formula based on cooperation between generations which proves mutually beneficial if applied by everyone. The choice of the savings principle adopted by contemporaries (behind the veil of ignorance) must be “subject to the condition that they must want all *preceding* generations to have followed it”...on the assumption that their successors will follow it also. This principle, which boils down to the well-known precept “do for your descendants what you would have wanted your predecessors to do for you”, establishes a *chain of downward and backward-looking indirect reciprocity*.

This type of indirect reciprocity advantageously replaces (family) altruism while retaining its most welcome implications: choices are made in the context of a long-term dynastic time horizon; intergenerational savings (in human and non-human capital, etc.) reach sufficient levels, etc. At the same time, it is characterized by a *final obligation to pay back*, one of Mauss’s three obligations. To function successfully, it calls for a certain responsibility or collective generosity with regard to future generations⁵.

(ii) *the fair claim* (upward and forward-looking indirect reciprocity)

For upward transfers (pensions, etc.) on the other hand, the State must protect the interests of contemporaries and obtain the cooperation of young or future generations. In this case, the Rawlsian principle of justice requires that contemporaries must want *subsequent* generations to follow the precept of “do for your predecessors what you would want your descendants to do for you”. It corresponds to a second form of indirect reciprocity: *upward and forward-looking indirect reciprocity*. The pension system, for examples, requires contributors to pay for their elders in the hope that they, in turn, will receive from their juniors in years to come.

This form of reciprocity, characterized by an *initial obligation to give*, is able to function even if individuals are selfish. The question at stake concerns rather the *credibility* of the rights and claims acquired over successors, the

capacity conferred upon the State to “pre-commit” these successors to the initial contract – to ensure that they respect the obligations made *ex ante* in their name. Cooperation thus depends upon the adoption of *appropriate beliefs* by each generation (Hammond, 1975). Each generation must be convinced that the precondition for receiving a pension is to pay one to the previous generation (with no possibility of evasion)... and that the same rule applies to *all* future generations (i.e., the condition is equally sufficient). Each individual counts upon the permanency of the institution, the indefinite continuation of the chain of intergenerational reciprocity.

Transposed into an uncertain future, this mechanism of indirect reciprocity engendered by public debt or pensions has a decisive advantage over private insurance, in that it spreads the contingencies or misfortunes of any particular generation over an infinite number of generations (so long as the reciprocity chain is capable of withstanding these “shocks”). By offering an “asset” pledged against future growth and better days to come, it provides a system of *intergenerational risk sharing*, covering demographic risks (size or longevity of the generation), economic risks (wage rates, interest rates, crises) and historical risks (war)⁶.

Operating over the very long term, this Rawlsian insurance is “fundamental” as it covers each generation against the risks occurring *before* it is able to insure itself or even to know about them – its “inborn handicaps” as it were. A universal reducer of *uncertainty* (as defined by Knight), it is based on the following cooperation principle: “in the event of difficulty, *enable* previous generations to do – issue a loan, develop pensions – what you would want future generations to enable you to do in a comparable situation”.

In this way, by protecting against risks that cannot be covered by the market, public transfers introduce a new form of *flexibility* which benefits *ex ante* each generation (assumed to be risk-averse). But prudence is essential to avoid excesses that would cause ever growing debts to be passed on from one generation to the next. *Laxist* policies of this kind would threaten not only generational equity, but also the very vocation of redistribution systems whose long-term viability as an effective system of insurance would be jeopardized. By increasing the risk of default by future generations (unwilling to pay the necessary tax increases), they would undermine public trust in State institutions and promises and would become, on the contrary, a *source* of instability and uncertainty.

(iii) *fair inheritance and fair claim*

For the sake of clarity, we have examined the questions of fair inheritance and fair claim separately: the solution always involves one particular form of indirect reciprocity, whose specific requirements are detailed above. But the crucial point is that these two questions are intimately linked: the State must

simultaneously safeguard the interests of future generations *and* obtain their cooperation. These two functions are complementary. It would be unrealistic to count on the collaboration of our successors without working at the same time for their well-being – to expect them to repay a heavy debt while leaving a very small inheritance. But overlapping generations models show, more precisely, how the people of today and tomorrow are drawn into a process of *cross debt* and mutual obligation which perpetuates and strengthens their mutual ties⁷.

This close dependence is best illustrated by the case of a *heavy investment*, in environmental protection for example, deemed highly beneficial over the *long term*, i.e., benefiting above all the young or unborn generations. Let us assume that today's workers and pensioners are sufficiently altruistic towards their descendants to agree to such an investment, which demands major sacrifices in return for very little benefit to themselves. However, if the cost of funding this investment is very high, they will not be able or willing to substantially reduce their consumption and will rely partly on public borrowing, refunded by future generations. Based on mutually beneficial intergenerational cooperation, such an operation will appear worthwhile to any rational and far-seeing planner: generational justice is preserved since the loan repayments made by the successors will be more than offset by the improvement in their environment (Van Parijs, 1995).

3.2 THE *REAL STATE* AND FUTURE GENERATIONS: A FAIR DEAL?

The transition from the normative and the ideal State to the positive and the actual behaviour of States is often a hazardous and disappointing operation. The current worrying state of relations between generations offers proof of this fact. Attention generally focuses on two economic trends, which are both new and alarming.

The first, relating to generational *equity*, concerns the evolution of living standards with respect to age. Since the end of the post-war boom years we have witnessed a relative deterioration – absolute since 1990 – in the situation of young households (notably with regard to starting wages) compared with all other generations which, for their part, continue to progress, though at a slower pace. Conversely, the situation of the oldest age groups has improved steadily, to the point where their standard of living has caught up with and even overtaken (for senior executives) that of the economically active generation⁸.

The second, which concerns the long-term *viability* of transfer systems, relating to upward transfers especially, draws attention to the increase in taxes and the sharp rise in public spending for the elderly. Today, people aged 60 and over receive almost 19% of annual national income (13% for pensions, 4–5% for healthcare, 1% for the increase in the public debt), as much as, or even more than the amounts devoted to all other age groups for education (7%), family

allowances (1.5%), healthcare (4–5%), welfare benefits and unemployment (3–4%), and other benefits (childcare, housing). One of the causes of this public spending imbalance simply reflects the actual situation: an ageing population which, in France at least, is due less to a decline in the birth rate than to the advancing age of the baby-boom cohorts and an (alleged) structural increase in life expectancy. So it would be more instructive to examine the variation by age in *per capita* public spending (*see below*).

Yet many commentators have claimed to identify a direct causal relationship between the above-mentioned facts. They believe that the deteriorating situation of the younger generations is directly attributable to the excessive wealth accumulation of the older generations who use their demographic weight and their electoral power to monopolize the resources of the State “at the expense” of their juniors, thus causing an uncontrolled movement of social transfers in their favour.

Without questioning, as yet, the grounds for a position which denounces the unequal battle of generations, it is important to note that it is against this backdrop of controversy that *generational accounting* has developed. The initial idea behind the development of this new tool is nonetheless justified. It aims to provide a measure of the long-term overall viability of redistribution systems as a guide for public policy makers. Governments wishing to assess the cost of a policy must not rely solely on “cash basis accounting” which only identifies *current* deficits, but consider the long-term budgetary equilibrium by integrating future commitments such as public debt repayments or “vested pension rights” (which correspond in France to an “implicit” debt equivalent to twice the country’s GDP).

The aim is to assess, on the basis of forecast interest rates and growth rates – up to the year 2100 – the effort required of future generations to honour the commitments made in their name. To this end, the accounts calculate for each *birth cohort* (current or future), under certain assumptions or conventions, the *discounted net value* of benefits received weighed against the taxes paid during the life cycle (Kotlikoff, 1992).

It is not our purpose to make a detailed critical analysis of this complex accounting exercise. Our aim is rather to interpret its results in terms of generational (in)equity and, above all, to explain the opposing conclusions reached by Kotlikoff and Becker. For the former, the balance of public redistribution is *negative* for future generations, who will have a heavy burden of debt to repay in order to restore long-term budgetary equilibrium, while for the latter, it is *positive* for all generations (present and future).

Two key factors explain this divergence. The first arises from the fact that generational accounting bypasses the question of the fair inheritance by focusing on that of the *fair claim* and ignores, in particular, the returns of public

investments (education, air quality, etc.) which do not correspond to monetary transfers. The second, inherent to all long-term forecasting exercises, relates to the scenario of public policy change taken as reference: that of Becker is much more favourable.

3.2.1 Illustration: Diagram of Public Redistribution Between Overlapping Generations

We begin by reproducing, in a simplified manner, the cycle of public redistribution in an instantaneous configuration JAV , with three overlapping generations (*cf.* § 3.1.1). The active generation (age A), in the middle position, finances the two other dependent generations through education of its young children (age J) and pensions for its elderly parents (age V).

Figure 3.1, with the period along the x axis and the generation along the y axis, represents the different transfers involved. Downward transfers are labelled 0 and upward transfers 1. The current pivot generation is labelled 2 (hence in position A_2). Its parents (V_1), belonging to generation 1, were in the pivot position in the previous period, while its offspring (J_3) are part of generation 3, which will itself become the pivot in the next period (in position A_3). Corresponding past transfers are designated by $\bullet 0$ and $\bullet 1$, and anticipated transfers by 0^* and 1^* .

The taxes-benefits life cycle for generation 2, currently the pivot, is easy to determine: it benefited from education spending (flow $\bullet 1$) when it was young (age J_2); it now contributes for its descendants (flow 1) and ascendants (flow 0); and expects to receive pensions and other benefits (flow 0^*) when it reaches old age (age V_2). This cycle of contributions (–) and transfers (+) can thus be written:

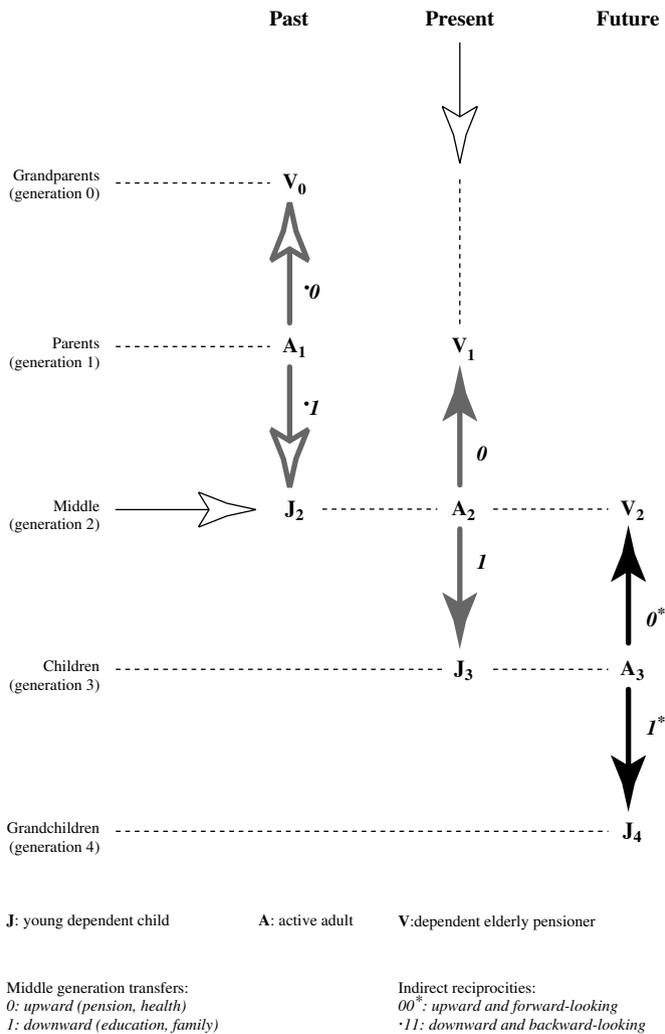
$$(\bullet 1; 1, 0; 0^*)$$

$$+ \quad - \quad - \quad +$$

Its discounted net value for different generations is key to the debate.

For the current middle generation, public redistribution combines the two forms of indirect reciprocity already described. One, downward and backward-looking (education) designated chronologically as $\bullet 1$, is characterized by a final payback obligation and is comparable, in financial terms to a *loan*, granted under steady state conditions at the overall growth rate of the economy, $n + g$ (the amount refunded is higher than the amount borrowed because of demographic growth at rate n and technical progress at rate g); the other, upward and forward-looking (pension) designated as 00^* , imposes an initial obligation

Figure 3.1. Public Redistribution Between Generations



to give and corresponds in financial terms to a *savings* operation, here again with a yield of $n + g$. These indirect reciprocities are intended to remedy the difficulties in bilateral exchanges between generations of the type. $\bullet 10$ or 10^* , at the source of the generation dilemma (*see above*).

3.2.2 Generational Accounting (Kotlikoff): Virtual Respect for Vested Rights

Developed by Kotlikoff (1992) and Auerbach et al. (1994), *generational accounting* aims precisely to evaluate, for each birth cohort, the result of this cycle ($\bullet 1$; 1, 0; 0 \bullet) of benefits received and taxes paid throughout the life cycle. The method is based on a series of assumptions or conventions (*cf.* Masson, 2002b):

A1: Only *public* redistribution is taken into account. Intergenerational transfers within the family are ignored, along with the repercussions of redistribution on these transfers, generally favourable to the younger generations: the increase in public pensions has to a large extent released the active population from the burden of supporting their elderly parents and led to an increase in bequests and gifts to children and grandchildren.

A2: The method gives only *one figure* per birth cohort: the discounted net payment of public redistribution for a “representative” agent (the discount rate r being chosen independently). Both timing effects and intra-generational inequalities are ignored⁹.

A3: With no rules for apportionment of benefits between ages or generations, the accounts only consider the *cost* of funding *public consumption* (infrastructure, schools, defence, research and other public investments...), which represent 20–30% of GDP, but not the benefits. For this reason, the net values (benefits – taxes) per cohort are often *negative*, corresponding to a *net payment*. Though they incorporate the cost of these public expenditures, they do not integrate the future gains to be reaped from this “consumption”, which in certain cases takes the form of heavy, long-term investments. The problem notably concerns *education* spending which, in the first versions of the accounts, was included in public consumption...

A4: To assess the viability of current budgetary and fiscal policy, the accounts are based on a fundamental convention concerning the *scenario of change*. In order to respect “vested rights”, it assumes that current policy remains unchanged for contemporaries, any imbalance being mopped up by their descendants. Clearly, this scenario is purely *fictitious* and the accounts are simply a *thought experiment*: if the policy implemented is indeed unsustainable, the chosen scenario will lead to substantial and unrealistic current deficits for certain welfare regimes and will not correspond to the (rational?) expectations of agents.

This method does not seek to take account of agents’ reactions (their private transfers are already ignored) or of the general equilibrium effects of fiscal policy: a purely static and... accounting method, it does not aim to predict the future, but simply to provide, as a complement to current deficits, a *virtual* measure of generational imbalance, a useful trend indicator for public decision making.

These assumptions are used to calculate the fiscal burden imposed on future generations to restore long-term budget equilibrium, a delicate notion which assumes that the discounted value of national debt falls to zero at infinity. In other words, at the date in question, it is necessary to satisfy the intertemporal budget constraint:

$$A(r) + B(r) = C(r) + D(r);$$

A represents the overall “net burden” for future generations (infinite in number); B represents the overall net burden for current generations (aged between 0 and 100 for example), with amounts established on a forward-looking basis only for their remaining lifetime. C is the discounted value of planned public consumption (up to infinity), D the national debt (public debt minus net assets), and r is the discount rate (equal to the real long-term interest rate).

C and D are easy to obtain, but the evaluation of B calls for complex calculations based on demo-economic projections over the very long term, up to around 2100. Lastly, in the Kotlikoff variant, the financial burden A is obtained directly as a *balance* ($A = C + D - B$). If we assume that this global amount A is apportioned equally among future generations, we can deduce the net cost to be paid by each future generation, which can be compared with that of current *new-borns* (who benefit from the current policy throughout their lifetime). If the two amounts are equal (in proportion to respective resources), the policy is balanced and, according to Kotlikoff, *equitable*.

For the USA in 1994, Auerbach et al. (1994) actually obtain a net burden per future cohort which is approximately *double* (in proportion) that of current new-borns. If we follow Kotlikoff, American social and fiscal policy is unsustainable over the long term: it is seriously inequitable and will severely *penalize* future generations.

However, these initial results have been criticized and more recent studies (Raffelhüschen 1999; Auerbach et al., 1999) offer partial improvements, on two points at least: (i) rather than obtaining the overall burden A as a balance (which calls for a very specific value of the interest rate r), it is better to calculate explicitly the burdens for future generations and determine directly the nature and scale of political change required to restore long-term equilibrium; (ii) to avoid negative bias when calculating the net payment (*see above*), public purchases are apportioned by convention between generations (as if each one had received such transfers) – for education, the effective spending profile by age can thus be taken into account.

These corrections substantially reduce generational imbalance (for certain countries, the tax burden of descendants even becomes negative). However, the method has proved extremely fragile in practice. The results obtained are very sensitive – over-sensitive even – to the conventions adopted,

to the values of certain parameters (interest rates, technical progress rates), but also to business cycles effects.

3.2.3 Generational Accounting or Equity (Kotlikoff): Selfish Elders?

Apart from the problem of reliability, these accounting results raise the question of whether or not they can be interpreted in terms of *generational equity*. This is indeed what Kotlikoff (1992) himself proposes, when he worries about the consequences of population ageing and denounces the selfishness or irresponsibility of the elderly: “the old generations have consumed too much and contributed too little”.

Can we thus conclude, on the basis of measured generational imbalances alone, that current policy is signing away the future of our descendants? The answer is obviously not, Kotlikoff’s error (manifest in his choice of interest rate) being to confuse two distinct viewpoints, clearly separated by Diamond (1996): on the one hand, a purely accounting-based analysis in terms of *cost* for the government (the very purpose of generational accounting), to measure the *sustainability* of budget policies; on the other, an assessment in terms of utility for consumers or *well-being* of successive generations, which can indeed be used to appreciate the generational *equity* of policies but which should be based on a detailed *dynamic* model, broadened, moreover, to include private intergenerational transfers¹⁰. There is no simple bridge between the two approaches. It is not possible, contrary to what Kotlikoff suggests, to see from both viewpoints simultaneously, by proposing a measure of policy sustainability which is also an indicator of generational equity.

More generally speaking, generational accounting is a useful guide for revealing future imbalances, beyond current deficits, that might be generated if current policy were maintained. But just as the absence of a deficit is not an absolute selection criterion, this form of accounting does not necessarily lead to a policy that is “equitable”, let alone optimal: if accompanied by sufficient productivity gains, growth in social transfers associated with actuarial imbalance may nevertheless improve the well-being of those who bear the burden of this imbalance... (Diamond, 1996).

3.2.4 Mutually Beneficial Intergenerational Redistribution (Becker)?

However, even with the right objective and a correct interpretation of results, generational accounting does not always provide pertinent information. In reality, a government management criterion based too unilaterally on this tool will result in the *rejection of numerous decisions that are favourable to*

future generations, either because (i) the accounts do not integrate future services rendered by certain long-term public investments, or because (ii) current policy is clearly not designed to apply over the long term to all contemporaries, throughout their life cycle.

The study by Becker and Murphy (1988) provides a remarkable illustration of this problem. The two authors respect the basic principles of generational accounting: a purely accounting method which ignores private transfers (A1); virtual measurement, based on a change scenario here again defined by convention (like A4), of the discounted net burden of public redistribution for a “representative” agent of each cohort (A2). So how is it that their rapid (and biased) calculation leads to *negative net financial burdens for all generations* and all (positive) discount rates, unlike the accounts of Kotlikoff, which are unfavourable for future generations? The key differences concern two points in particular: the contribution of spending on education received as a child and the steady-state scenario upon which the contribution and benefit estimates are based.

(i) *The benefits of public consumption: the case of education according to Becker*

As a general rule, a major defect of generational accounting, even in its most recent variants, is that it considers on the same level – as operating expenses (in line with A3) or uniform transfers – all public purchases, from current expenses (for road transport, etc.) to structural investments (for the environment, etc.), as if they concerned the *same time horizon*. This hasty assimilation will lead to the rejection of public investments that are highly profitable over the long term (to protect the global environment for example) but whose very high cost obliges future generations to contribute to its financing through public borrowing (*cf.* § 3.1.4). Very few or none of the expected (non-monetary) benefits will be incorporated into the accounts, while the financial burden imposed on future cohorts will be duly taken into account.

With regard to this point, a key problem for appreciating generational imbalances is to know whether *education* expenditure for future generations, recorded in the accounts at worse as a non-allocated public purchase and at best as a series of transfers attributed directly to students by age, should not be seen rather an *investment* of this type, profitable but very heavy, obliging parents, even altruistic ones, to leave a debt to their children in return.

This, in any case, is the position of the theoreticians of human capital such as Gary Becker: drivers of technical progress, investments in education (both public and private) have high individual and collective yields. But the active generations will not agree to contribute unless they can issue a loan which is refunded by their successors and, furthermore, obtain a return on their investment by claiming in advance a share of the surplus resources available to their better educated children. Pay-as-you-go pensions and health expenditures for the elderly

would fulfil this function perfectly by granting the active generations “rights” to a share of the income of their successors, i.e., “drawing rights” on future growth.

We will return later to this Beckerian approach, which sees public redistribution (along with family investments in children’s education) as the expression of a “social contract” leading to mutually beneficial *cooperation* between generations. Here, we are merely concerned with the fact that they liken education expenditure to an *investment in human capital*.

Over a *JAV* life cycle in three periods, we saw in § 3.2.1 that public redistribution is a mechanism whereby each generation benefits from education expenditure as a child (age *J*), then contributes during its economically active period (age *A*) to the “education” of the next generation and the “pension” of the previous one, and finally benefits from pension transfers when it reaches old age (age *V*). By likening spending on education received at age *J* to a *transfer*, the balance of redistribution is calculated over the full life cycle *JAV* of each cohort, using the market discount rate *r* to determine the discounted value of this expenditure, as is the case for other benefits or taxes. With the most recent versions of generational accounting which proceed in this way, the generational imbalances obtained are already much more limited.

But when this education expenditure is considered as an investment in human capital, it is no longer the sums received when young that are entered into the balance sheets, but rather their subsequent “yield”, at the rate r_h specific to human capital: the increase in individual productivity is translated into a wage increase spread more or less evenly over the working career. Becker and Murphy (1988) assume moreover, rather hastily, that *all* public spending on young people contributes to this investment in their human capital. As a consequence, the discounted net financial burdens at rate *r* are determined solely from the *start of working life*, over the period of adulthood *AV*, but include also the yields of education received, evaluated at a high r_h rate (taken as 5%, with reference to an American study in 1973...). As these sums are received very early in the life cycle, this “bonus” has a major impact on the net financial burden and contributes largely to its negative value...¹¹

(ii) *The convention adopted for changes in transfer policy*

The other point of divergence, relating to the scenario of change used as reference in the accounts (assumption *A4*), is even more revealing of the preconceived ideas of each author and the underlying issues at stake. Obsessed by the importance and the inertia of “vested rights” acquired from the welfare state by elderly “Rentiers”, Kotlikof assesses the generational imbalances (assumed to be refunded by successors) on the basis of *a policy that remains unchanged for contemporaries*. But too often “forgetful” of the virtual nature of the measures obtained through this thought experiment, he tends to see the results of accounts as a plausible scenario of apocalypse for future generations...

Becker, for his part, does not believe in a conflict between generations for the appropriation of limited budget resources. On the contrary, he interprets public redistribution and its history as a profitable cooperation contract between generations, obliging the active generation to make substantial transfers both to its parents (healthcare, pensions) and to its children (care, education). For Becker and Murphy (1988), the solidity and stability of this “contract” are attested by the fact that the ratio of *per capita* spending on the elderly (aged 65 and above) to spending on the young (aged 22 and below) in the USA remained practically unchanged for almost half a century, from 1940 to the mid-1980s.

Counting, as a consequence, on the durable nature of this contract, Becker and Murphy assess the net burden per generation on the basis of a *constant* ratio (around 3–1). The steady state regime to which they refer, a favourable scenario which wagers on *parallel* growth in unit spending for the young and the old, is thus substantially different from the assumption of an unchanged continuation of current budget policy for contemporaries. In general, it implicitly assumes that the transfer systems are continually adjusted in favour of the new generations. If this scenario prevails, the (virtual) generational imbalances denounced by Kotlikoff will surely tend to disappear, and the cardinal virtues attributed to investments in human capital will indeed lead to a *negative* net burden for each birth cohort...

3.2.5 Provisional Conclusions

This radical difference in perspective with regard to transfer policies is all the more significant in that it divides authors who belong to the same intellectual school. In conclusion, it calls for three remarks.

The first, of a technical nature, concerns the *calculation errors* of each, which illustrate the difficulties inherent to accounting exercises that concern different generations. Kotlikoff does not respect the conditions of validity relating to the intertemporal budget constraint and, more generally, his incessant to-ings and fro-ings between analysis in terms of cost for the government and in terms of utility for the consumer-saver produces inconsistency in his choice of interest rates, public consumption, etc. Becker and Murphy, for their part, use a biased timing of public taxes and transfers (*cf.* previous note). And above all, though spending is analysed on a per capita basis, their calculation neglects the problem of demographic ageing, since they assume the population to be in a steady state!

The second remark, of an empirical nature, concerns the realism of Becker and Murphy’s proposed scenario of change (1988), i.e., parallel growth in per capita public spending on the old and the young, which stood at a ratio of around 3–1 between 1940 and 1983. According to several (contested) American studies, the situation has greatly deteriorated since then, to the detriment of the

young, with the ratio exceeding 5–1 in 1996 (Mulligan and Sala-i-Martin 1999). For France, no in-depth assessment has been made. The recent trends appear to favour the young, with education expenditure increasing faster, even globally, than spending on healthcare and pensions in the years 1986–1996 (*cf.* Masson, 1999). Clearly, accurate diagnosis calls for detailed information on long-term changes in per capita taxes and expenditure by age and by budget item. The study by Gauthier (2004) provides the necessary data, showing that the welfare reforms in Quebec produced a spending structure by age that was very similar in 1991 and in 1998.

The third remark concerns the socio-political issues underlying these accounting disagreements. At the end of the day, the controversy contrasts a concern for generational *equity*, by which each generation preserves its own interests in the face of the untimely interventions and the deficiencies of the welfare state (Kotlikoff), with an idyllic vision of public redistribution as a contract of *solidarity* between generations, intended to benefit everyone (Becker). Equity versus solidarity is a longstanding debate which takes a new turn only insofar as it concerns different generations. But here too, the aim is to reconcile the two viewpoints or, better still, find a satisfactory alternative.

3.3 REDISTRIBUTION: STRUGGLE OR COOPERATION BETWEEN GENERATIONS?

In practice, this debate between intergenerational equity or solidarity reflects a more fundamental, quasi-ideological disagreement: should public transfers (if not private ones...), this time between contemporary generations, be analysed in terms of *conflict* between these generations, often weighted in favour of the older ones, or, on the contrary, in terms of *cooperation*, which would appear to be mutually beneficial?

The first viewpoint reflects the positions of the *neoliberals* who, in the name of generational equity, deplore the incompetence and laxism of governments unduly influenced by pressure groups and conflicts of interest, and who denounce the chronic instability of policies designed to satisfy short-term objectives and electoral imperatives. They are worried, above all, by the dramatic increase in social transfers in favour of the old, attributed to the growing political power of this age group, which is accused of grabbing the lion's share of public spending *to the detriment of* the young (*cf.* beginning of Part 3.2). So they are overtly critical of a welfare state which, in their eyes, has become cumbersome and inefficient. The welfare state is deemed *ineffective* because it penalizes employment and discourages saving by holding back growth fuelled by investments in physical and financial capital; it is *anti-redistributive* because it encourages “moral risk” (i.e., discourages persons with social insurance from

making “efforts” to find a job, etc.) and a culture of irresponsible reliance on welfare benefits; and *biased* because it unduly favours the older generations.

Conversely, authors like Rawls (1993) who see society as “a system of cooperation over time between generations [whose advantages should be] equitably distributed from one generation to the next”, generally have a favourable view of the welfare state. It is deemed *effective*, in that it remedies the inadequacies of the loan market (generation dilemma) and the insurance markets (reduced uncertainty); it is *equitable* insofar as the agents it favours, namely those most affected by market imperfections, often belong to the least privileged classes; and even *favourable to growth* if one also believes that investments in human capital are the main driver of technical progress.

Kotlikoff, as a steadfast neoliberal and champion of the private sector, belongs to the first camp, while Becker, as a theoretician of human capital, is paradoxically in the second, which advocates public intervention. But things are not that simple and the two viewpoints are defended by economists of all political tendencies: the Chicago Nobel Prize winner has not suddenly turned into a “leftist”! At the same time, some social democrats also denounce the unequal clash of generations (Esping-Andersen, 1999). In fact, the proposed dichotomy, like the analysis conducted so far, has a major defect: it is limited to two players, the market and the welfare state. In its analysis of relations between generations, it ignores a third institution, the *family*, the focal point of such relations. . . (Arrondel and Masson, 1999).

A new fracture line thus emerges, leading, in a first approximation, to *three* different views of the welfare state. For the neoliberals and social democrats, the family and the State have *substitute* functions, the former seeking to promote family solidarity to reduce public spending, the latter seeking, on the contrary, to replace the family by the State. Becker’s intergenerational model is a more paternalistic, “familial-corporatist” vision of social insurance, with the family and State playing *complementary roles* for investment in human capital. A certain degree of role sharing is acknowledged, with the altruistic family giving priority to the education of the young while the State covers the needs of the elderly.

But the study of interactions between public and private transfers raises a major problem for economists. Adopting the *same* mode of description as for public redistribution (*cf.* § 3.2.1 and Figure 3.1), the overlapping generations models only consider a *representative* family with a *JAV* configuration, assumed to reproduce itself indefinitely. . . We can admit that, for the sake of simplicity, this purely longitudinal approach ignores the cross-sectional dimensions of the family such as marriage, siblings or gender differentiation. But the fact that it disregards the *diversity* of generational configurations, by postulating that most families comprise (at least) three overlapping generations – without taking account of discontinuous lineages (*cf.* § 3.3.3) – is more difficult to accept.

3.3.1 Human Capital, Parental Altruism. . . and an Ode to Redistribution

The originality of the position held by Becker and his co-authors lies in their advocacy of *generous and two-way* intergenerational redistribution: each generation in the middle position (age A) must, in turn, pay substantial contributions, both for its elderly parents of age V (healthcare, pensions), and for its children of age J , (education). Far from being regarded as competing expenses drawn from a limited budget, public transfers for the old and the young should be seen as closely *linked*, forming part of the same “package” or cooperation contract between generations¹².

(i) *Becker: premises based on neo-Marshallian paternalism*

This conclusion, apparently surprising on the part of an otherwise strong supporter of individual liberty/responsibility and markets, is based on three premises:

P1: Technical progress and productivity gains are driven primarily by investment in education and training. Through their positive externalities, these investments in *human capital* are a veritable “godsend” at individual or family level, and even more so at macroeconomic level, since they are the main driver of *growth* (be it “endogenous” growth or the result of complementarities between capital and qualified work)¹³.

P2: The family plays a specific and *quasi-indispensable* role in these investments in human capital. In other words, attempts to totally bypass the family by entrusting children’s education entirely to the market, the State or any other form of social organization (kibbutz) are bound for failure¹⁴. The *altruism* of individuals for their offspring explains why most societies entrust their children’s education primarily to families. The problem stems from the excessive weight of this burden in industrialized countries¹⁵.

P3: But as we have seen, Becker’s model nevertheless recognizes the existence of two types of parental altruism: *free* and *constrained*:

- free altruism corresponds to families, generally the more *wealthy* ones, who leave positive bequests (or non-human transfers). A true panacea, these bequests are assumed to permit and to reflect an *optimal* intergenerational allocation of resources which remedies the imperfections of the loan and insurance markets (*cf.* § 3.1.3) and results in effective investments in the human capital of children. So thus far, the analysis remains within the conventional bounds of neoliberal thought, but. . .
- *low-income* families are most often constrained by liquidity, and have no substantial bequests to hand down to their children. The generation dilemma prevents them from exploiting to best effect the “godsend” represented by investments in human capital. Since the surplus that would

thus have been generated cannot be distributed *ex ante*, we end up in a situation where the children are under-educated and the elderly parents likewise under-protected¹⁶.

This corresponds in every respect to Marshall's theory of the accumulation of wealth – minus the moralizing tone (Marshall, 1920). Firstly, the same liberal starting point, which highlights the rationality and foresight of “civilized” people; the preponderance of saving in the form of “human investment” in one's children (*P1*); “family affection” (actually paternal) as the main driving force for the accumulation of wealth (*P2*); the optimal choices of autonomous families, identified by Marshall with the “professional classes” (*P3*). But also, the same justification for paternalistic intervention by the State to help families of the “working classes” (*P3*), constrained “by the slender means and education of the parents, and the comparative weakness of their power of distinctly realizing the future”. And finally, the same objective, which all citizens must be encouraged or “induced” to achieve: to engender, for progress “a much more efficient race of producers in the next generation” (*cf.* Masson, 1995).

However, Becker's originality lies in the way in which this goal could be achieved through public redistribution between generations, with investment in children's education being traded against pensions and support in old age (which admittedly concerns a much longer period now than in the past!).

(ii) *A double education-pension contract, based on indirect reciprocity*

Far from the negative vision based on the unequal struggle of generations, Becker's interpretation of transfer policies is clearly illustrated in the following quotation (Becker and Murphy, 1988, p. 370):

Expenditures on the elderly are part of a “social compact” between generations. Taxes on adults help finance efficient investments in children. In return, adults receive public pensions and medical payments when old. This compact tries to achieve for poorer and middle-level families what richer families tend to achieve without government help; namely, efficient levels of investments in children and support to elderly parents.

A key assumption is that redistribution has *no impact* on resource allocation – assumed to be optimal – within free families (*cf.* § 3.1.3 and Barro, 1974). When altruism is constrained, public transfers provide a means, for the good of all, to *mimic* the private mechanisms that are lacking i.e., the intergenerational agreements or contracts which would prevail on an “ideal” market. Guaranteed by the State, these transfers thus play the role assumed by family bequests when altruism is free. Remedying the same imperfections of the insurance and loan markets, they enable the poor to do as well as the rich in terms of intergenerational resource allocation. So all in all, public redistribution would appear to be a genuine public gold mine, proving effective, equitable, a source of growth and favourable to all generations...¹⁷

This miraculous result nevertheless calls for closer examination. This can be done, for a *JAV* configuration, using the same symbols as in Figure 3.1 (*cf.* § 3.2.1). In a steady state system, public redistribution results in each generation contributing *twice* to the social contract, with education expenditure on children being “exchanged” for healthcare or pension expenditure on the elderly: firstly as a *child*, with the previous generation, i.e., $\bullet 10$; then secondly as a *parent*, with the next generation, i.e., 10^* . It is assumed that the public contract resolves the generation dilemma, and hence improves at each step the *combined* well-being of parents and children. This leaves the question of how the family surplus thus generated is to be redistributed. But as each generation in turn enters into the contract first as a child and then as a parent, it necessarily *wins out* over its full life cycle in a steady-state environment.

Based precisely on the virtues attributed to education and on the existence of a steady-state system of transfers by age, Becker and Murphy’s rapid calculation (1988) corroborates this optimistic prediction (*cf.* § 3.2.4). Concluding that the net burden of public distribution is *negative* for each generation, it simply expresses in different terms the existence of mutually beneficial cooperation organized by welfare policies.

Beyond the sometimes questionable assumptions upon which it is based, Becker’s model offers an original vision of the sequence of taxes and transfers implemented by the State over the life cycle of an individual or a generation. This sequence, written $(\bullet 1; 1, 0; 0^*)$ with the notation of Figure 3.1, is generally considered as the conjunction of two binomials, $\bullet 11$ and 00^* , concerning respectively education and pensions. From the purely individual market viewpoint, $\bullet 11$ corresponds to a borrowing operation and 00^* to a savings operation. In terms of tri-generational indirect reciprocities, $\bullet 11$ is read as downward and backward-looking and 00^* as upward and forward-looking (*cf.* § 3.2.1). Becker’s model makes a further *division*: the sequence is interpreted as a succession of two similar bi-generational contracts, $\bullet 10$ as a child, and 10^* as a parent.

Proposing an exchange based on *direct* reciprocity, these bi-generational contracts closely link the financing of the two periods of dependence, i.e., education and retirement. Conversely, the relation between contributions and pension benefits, 0 and 0^* , (as between transfers and education payments, $\bullet 1$ and 1), theoretically becomes *looser*: it depends on the strength of the *link* between the two public contracts $\bullet 10$ and 10^* . Yet this link forms part of an implicit mechanism of *indirect* (backward-looking) reciprocity: the current pivot generation (labelled 2 on Figure 3.1) agrees, as the parent of its children (of generation 3) to abide by the same “education versus pension” social contract to which its own parents (of generation 1) adhered. Like all forms of intergenerational solidarity, Becker’s model is thus based on indirect

reciprocities (*cf.* § 3.1.4). However, they do not simply engender an indefinite repetition of the same type of transfer, but rather the replication of a single exchange *contract*¹⁸.

3.3.2 The *Indeterminate* Level of Upward Redistribution. . .

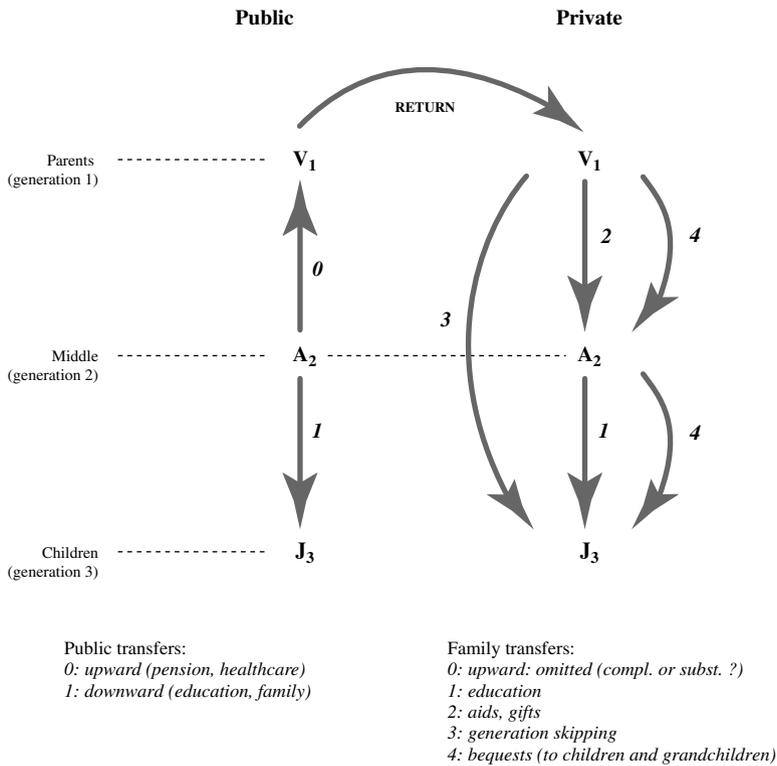
However, Becker's model does not simply assert that public transfers serve to imitate the mechanisms of defective markets – a standard argument used by economists to justify public intervention. His Marshallian neo-paternalism goes much further than that. More than a simply remedy for the imperfections of the private insurance and credit markets, the ultimate purpose of transfers is, in his view, to offer *freedom* for constrained families, to restore power to the “benevolent patriarch” who knows what is best for his children, “spoilt” or “rotten” though they may be, and who takes appropriate action as soon as he can by adjusting the (positive) bequests to his descendants.

But for this reason, Becker and Murphy's analysis (1988) is strongly biased in favour of *upward* redistribution, though its authors appear unaware of this fact. For certain old people, generally less well off, there is always a risk of not giving *enough*. Their altruism will thus remain constrained and hence ineffective, with the detrimental consequences that ensue (less growth, more social inequality). But the symmetrical risk of giving *too much* never arises, since the elderly parents whose altruism is free can make up for all excess amounts paid out by the State, efficiently and *at no cost*, through transfers to their children. Consequently, the optimal level of upward public redistribution is in substance *indeterminate*. . . For economists, such a prediction is absurd; it also casts doubt upon the coherence of Becker's model.

So where is the flaw? It lies precisely in the perfectly *compensatory* effects of altruistic bequests, according to Barro's equivalence principle (*cf.* § 3.1.3). This principle generates the “friction-free” cycle of intergenerational flows depicted on Figure 3.2 : any increase in upward public transfers is paired, as soon as altruism becomes free, with an equivalent *increase* in downward family transfers. More generally, we thus obtain a *perfect circle*, in which the *surplus* public transfers to the elderly, totally neutralized, are channelled back through the family generations, with no losses along the way, in the form of aids or gifts from seniors to their children (flow 2) or grandchildren (flow 3), or again in the form of bequests to these same individuals (flow 4)¹⁹.

A startling paradox: dynastic altruism which, in an ultra-liberal environment, enables families to behave autonomously and serves to justify the inanity of transfer policies, now becomes the key argument for legitimizing (especially upward) public redistribution between generations, the unexpected meeting point between Beckerians and partisans of pensions and welfare

Figure 3.2. Circuit of Public and Private Transfers Between Generations



spending for the elderly. In fact, public “solidarity” upstream and private “solidarity” downstream now appear to be *complementary*.

This belief in profitable cooperation between generations, resulting from the *combined* action of families and the State, is shared by many continental sociologists, partisans of the welfare state, who “refute the war of generations... a polemical argument against social welfare and the pension system... and underline, on the contrary, the strength and importance of inter-generational family solidarity”²⁰. But by focusing on the compensatory nature of private transfers to children, the “hallmark” of Barro-Becker’s altruism, their reasoning leads to the same impasse as Becker’s model, a fact that they hardly appear to notice. It is true that they rarely raise the question of the optimal level of upward transfers (does today’s State give too much or not enough to the elderly?).

Hence the value of economic *modelling* to detect certain contractions or inconsistencies in the theoretical approach, but also to find ways of remedying them. . .

3.3.3 Can Becker's Model Be Saved?

In the present case, the level of upward redistribution will remain indeterminate unless the "free circulation" of flows represented on Figure 3.2 can be held back or prevented in one way or another.

(i) *Heterogeneous agents and the effect of redistribution*

Let us assume for the moment that we want to save Beckerian altruism and that we accept this fundamental assumption. What economic factors explain the fact that public and private transfers are not perfectly equivalent, that every single "surplus" public euro levied on the active population to be paid to the elderly does not "turn up" in the form of family transfers from elderly parents to their descendants? Most of these factors, liable to generate a loss in *family returns* to the younger generations, are emphasized by public economics.

The first draws little comment: transfer policies entail collection and redistribution *costs* (administrative or management costs, information or transaction costs). Most of these costs are not fixed but tend to increase with the size of the amounts levied or paid. They thus introduce a financial limit to the volume of redistribution.

The other explanatory factors query, from different viewpoints, the assumption of homogeneous or *representative* families or agents²¹. Firstly, family "returns" are not possible for certain generational configurations: it is difficult to see how the "surplus" pension received by a (rich) old person "with no family" can be recovered.

Secondly, ignoring the fact that each agent differs in terms of aptitudes, resources, constraints, etc., amounts to an assumption that public transfers are *lump sum*, i.e., independent of agents' economic behaviour (unlike pensions for example). This unrealistic assumption ignores the insurance and social redistribution function of these transfers, but also disregards their costs in terms of behavioural "*distortions*": disincentive effects of high taxes or generous pensions on labour supply (and demand), savings, fertility and, more specifically, on investments in children, effects which reduce accordingly the family downward "returns" of "surplus" amounts paid out by the State.

The effects of these different factors are undeniable, though their quantitative importance remains controversial, especially as regards the distortions generated by non-lump-sum transfers (*cf.* Masson, 2007). It is therefore unlikely that they alone are sufficient to determine the optimal level of upward public transfers. At the very least, such an eventuality would substantially reduce the

explanatory value of the Beckerian model, forced to make use of external considerations – of public economics – to take account of a key variable.

The alternative is to directly query the capacity of (free) altruism to neutralize public policy. More precisely, how can the Beckerian model be preserved while at the same time taking account of transmission motives which break the circle of equivalence between public and private transfers? Two solutions have been put forward in the recent economic literature.

(ii) *Heterogeneous motives for family transfers*

The first seeks to introduce a certain degree of *heterogeneity* into transfer motives. Alongside altruistic parents (free or possibly constrained), there are a number of “*selfish*” individuals whose bequests respond either to *exchange-motives*— gifts or the promise of inheritance being used as a means to pay for the services required from their children in old age— or are driven by *precautionary motives* against the risk of longevity: “accidental” bequests correspond in this case to what the individual would have consumed if God had granted him a longer life (*cf. Masson, 2002a*).

Accidental bequests in particular, which represent a plausible model for a share of the population (middle and low income categories especially), result in predictions totally opposite to those of the equivalence principle: under the same assumptions, upward public transfers and family bequests are perfectly complementary in the case of free altruism, but perfectly *substitutable* in the case of precaution. In fact, an increase in pensions produces an equal decrease in accidental bequests (since it reduces by a corresponding amount the precautionary savings required for old age): it is totally absorbed by “selfish” pensioners (sometimes qualified as *greedy geezers*) and is of no benefit to the next generations. The optimal solution would thus be to stop upward redistribution once the consumption level it gives to pensioners is judged to be sufficient or equitable. . .

The coexistence of altruistic families (free or constrained) and selfish families makes the situation more complex – especially as the State cannot observe agents’ preferences directly and can only aim at a “second-best” optimum. Though the overlapping generations models are starting to introduce different types of agents, analysis is too often limited to long-term equilibrium only. Moreover, greater heterogeneity should be introduced by distinguishing at least *four* groups: rich (free) and poor (constrained) altruistic families; and likewise, rich and poor selfish individuals, with the latter requiring specific State intervention. This would give us a pertinent theoretical model for simultaneous analysis of *inter-* and *intra-* generational redistribution.

(iii) *From Beckerian altruism to indirect tri-generational reciprocities*

The other solution is more original (but not necessarily exclusive of the previous one). For *inter vivos* transfers in particular, it seeks to move beyond the standard opposition, in a bi-generational context, between *altruism*, where

the act of giving is explained by the psychological benefits it confers upon the giver, and *exchange*, where the gift is offered in return for past or future compensation, from the beneficiary to the giver. To this end, it sees these transfers as the outcome of generalized exchanges between *three* family generations, in the form of upward or downward *indirect reciprocities*, each associated with specific conditions. These conditions make it possible to introduce more sophisticated motives, halfway between altruism and exchange (or precaution). In particular, Beckerian dynastic altruism (*cf.* § 3.1.3) can be seen as a particular variant of indirect, downward and forward-looking reciprocity, with the generation chain making it possible to move from link to link towards an infinite horizon.

Up to now, we have used the anthropological concept of indirect reciprocity solely in an abstract and normative manner to characterize optimal social contracts between generations. We will now use it to identify the actual forms of relations and exchanges within families. This will enable us, *in fine*, to take another look at the teachings of Mauss and his successors concerning the *ambivalence* of gifts.

Recourse to these indirect reciprocities can in fact be justified on three levels.

- First level

It concerns the *empirical* failures of the models of altruism and exchange. For downward transfers from parents to children, the compensation effects of altruism are nonexistent. As for upward family transfers (in France or the USA), they generally go to poor old people in need, who do not have much to offer in exchange; and more generally, they do not appear to correspond to any significant form of compensation, either already received or still expected by the children (Arrondel and Masson, 2001 and 2006).

On the other hand, the (French) data argue for the introduction of a *tri-generational* perspective by favouring two models of indirect reciprocity. With regard to downward transfers, they reveal the systematic existence of major quantitative and qualitative retrospective effects: the sums paid to the children depend closely upon the sums received from the parents, and the form used (aid, gift or bequest, but also loan of a house, inter vivos distribution, inheritance bequeathed by will, etc.) tends to be repeated from one generation to the next. This corresponds to the notion of a *retrospective bequest*.

In addition, econometric results concerning upward transfers confirm a variant of forward-looking indirect reciprocity based on a *demonstration effect* (Cox and Stark, 1998). In a family with a *JAV* configuration, the active generation (age *A*) must set the example: it helps its own parents (age *V*) in the presence of its young, still “malleable” children (*J*), in order to provide them with a model to follow, i.e., parents inculcate preferences and values (filial respect or love, obedience, etc.) to ensure that they receive similar assistance when they

in turn grow old. This imitation mechanism implies that help for elderly parents increases, paradoxically, with the existence of young children to be educated, but also among active individuals who are liable to have the greatest need for help in their own old age (women, persons living alone, individuals with minor health problems). Tests in France and the USA tend to bear out these predictions.²²

- Second level

The second advantage of indirect reciprocities lies precisely in the fact that, compared with altruism, they introduce a relative *inertia* in behaviour which slows down and limits the circulation of flows on Figure 3.2. The two variants considered predict *partial or deferred* family “returns”, and thereby lift the indeterminacy of upward redistribution. In the case of the demonstration effect, the help provided by households to their elderly parents will thus be largely unaffected by a pension increase deemed to be temporary (which affects the parents only); but will decrease much more over time if this increase is perceived as durable (concerning the current helpers also). Likewise, the fact that behaviours of transmission to children are influenced by the choices of the givers’ parents is likely to slow down and limit the increase in bequests following a pension increase.

- Third level

Indirect reciprocities have yet another advantage: they open the way for a less naïve analysis of family (and even public) transfers between generations, which seeks to integrate the contributions of Mauss (1950) and of *anthropology*.

It is not simply a question of introducing a new type of motive, the “*exchange-gift*” which, through its “hybrid” character, partially blurs the distinction between exchange (purely self-interested) and altruism. The anthropological aspect of giving makes it necessary, on a more fundamental level, to consider the collective and coercive dimensions of this practice and, above all, to focus on its *ambivalence* (cf. Masson, 2007).

3.3.4 The Ambivalence of Gifts and Transfers: A Sociological Debate...

We have already seen that family transfers based on indirect reciprocity are by no means simple, inconsequential transactions, but are a precondition for indefinite continuation of the generational chain, a collective good that is beneficial to all²³. But the anthropological perspective takes us even further, beyond the initial question raised by the indeterminacy of upward redistribution, a key flaw in the Beckerian model.

So let us forget this bothersome indeterminacy and ignore the various factors evoked to remedy the problem: cost of redistribution policies, diversity of generational family configurations, fiscal incidence. The State acts without

constraint and possesses all necessary information. Likewise, let us disregard the paradoxes of neutralizing altruism, a borderline case of indirect reciprocity, by assuming that private bequests have a perfectly compensatory effect. To characterize this textbook situation differently, it is useful to refer to the thorny problem of the relevance of the *family detour*, raised notably by sociologists (Kohli, 1999): instead of the State giving directly to the young, why shouldn't it pay "extra" to the older generations, who would then be responsible for channelling back the surplus to the next generations, via their families (see Figure 3.2)? In the economic context under study, this problem does not arise: according to the Ricardian equivalence principle described by Barro (1974), the two modes of redistribution to the young are effectively... equivalent.

Only economists who adopt a purely quantitative and individualistic approach can thus claim that the family detour is inconsequential and that any policy involving extra payments to the old will be a blank operation with no real effect. For many other social scientists, it is difficult to believe that family "returns" brought about by a pension increase (the compensatory increase in transfers to descendants) will have no other effect, for better or for worse, on relations within the family; i.e., that they will entail no *externalities* (see previous footnote), either positive or negative, on family cohesion, on the role and status of the generations, or on the balance of power between parents and children...

It is here that anthropologists make a valuable contribution, via the Maussian ambivalence of giving in particular. The following quotation from Godelier (1996, p. 21) clearly sums up this point (our square brackets):

Giving appears to institute simultaneously a *double relation* between the giver and the receiver. A relation of [non-agonistic] *solidarity*, since the giver shares what he has [...], and a relation of [agonistic] *superiority* since the agent who receives and accepts the gift places himself in debt with respect to the giver [and], to a certain extent, becomes his subordinate. [...] Two opposing movements are thus contained in a single act. The gift brings the protagonists *closer together* because it is shared and *distances* them socially [introduces or reinforces a hierarchy] because it makes one indebted to the other. [...] It may be, simultaneously or successively, an act of generosity or an act of violence...

Though this diagnosis primarily concerns primitive tribes or societies, it is also valid, according to the author, for modern family exchanges. Following on from Mauss, who mistrusted the family and its "apparent generosity", a whole thought movement (writers, legal experts, psychoanalysts, etc.) has highlighted the negative externalities of these exchanges. *Gifts* between parents and children are particularly fraught with danger²⁴.

Though things are starting to change (theory of contracts or of organizations, formation of preferences via, for example, the demonstration effect, etc.) economists tend to remain *agnostic* on these questions, at least with regard to downward transfers (though see previous note): subject to more ample information, they consider that the incriminated family detour is neutral providing that the parents are altruistic. In so doing, they sidestep a key question for public redistribution; more importantly, they allow *sociologists*, more conscious of the stakes involved, to monopolize the debate and to have the last word. Two of them have established a clear and typically representative position on this question.

Advocating a social democratic conception of the welfare state, Esping-Andersen (1999, p. 293) is alarmed by the excessive pensions paid to seniors whose income largely exceeds their consumption (by 30% in Italy) and “who have amassed a considerable fortune”. Sharing with Mauss a certain mistrust for family solidarity, too often tainted with authoritarianism or arbitrariness (with respect to women in particular), but less effective than in the past at protecting family members, he argues against the family detour for reasons of social equality. The cycle described in Figure 3.2 is thus qualified as “a perverse system of second-order distribution within families [...], which favours rich families and penalizes the poorest ones” – a conclusion quite contrary, incidentally, to the one reached by the Beckerian model (§ 3.1.3). For this author, the real problem of contemporary welfare States lies not in their size but in their priorities, which should be redirected towards children and young mothers (to enable mothers to work and to push up the birth rate).

While minimizing these anti-redistributive effects, Kohli (1999), on the contrary, endorses parental altruism, like Becker, though he criticizes Becker and economists for ignoring precisely the family-specific “institutional effects” generated by the flows on Figure 3.2. Reflecting the importance of welfare protection issues, the arguments put forward by this author – all in favour of the family detour – nevertheless betray a strongly ideological standpoint: a high level of upward public transfers has improved the position of seniors in the family – which is a good thing; the old, who are more careful and wise, are bestowed with welcome powers of social control over the excessively hedonistic young (!); the family is better able to judge the real needs of the young beneficiaries and to control their behaviour; above all, the multiplication of transfers to children and grandchildren strengthens sociability ties between family members.

Rarely evoking these “institutional effects” of capital transmission, economists are absent from this debate. They prefer to denounce, mainly through the voice of the neoliberals, the negative externalities associated with *public* welfare, which takes away the freedom and sense of responsibility of beneficiaries who are stigmatized and subjected to redistribution programmes, even humiliated and “wounded” by this public “charity” (in the words of Mauss).

3.3.5 The Three Conceptions of the Welfare State (Between Generations)

The strategic significance of the qualitative or structural externalities of private and public intergenerational transfers must not be underestimated since it is they that condition or reflect, to a large extent, the underlying conception of the welfare state. To show this simply, we will use the trilogy proposed by Esping-Andersen (1999) exactly as it stands, without seeking to distinguish between normative and positive aspects: we will simply summarize it very approximately by “projecting” it, in a schematic manner, onto the relations between generations, and by specifying, in particular, what each of these three conceptions implies in terms of levels of social protection and priorities (favouring the young or the old). The purpose of this succinct presentation is two-fold: first, to measure the shortcomings of traditional economic analysis in this field, and second, to better understand the philosophical or ideological foundations of an apparently paradoxical Beckerian position.

(i) *The liberal regime* (Anglo-Saxon) => Kotlikoff

In the motto of the French Revolution, the key word here is *liberty* (of trade and enterprise). Its partisans place their trust in the markets and defend private ownership. Troubled by the distorting effects of taxes and the negative externalities of public transfers, they advocate drastic cutbacks in the welfare state whose vocation, in their view, should be limited to that of a “Beveridge of the poor”, with welfare benefits being precisely targeted (towards those in greatest need) and controlled (for those who deserve them). The ostensible concern is indeed to guarantee *equity*, notably between generations: the elderly must be prevented from using their electoral power to increase expenditure on their behalf (Kotlikoff). The priorities of this minimal welfare state must therefore be refocused towards the young generations, even if this means greater pension privatization.

(ii) *The social democratic regime* (northern Europe) => Mauss, Esping-Andersen

Here, the key word from the revolutionary motto is *equality*. The welfare state, largely developed, is likened in its ambitions to a “Beveridge of the rich”: it must grant high welfare rights to each individual *citizen*, including ideally a job (and hence a double wage for couples), but also direct services to the children (free school meals, etc.). This high level of welfare protection is justified by a dual mistrust, of the market (and unequal property rights), but also of the authoritarian traditional family structure (with its family – male – “head”). This welfare state should give priority to the new risks (poverty) and new priorities (fertility) by limiting, if necessary, pensions and favouring, here too, the young generations: children’s rights, aids for young women to reconcile work and childrearing etc.

(iii) *The familial-corporatist regime* (continental Europe) => Kohli... Becker

Here, the word from the French motto is *fraternity*. Inspired by the doctrines of social Catholicism, the “Bismarckian” welfare state provides extensive welfare protection. Paternalistic and authoritarian, it plays an important role in social regulation, in preserving established statuses and hierarchies. It relies strongly on corporations (hence the characteristic multiplication of occupational pension schemes) and above all on *families*. It trusts families, or rather the “heads of families” to act in the interests of their “beneficiaries”, women and children. Following the principle of the *subsidiary model*, it intervenes only when these “family solidarities” are deficient. In this context, it is important to maintain pensions at high levels to safeguard the authority of the older generations, who will recycle the surplus sums received in an optimal manner towards their children and grandchildren: a policy of this kind offers the advantage of preserving or strengthening family cohesion (Kohli).²⁵

Why does a staunch neoliberal such as Becker, following on from Marshall, support this paternalistic if not patriarchal current of thought by legitimizing generous intergenerational redistribution, notably for the Elderly? The fundamental reason is the trust he places in families, or rather in the altruism of fathers, to educate and guide their children. In fact, all the ingredients of a familialist conception of the welfare state are found, at different levels, in Becker’s model:

- the language used: “benevolent patriarch”, “rotten child”...;
- the representation of the family, a copy or clone of the State, with the same generational configuration (*JAV*), the same infinite (dynastic) horizon, the same authoritarian structure...;
- the assumption, in the case of free altruism, that choices are *optimal*, from the viewpoint of the father, but also of his entire lineage, within a consensual, almost monolithic family;
- more generally, recourse to the “subsidiary model” which means that the State only intervenes to help liquidity-constrained families;
- lastly, if downward family transfers do not, strictly speaking, generate positive externalities or favourable institutional effects, the prime objective of the State is nevertheless still to grant or restore full powers to the patriarch by offering the possibility of positive (“operational”) bequests, to which all possible virtues are attributed...

3.4 CONCLUSIONS

While focusing primarily on the role of the State, some fundamental though partial elements for an economy of relations and transfers between generations have been presented in the form of a triptych, examining successively:

justice with respect to future generations; the long-term viability of transfer policies which commit our descendants; the most appropriate forms of redistribution between age groups or contemporary generations. Each time, we have shown that the questions raised are far from being resolved, and have aroused lively and caustic debates, sometimes even among economists belonging to the same school of thought. The importance of the issues at stake doubtless explains why the standpoints adopted are often less the result of formalized argument than of philosophical, political or ideological assumptions, “external” to the model. Should we favour individual freedom or responsibility with respect to future generations? seek equity or favour solidarity in generational terms? adopt a cooperative or agonistic vision of relations between contemporary generations? In this last case especially, the choice depends greatly upon the positive or negative *a priori* judgments made about the family and its intergenerational solidarities.

We will end by raising a number of issues concerning this economy of generations in order to better point out its remaining weaknesses. They concern successively the two key concepts which go beyond standard economic market analysis, namely (1) altruism and (2) generational solidarity; followed by (3) the ambivalence of giving and its consequences and finally (4) the need to incorporate the intra-generational dimension in the analysis.

(1) *Altruism*, for one’s descendants, i.e., a concern for their well-being, rightly raises a series of questions for non-economists. A first ambiguity concerns the object of this benevolence: is it the family lineage or, more impersonally, the generations to come? Though economic models often confuse the two, this is not the case for many neoliberals or social democrats, more favourable to “social” altruism than to family altruism. In the USA, excessively large family bequests are socially frowned upon (and heavily taxed), while charity donations, foundations, and the like are strongly encouraged (including fiscally). Mauss, for his part, (1950, pp. 262–3), already found “the noble spending of rich Anglo-Saxons [who feel] the joy of public giving, the pleasure of a generous artistic donation... “ preferable to family love.

The Beckerian variant of altruism is, moreover, very different from that of Mauss: it rules out any social dimension and assumes that the giver’s satisfaction does not derive from the act of giving (Lady Bountiful’s pleasure to give) but from the beneficiary’s increase in well-being. Admittedly, this formulation offers an explanation for the considerable sums invested by parents in the education of their children and broadens the agent’s decision-making horizon, possibly to infinity, via the chain of generations. But at the same time, it leads, via Barro’s equivalence principle, to a series of bothersome contradictions and paradoxes (§ 3.3.2).

We would doubtless better understand the specificity and the limits of this altruism if we likened it to the conception of *friendship* (or beneficence, goodwill. . .) developed by Aristotle in his *Nicomachean Ethics*. Friendship corresponds rather to *self-altruism*, founded on self-love. If we seek the good of our friends, it is because they are other parts of ourselves existing separately from us, exactly like parents love their children because they are a part of themselves. . . But Beckerian altruism is totally *asymmetrical*: the parents “love” their children, but not the reverse.²⁶

In this respect, recourse to tri-generational indirect reciprocities offers numerous advantages: from a normative viewpoint, they produce better solutions than altruism in the case of downward public transfers (Rawlsian justice), and also provide a means to deal with upward public transfers (*cf.* § 3.1.4); at the empirical level, their predictions tally much better with the family transfer behaviours observed (§ 3.3.3). However, the main problem concerns the economic modelling of these heterogeneous mutual exchanges, still in an embryonic state.

(2) The fact that long-term *inter-generational solidarities* must be based on such indirect reciprocities is obvious enough to be accepted by authors from very wide-ranging horizons (Bourgeois, Mauss, Rawls, Dasgupta, Kolm, Van Parijs, Birnbacher. . .). But few of them perceive that these solidarities are characterized by *one-to-oneness*, requiring close links between downward and upward reciprocities and entailing mutual obligations between parents and children (e.g., the Beckerian double contract) as well as between contemporaries and successors: the State must safeguard the interests of the latter and, to this end, obtain the cooperation of the former and vice versa (§ 3.1.4). While the questions of the fair inheritance (investment in education, bequests, environmental protection, etc.) and the fair claim (pension, public debt) are intimately linked, most models handle them separately, giving priority to one or the other. One form of bias inherent to generational accounting is that of focusing in this way on the problem of the fair claim while at the same time limiting analysis to the individualized relations of each generation with the State (§ 3.2.4). One of the merits of Becker and Murphy’s analysis (1988), on the contrary, is the close linking of these two questions, in the case of education and pensions.

The anthropological approach shows, however, that the “accounting-based” outlook (net tax burdens, yields, etc.) upon which the Beckerian model is founded is a bit narrow. The representation of two-way solidarity between generations should be based on *non-agonistic* exchange, a pacific form of giving (very different from the *potlatch*): the obligation to “give the same in return” does not cancel out the debt engendered by the initial gift but creates a new one, a mutual debt, to promote or strengthen *solidarity between equals*. Gifts and counter-gifts of “equivalent benefits” establish a sort of debt equilibrium,

with the multiplication of these exchanges creating long-term bonds between partners²⁷. Transposed between generations, this analysis necessarily involves recourse to tri-generational indirect reciprocities: as debts and claims are not interchangeable, this is effectively the only way to “give the same in return”, thus combining equity and solidarity.

(3) For our analysis, the greatest contribution of anthropology concerns the *ambivalence of gifts*, where actual practices combine both agonistic and non-agonistic aspects in varying proportions: applied to transfers between overlapping generations, this idea would notably provide a means to better understand many paradoxical behaviours within families (§ 3.3.4) and to take account of several divergences regarding the conception of the welfare state (§ 3.3.5).

The duality inherent to these public or private transfers calls for a faculty of “double vision”, in order to see them *simultaneously* as the outcome of conflict and of cooperation between generations. Economic formalization offers either a consensual vision, exemplified by the Beckerian cooperative model, or conversely, a cynical or negative vision, as in the median voter analysis or in Bernheim et al. (1985) “manipulative bequests” model; but it rarely succeeds in linking these two perspectives – see however Arrondel and Masson (2006) on “strategic altruism”. Yet in most cases, exchanges between generations cannot simply be summed up as either cloudless cooperation or simple power struggles disguised as selflessness. The different forms of sharing or generosity underlying the battle of generations must be emphasized: many “selfish” seniors, accused of “taking the lion’s share” of public resources, look after their grandchildren. Likewise, the latent tensions and endemic violence behind solidarity must be identified: the Beckerian model offers a privileged field of study from this point of view.

For a *JAV* configuration, the message conveyed by this model is clear, almost biblical in inspiration (§ 3.3.1): “you are the link in a generational chain of mutually beneficial cooperation: at the working age *A*, give generously through public and private transfers both upstream (pension: flow 0) and downstream (education: flow 1), since you have already received (flow •1) and you will receive in the future (flow 0*)”. One could not imagine a finer example of solidarity between generations, further reinforced by “family returns” from the old to the active and young generations. And yet, the opportunities for tension and conflict are numerous.

The first, which stems from the very terms of the message, concerns a problem of *frontiers* between age groups: it is in the interest of each generation to vacate as quickly as possible the uncomfortable middle position (age *A*) of being the fundraiser for the other dependent generations. This debate does not simply concern the age of retirement, the current vogue for *à la carte* pensions, for flexible distribution of working periods over a lifetime; it will likewise concern

the age of *entry* into the workforce, since the retired baby boomers will have every reason to encourage upcoming generations to start work earlier in order to pay for their pensions. . .

Another difficulty, already mentioned, concerns precisely the pre-commitment of young, already educated generations (*1) to the next, much less advantageous stage (0; 1; 0*) of the Beckerian double contract. A young, highly qualified senior executive will have to pay for the education and pensions of others before claiming a pension whose yield is now below that of the market. This is not an attractive outlook if he is relatively “short-sighted”, or if his memory is short and he has forgotten how much was spent on his education (an incorporated human capital that cannot be taken away from him!).

Beckerian dynamics has another “internal contradiction”: it is a machine for producing *longevity*, since high spending on welfare, education of young people, health and living standards of the elderly are key factors in reducing mortality (*cf.* Sen, 1998). Admittedly, the imbalances caused by longer life expectancy can be seen as the ransom of success. They are nevertheless likely to generate considerable tensions: an increase in the retirement age is rarely perceived as a consequence of progress; and the fact that lower pensions are offset by longer retirements is a meagre consolation for individuals who, like Achilles in the *Iliad*, have a strong preference for the present.

(4) Readers may be more troubled by the almost systematic omission of the *intra-generational* dimension in the broad sense: within the family (gender, alliance, siblings. . .); between families with diverse demographic compositions and generational configurations, values and preferences; between agents with heterogeneous aptitudes or resources. Taking these factors into account would make the analysis more complex, but also more enriching (*cf.* § 3.3.3).

Let us give just one example. The generational configuration most “representative” of the family today is not *JAV*, but rather *(J)NAV*, with three overlapping *adult* generations of age *V* (pensioner), *A* (middle-aged working adult) and *N* (young working adult in a position to have children) – with, in some cases, a fourth generation child of age *J*. This configuration gives a more exact picture of family relations. The only significant upward transfers (in terms of time or money) go from the middle-aged parents (*A*) to the grandparents (age *V*): support from the children (age *N*) to their parents or grandparents is rare and/or limited (Attias-Donfut et al., 1994). The *(J)NAV* configuration is also better suited for studying the specific place occupied by women throughout their life cycle: choice between maternity and a professional career (age *N*); their role as the “pillar” of family solidarity in middle age (*A* and already *V*), between support for elderly parents (in-law), support for adult offspring and care of grandchildren; and in 80% of cases, support for the elderly husband followed by widowhood (age *V*).

This (*JNAV*) configuration also allows for more subtle socio-political “games” between three players. Two coalitions are standard: that of active adults (ages *N* and *A*) against the elderly who “have consumed too much and not contributed enough” (Kotlikoff); and that of the middle-aged active adults – the generation with the highest rate of trade union membership – with the pensioners (*A* and *V*), to protect their “vested rights”, albeit at the expense of the young active adults (a situation strongly criticized by Esping-Andersen). But a third, more original, coalition no longer fits in with the standard model of the median voter. It brings together the oldest (age *V*) and the youngest (age *N*) against the baby-boomers (age *A*), notably with a view to increasing the pension age *right now*: the first aim to restore the balance of the system by avoiding a drop in their pensions, in real (inflation) or relative terms (with respect to wages), while the second, knowing that the retirement age is bound to increase for them anyway, are looking for ways to limit the increase in contributions...

NOTES

1. Certain developments or arguments may appear rather succinct or over-elliptic. For a more detailed presentation, readers should refer to Masson (2007).
2. It is symptomatic that Godelier (1996), in the last lines of his book, considers such an example of irreversibility to signify that not everything that “links” individuals is negotiable – even *socially*: “Can we imagine a child contracting with his parents to be born? [...] The first link between humans, that of birth, is not negotiated between those whom it concerns”. The solution indeed appears to lie in the hypothesis of (dynastic) altruism or, better still, in more general forms of downward indirect reciprocity (*see below*).
3. This discount rate depends on the effects of two opposing factors: on the one hand, higher anticipated economic growth encourages present generations to make less effort for the following ones hence leading to a higher discount rate; but on the other, uncertainty about the future calls for a *prudent* approach and a lower discount rate to preserve the interests of future generations in the event of major contingencies.
4. Mutual interest signifies that, behind the veil of ignorance, each individual works solely for his own good, but nevertheless agrees to *not use information* on himself or on others *which might give him an advantage* : hence, the principle of mutual interest – or better *solidarity* – between men and women applies for pensions, since the shorter life expectancy of men is not taken into account.
5. In fact, to safeguard the interests of future generations, the altruism of contemporaries for their successors and public intervention, rather than representing alternative solutions, often play complementary roles. Indeed, the very nature of altruism confers a status of *public good* to the consumption or well-being of descendants, both near and distant. Though concerned about the fate of our successors, we would nevertheless prefer for others – contemporaries or less distant intermediate future generations – to contribute in our place, without giving anything ourselves. The solution to this

- problem of *collective giving* is a compulsory public contribution (Kolm, 1985): taxation is both *voluntary* (individuals vote for this system of redistribution)... and *imposed* by the State (each individual protests against his own contribution).
6. According to Gordon and Varian (1988), the emergence of pay-as-you-go pension schemes responded to a need of this kind generated by the economic crisis of 1929: the most hard-hit generations, of working age at that time, benefited greatly from these schemes as they received far more than they contributed.
 7. These debts and claims are not *interchangeable* and their accounting balance over one generation tends to mask the mutual ties between the generation in question and those coming before and after it. Likewise, in the “non-agonistic” exchanges of traditional societies, the counter-gift, made obligatory by the gift, *does not cancel the debt* but engenders a mutual debt. The multiplication of these exchanges creates links (duty of mutual protection, etc.) between families over the long term (Godelier, 1996).
 8. The income of elderly households has practically caught up with that of working households, for a lower number of consumption units on average. The fact that parents’ living conditions are often superior to those of their children is not without implications for the meaning of family self-help.
 9. To be precise, the method gives two figures per cohort, one for men and another for women, but on the basis of heroic assumptions regarding the individualization, within couples, of taxes and transfers measured at household level.
 10. The model should notably integrate agents’ reactions to the policies pursued, and assess the efficiency of education and health expenditure in terms of well-being, but also as an investment in human capital (a potential generator of growth). It should also take account of the role played by social transfers in reducing uncertainty (Diamond suggests that this *ex ante* insurance function could increase future benefits “by perhaps as much as 50%”), and their capacity to remedy imperfections in the loan markets by smoothing resources and resolving the generation dilemma.
 11. However, when the two rates of return, r and r_h , are equal, the two procedures boil down to the same thing... In fact, Becker and Murphy’s rapid calculation (1988) uses a *timing* of public benefits and taxes which is systematically biased in favour of a negative financial burden: firstly, spending on education received is assumed to remain constant with age (whereas a baby costs less than a student); secondly, active generations pay first for the education of the next generation, before paying – much more heavily – for the pensions of their elders (whereas the effective distribution of taxes by age is more balanced). Moreover, Becker and Murphy limit themselves to positive discount rates, whereas in a situation of balanced growth at the rate of progress g , discounting occurs at the rate $(r-g)$, which may be negative (Masson, 2002b).
 12. Cf. Becker (1988 and 1993); Becker and Murphy (1988); Becker et al. (1990).
 13. We could even talk about a *virtuous circle* between growth and education given that, in return, a high level of technical progress calls for constant adaptation to new technologies and thereby improves the profitability of investments in human capital. Moreover, the corollary of this belief in the cardinal virtues of education for growth and well-being is the purely secondary role assigned to physical or financial capital: the high yields of shares, the positive (technological) externalities attributed

- to investments in productive capital are simply a *facade*, - i.e., transient phenomena – if they are not based on a sustained accumulation of human capital.
14. Public and private investments in education are seen to play a *complementary* role in the production of human capital (i.e., for a child in school, the rate of return of one increases with the size of the other). This central role assigned to the family and a certain scepticism with respect to the public education system are typical of the Chicago School. As early as 1966, the controversial report by the sociologist James Coleman on the education of deprived minorities concluded that the money invested in schools in poor districts showed a poor return in terms of qualifications or access to the labour market (Piketty, 1997, pp. 77–80).
 15. Hardly more “productive” now than in the past, children’s education is highly *time consuming*, so its (opportunity) cost increases regularly with the rise in real wages. This explains why parents have tended to “trade quantity for quality”: they have fewer children but give them more education.
 16. Cf. § 3.1.3. The assumption is that the marginal rate of return r_m of investments in a child’s education, initially very high (food, care as a small child), decreases in proportion to the amounts already invested until it falls practically to zero (when a very high educational level is reached). For this reason, parents invest *first* in the child’s human capital, so long as the rate r_m is above the rate of return of patrimonial assets r ; after which, they will transfer non-human wealth, in the form of gifts or bequests. Unconstrained families, who make positive bequests, have thus optimally reached this human capital breakeven point ($r_m = r$). Liquidity-constrained families, on the other hand, cease their education transfers when r_m is still above r . Measured by the differential ($r_m - r$), the unexploited opportunity penalizes everyone, reducing both parental consumption and the child’s resources, but also the growth potential of society.
 17. In this social contract of cooperation, *upward* transfers such as pay-as-you-go pensions play a crucial role (cf. § 3.2.4). The promise of a pension enables families that would not otherwise do so to make the necessary investments in their children’s education as it offers the parents a *collective* means to obtain a refund at a later date (the “vested pension rights”, which give drawing rights on future growth generated by better educated children, offer parents a “share” in the benefits of this growth). As is the case for all public goods, there is a temptation to “free ride”, i.e., to have one’s pension financed by other people’s children. A sufficient degree of intergenerational altruism, in one form or another, is probably the only convincing answer to this problem. (cf. Masson, 2007).
 18. Indeed, the nature of the public contract does not favour these indirect reciprocities. Children should be happy to take part in the contract: they are certain to receive *first* the sovereign good that is education, before possibly being required to give in return. As parents, on the other hand, adults who are already educated take the risk of giving first. They will be more willing to accept the contract if they are altruistic and/or are unable to obtain adequate insurance for their old age on the markets. Otherwise, they are liable to refuse the second contract 10* (or even to refrain from having children), but also, once educated, to not honour their share of the first contract by receiving

- education (*1)... and then leaving a system from which they no longer have much to gain. . .
19. In Figure 3.2, upward family flows (type 0) are omitted to simplify the presentation, which focuses on the transfer circuit, and also because Becker's model says nothing about the determinants of these transfers, generally non-financial (services, time spent, etc.). In particular, we do not know if upward public and private transfers are rather substitutes or complements.
 20. Nicole Lapierre, "La preuve par trente", *Le Monde*, Friday 3 March 2000, p. VII: commentary on the book by Christian Baudelot and Roger Establet, *Avoir 30 ans en 1968 et 1998*, Seuil.
 21. In fact, it is already possible to obtain a non-neutral effect of public policies in the context of a single family, with *endogenous fertility*: whether altruism is free or constrained, a pension increase reduces the number of children, now "more costly", and is no longer fully offset (*cf.* Becker, 1988, pp. 4–5; Masson, 2007).
 22. On empirical studies, *cf.* Arrondel et al. (1997), Arrondel and Masson (1999; 2001 and 2006).
 23. In the examples considered above, these transfers thus include *positive* "externalities" for the individuals who grant them: the formation of a child's preferences (demonstration effect); inclusion in a lineage and the collective identity (retrospective bequest); survival through ones family and an extended horizon (dynastic altruism). *Technically*: externalities are associated with actions of an economic agent which affect the physical conditions of consumption or the technological conditions of production for other agents (pollution is a negative externality).
 24. Intended to speed up the transmission of assets and thereby strengthen family ties, gifts can turn into their opposite and be accused of destroying these ties, through both a desire to manipulate on the part of the giver and filial ingratitude on the part of the receiver. The literature (*King Lear*) and the history of giving contain numerous examples of such a reversal (Toubiana, 1988). Economists are starting to understand that externalities associated with transfers and the underlying motives in family relations play a crucial role in explaining certain "paradoxical" behaviours: the dominant practice, even in countries offering the freedom to make a will, of *equal sharing* of bequests, is neither effective nor equitable from a strictly economic point of view; the waning popularity of *life annuities* – whatever the drawbacks of these assets – is depriving families of certain attractive opportunities, etc. (for more details, *cf.* Masson, 2007).
 25. Incidentally, these three worlds of welfare according to Esping-Andersen (1999) can be closely correlated with the trio of classical political philosophers of the social contract - Locke, Hobbes and Rousseau (idea suggested by François Héran). Locke, who gives priority to liberty and inalienable natural rights (of ownership, etc.), before any definition of a social contract, can predictably be associated with the neoliberal regime. Rousseau, who denounces the alienation and violence engendered by private property and who seeks, before Mauss, to depersonalize social relations, prefigures the social democratic regime and its mistrust of the market and the family. Hobbes, for his part, clearly heralds the familial-corporatist regime because he advocates the need to renounce force and to promote social harmony, recommends submission to

- the sovereign and favours a system of contracts with close relations, progressively extended to a wider entourage.
26. The assumption is admittedly crude, but nevertheless preferable to that of bilateral altruism, a source of multiple aporias and inefficiencies; it also avoids the *ad hoc* nature of upward altruism, whose rare predictions are, moreover, clearly contradicted by the data (*cf.* Masson, 2002a and 2007).
 27. These non agonistic modes characterize, for example, the ritual exchange of women during marriages (Lévi-Strauss in *The Elementary Structures of Kinship*), or the *ginamare* of the Baruya people of New Guinea (Godelier, 1996). The bond created by exchanges explains why the same good can be “re-given” (rather than returned) to the initial giver.

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CHAPTER 4

REORGANIZING THE ACTIVITY CYCLE: THE STAKES IN A NEW SOCIAL CONTRACT

BERNARD PERRET

The activity cycle made up of three clearly identifiable stages (education, employment, retirement) characteristic of industrial societies is, nowadays, less clearly defined. The establishment of a stable working career in early adulthood is taking place later and later, often preceded by a transition period of uncertain social status. A similar phenomenon is observed at the end of working life, with increasing employment insecurity and a decline in labour force participation rates beyond the age of 50. At the same time, physiological old-age occurs increasingly later in life, and the financial difficulties faced by pension systems will, sooner or later, make it necessary to set retirement at a more advanced age.

We are witnessing the emergence of two transitional phases, two new stages of life unparalleled in previous societies, characterized from the social standpoint by increased inequality between individual trajectories and by growing uncertainty. In simplified terms, two possible attitudes can be adopted in response to these major trends:

- A liberal attitude which would tend to deny the social pertinence of age criteria while accepting a complete individualization of working career profiles based on skills, state of health, etc. Under this hypothesis, inequalities in the course of the life cycle add on to other forms of inequality;
- A more proactive attitude which would seek to re-establish references to age criteria in the collective management of human activity. This could lead to the establishment of a standard life cycle made up of five stages, replacing the old three-stage cycle.

In practice, the adoption of such a project involves the definition of new welfare rights and new collective regulations applicable to the transition phases. Leaving aside the problems facing the young, we will develop (with purely heuristic intentions) a “model” which will allow us to illustrate the potentialities

and the inherent difficulties of the right to a “second career” based on the following principles:

- generally a part-time activity, but one that can be extended beyond age 65;
- income combining both earnings and transfers;
- personal projects taken into account;
- promotion of multiple jobholding and “socially beneficial” activities.

Any such scenario is obviously largely Utopian and it would be impossible to ignore the numerous political and technical difficulties involved in its implementation. Furthermore, it may be argued that in certain cases, the differentiation of life cycles is a response to a demand for equity (no-one would contest that a worker in a physically demanding job since the age of 16 should be allowed to retire at age 55). Proactive and simplificatory, this scenario has the unique merit of suggesting that a social contract between generations could be reformulated in a more innovative way instead of being left to the mercy of socio-economic trends that offer no guarantee of satisfactory solutions from a social equilibrium standpoint. Before illustrating the notion of a second career using a few concrete examples, we will introduce two more general considerations to place this notion in perspective, concerning on the one hand, the role of age criteria in the social domain, and, on the other, links between employment, labour force participation and welfare.

4.1 TAKING ACCOUNT OF AGE CRITERIA IN SOCIAL POLICY

The “Civil Code”, by and large, distinguishes simply between minors and adults. By contrast, “social” codification is based on the real abilities and needs of individuals (and not just their abstract citizen status). This gives rise to a classification of individuals according to numerous criteria, among which age occupies a key position. Putting individuals into categories based on their age makes it possible, by way of social policies, to establish a vast system of solidarity and exchange between generations.

Within the social system, the specificity of transition periods has already been recognized. At the young end of the scale, 18–25-year-olds are targeted by a set of specific measures (although they cannot receive the “RMI” minimum income). To a lesser degree, the ages 16–18 are also recognized as a transition period. Towards the end of working life, several thresholds exist (age 55, age 57, age 60, etc.) defining particular entitlements to partial or total retirement. Over the years, several “special types of activity” (community work, solidarity employment contracts, youth-employment, progressive early retirement) have been created (specifically or otherwise) for these transition periods.

This institutionalisation of transition is marked by inequality and individualization. The new thresholds introduced by social policies do not have

the unifying characteristics of the imposed stages that structured the life cycle during the boom years of the French economy spanning from 1946–1975, (military service at age 20, retirement at age 65). In fact, far from defining new ages with clearly identified contours, the transition periods seem to be symptomatic of the destructuring of the standard life cycle. Legally, they simply represent periods when individuals are exposed to a high risk of falling through the social net. Their importance in French social policy can be seen as the consequence of a higher concentration of wage employment in the 25–55 age-group that stands out more in France than in other countries.

On the other hand, and in a way that might appear contradictory, society is marked by a tendency to relativize the generation gap and to promote individual autonomy at all ages. Under the dual effect of medical progress and changes in behaviour, certain sociologists claim that we are evolving towards an “age neutral society”.

“Society has grown used to the 70-year-old student, the 30-year-old university director, the 25-year-old mayor, the 35-year-old grandmother, the 50-year-old pensioner, the 65-year-old with a child in kindergarten, the 85-year-old mother caring for her 65-year-old son: norms and expectations based on age are no longer as important”¹.

We might thus begin to wonder, alongside Xavier Gaullier (1998), whether the emergence of intermediate ages such as “young adult” and “end-of-career decade” might not constitute “the French approach to generalized flexibility that concerns all ages and all stages in life”, and that will ultimately bring down the system of workforce management based on the exclusion of young people and those over 55. Without neglecting this possibility, the approach we have chosen to explore is based on another challenge: that of re-configuring reference to age, admittedly with greater flexibility and complexity than in the past, in the organization of social solidarity.

4.1.1 The Search for a Better Articulation Between Employment, Labour Force Participation and Social Protection

The debate that we have just sketched out should be put into the context of present day reflections concerning the interconnections between labour policy and social protection. This question is generally broached from two angles: (1) the impact of tax contributions on job creation and (2) the impact of compensation mechanisms on labour force participation. Expressed as concisely as possible, the question is: How can the system of social contributions and transfers be made compatible with changes in the labour market? Or, more precisely: (1) What can be done to facilitate the differentiation of levels and types of employment (and in particular the creation of flexible, non standard and/or

semi-qualified jobs)?, (2) What can be done to facilitate occupational mobility?, (3) How can the unemployed and the excluded be encouraged to actively seek employment and, more generally, what can be done to facilitate the transitions between different types of activity (training, inactivity, employment)?

4.1.2 Negative Tax and Universal Allowance

The creation of mechanisms such as *negative taxation* might seem like the best way of reaching this set of goals. Roughly speaking, the redistribution system would have to be transformed into a single mechanism combining a fixed transfer along the lines of a universal allowance and single rate of taxation from the first euro onward, in such a way as to obtain a linear relationship between primary income and final income (in fact, the advocates of this type of reform generally recognize the need for some degree of progressiveness, which leads them to recommend that an increased marginal level of contributions be maintained for higher incomes) (Bourguignon, Chiappori, 1997).

Under the heading *universal allowance* or *existence income* similar ideas have been upheld in the name of varied, and sometimes contradictory, philosophical concepts². Overlooking the obvious ideological divergences, by using negative tax, these different scenarios aim to replace the present system of contributions and social transfers with a single mechanism, of which one of the major advantages would be to broaden the possibilities of cumulating employment and transfer income, thus facilitating the diversification of activity and types of employment.

It is unlikely that a complete reworking of the fiscal and social system is possible in the short term. On the other hand, some reforms inspired by similar considerations have already been implemented and others will probably be introduced over the coming years. In France, two subjects are on the agenda. One has already been circulating for many years: a reduced level of social charges on the lowest wages; the second is more recent: a modification of the conditions for receiving minimum social benefits that would encourage people receiving them to work³. Along the same lines, new measures were taken in 1998 to allow people on minimum income (RMI) and other welfare benefits to cumulate a part of the benefit with income from employment for a period of one year, in a degressive way, provided income remains below minimum wage level. This has the indirect effect of favouring the creation of part-time, low-waged employment. The United States have had a wide-reaching mechanism in place since 1975, aimed at encouraging welfare beneficiaries to seek employment: the Earned Income Tax Credit (EITC)⁴.

Negative tax can be seen as a radical way of facilitating more diversified and flexible activity cycles, from a blatantly individualistic and liberal standpoint.

If we followed this thought through to its logical conclusion, we would find a society in which labour and social benefits were organized on a purely individual basis, with everyone managing his or her own diversified portfolio of wage and non-wage employment and, when applicable, of transfer income. The underlying temptation is to totally separate redistribution and regulation of the labour market. For some liberal economists, negative taxation is the necessary social counterpart of the abolition of the minimum wage and the dismantling of labour law.

4.1.3 The “Transitional Labour Markets”: Attaining Negotiated Management of Transitions Based on the Diversification of Types of Activity

This liberal project can be contrasted with another project, based on the same premises – i.e. reforming social protection in order to simplify the diversification of types of employment and flexible management of individual activity cycles – but is more oriented towards the renewal of collective regulation and social negotiations.

This type of project was first sketched out by the concept of “transitional labour markets” (Schmid, 1995), which several European researchers are currently developing. The transitional markets strategy is based on the spontaneous development of new employment and activity situations, to which it aims to give positive social significance, thereby moving away from the demeaning image that they carry today. What needs to be done, to quote Bernard Gazier, is “to systematically reorganize the intermediate positions between wage employment and a large group of activities that constitute a service to the community” (Gazier, 1997). In real terms, social transfers would be redirected to systematically facilitate the linkage between part-time employment and other activities (training, raising children, voluntary work, etc.). Many measures that can be likened to transitional markets already exist: progressive early retirement, unemployment benefits for persons with reduced activity, parental leave, training leave, retraining leave, etc.

The aim should be to extend and unify these measures, but also to reinforce the social guarantees to which the individuals concerned are entitled, and also to place the management of these situations at the centre of a new type of social negotiation. The possible scope of application is large, ranging from training programmes, to special working hours for the parents of young children, the re-employment of unemployed workers, as well as the transition between paid employment and retirement, etc. The transitional market concept is a possible response to the classic aim of “activating” social welfare spending, but it tries to accomplish this while avoiding the symmetrical dangers of unconditional attribution (universal benefits) and obligatory employment, by extending

beyond the narrow limits of the integration economy (solidarity work contracts, intermediary associations, rehiring firms, etc.), and, most of all, by giving decentralized collective negotiations a key role to play in the management of changes in employment. We could define the perspective for transitional markets as an attempt to reconstruct waged society around a negotiated organization of mobility, part-time employment and multiple job holding-, based on the assumption that these situations, and in particular the feminisation of the workforce and increased employment insecurity, will concern a majority of workers.

The idea of a transitional market is not disconnected from that of the “*Contrat d’activité*” (Activity contract) suggested in the 1995 report issued by the Commissariat general du Plan entitled *Le travail dans vingt ans* (Work in 20 years’ time). In broad terms, the aim of the Activity contract would be to integrate new types of work (in particular, multiple job holding in its various forms) into a framework providing the same security and the same advantages as the classic wage-employment contract. Thus, the aim would be to “enlarge the organizational framework of the employment relationship with regard to three main constituent elements: its objective, its timescale and its personal scope. Along the same lines, some legal experts have suggested a more ambitious idea entitled “active person’s status” which would define the social rights and obligations of individuals during their entire working life. “Such a status could be applied from the age of 16 or 18, alternately covering work and training, plus the various employment contracts making up a career which no longer takes place within a single company. It could also encompass self-employment, as a new phenomenon is developing in the form of multiple job holding for people who are part wage-earners and part self-employed” (Gaudu, 1998). As the author of this proposal suggests, this would make it possible to address as a particular case the question of what, in some cases, should be demanded in return from persons receiving replacement income.

4.2 THE TRANSITION FROM EMPLOYMENT TO RETIREMENT

Clearly the transitional market idea concerns first and foremost (although not exclusively) the management of transitional ages. Obviously the transition from employment to retirement constitutes a particularly pertinent and promising area of application. It is barely even necessary here to underline the quantitative stakes for hundreds of thousands, and perhaps even millions, of potentially concerned individuals.

In several ways, progressive early retirement prefigures what we are aiming at here, but the measures are too rigid and limited in their ambitions. If

the existing measures are taken as a starting point, it would be necessary to go further:

- 1) Broaden the time scale. Progressive early retirement is seen as a short transition, 2 or 3 years, whereas a second career requires a longer time span, closer to 10 or more years. The advantage (particularly economic) of this sort of plan would be to postpone the age of full retirement (beyond the age of 65). To be perfectly clear, the aim is to move from the idea of progressive cessation of activity to that of part-time retirement.
- 2) Diversifying activities. Whereas progressive early retirement consists in going from full-time to half-time work while remaining in the same job, the new aim would be to offer beneficiaries a veritable change in activity, comparable to an end-of-career secondment. Obviously, the increase in wages that goes hand in hand with seniority in large companies (especially for management positions) constitutes a major obstacle: it makes it hard to imagine any sort of horizontal mobility, let alone slight downward mobility, at the end of a career. "Elephants' graveyards" really do exist, especially in the state sector, in which senior managers are given various tasks which tend to be less demanding than those performed in the best years of their career, without necessarily being less qualified. These costly measures, which remain opaque and largely under-managed should certainly not be seen as models. Why should it not be possible to clarify their aims and rationalize their parameters?
- 3) Diversifying financial arrangements. In many cases, we could imagine a three-way mode of financing involving the original employer, a new private or public employer (typically a local community) and the social security system (State and/or pension funds).
- 4) Leave broad scope for personal projects and contractualization.

A few examples

Clearly, the field of activities potentially encompassed by this type of measure is vast: neighbourhood services, training and consulting, participation in non-profit organizations, caring for the environment, etc. I will limit myself to two concrete examples:

- 1) Neighbourhood shops in rural areas. Many French villages do not have sufficient inhabitants to allow a shop to thrive. A certain number of early retirees might be willing, for reasons of independence and quality of life, to run a shop that makes a loss, provided their income is supplemented to a decent level (that I will not venture to fix here). In this type of scenario, part of the supplementary income could be financed by the village, social security, and possibly even the company originally employing the person (within the framework of company restructuring).

2) Neighbourhood mediation and justice. There are considerable needs in this area. I will not develop this any further, instead I will let each reader imagine the type of administrative and financial setup needed for this type of project.

Certain readers will object that the natural interaction between the market and social demand will allow this kind of innovation to emerge on its own. True enough, many people in early retirement or young pensioners already participate in a wide range of socially beneficial activities (consulting, voluntary work, electoral mandates. . .). Nonetheless, an overall public policy would be very useful, grouping together financial motivation mechanisms, training schemes, and follow-up as well as actively and openly encouraging the advancement of this type of work. It is worth asking whether part of the social needs identified in the framework of the “jobs for the young” scheme could not have been better addressed by a scheme that we might call “jobs for the old” (Coquidé, 1998) (we can trust politicians to find a more appealing title). For young people, these jobs have the dual disadvantage of not making later integration into companies any easier and of being almost exclusively oriented towards the lower end of the public sector – while this would not be a problem for people reaching the end of their working lives.

4.3 CONCLUDING REMARKS

To return to the debate initiated above, the path we have just sketched out is clearly situated within the perspective of a re-modelling of the social contract between generations. As presented here, the “second career” project can be interpreted as a more complex form of trade-offs between generations, integrating a non-monetary dimension. Early in working life, the now defunct Military Service represented a classic example of a trade-off between generations (young men were required to give up their time for the community). The employment-retirement transition is characterized by a variety of formulae, combining wages and transfer incomes in varying proportions. A slightly caricatured way of presenting things would be to say that a social contribution is made in kind, in the shape of community activities, but this type of presentation runs the risk of rejection. The idea of a second career would only be accepted if it were seen as a new type of freedom, which is why the importance of negotiated *personal* projects needs to be stressed. The aim would be to open a space enabling exchanges between generations to take the form, in part at least, of a right to personal fulfilment combined with an obligation to help the community.

An innovation of this type would demand a substantial capacity for institutional inventiveness on the part of all concerned parties. Furthermore, society would have to accept a more individualized and contractualized mode of management of social rights. It is not certain that these two difficulties can be overcome⁵.

NOTES

1. An American sociologist, quoted but unnamed in Xavier Gaullier (1998).
2. André Gorz, Jean-Marc Ferry, Philippe Van Parijs, Yoland Bresson, to name only a few of the most well-known. For an overview of the various positions see the collective publication coordinated by Alain Caillé, *Vers un revenu minimum inconditionnel?* (1996).
3. Since this article was first written, the “employment premium” has been introduced, constituting a new stage in the process of individualized encouragement to work.
4. The EITC principle is identical to that of a negative tax that only concerns the poorest workers. This type of measure has facilitated the creation of low-paid jobs, especially in personal services. According to some estimates, the EITC has contributed to the creation of a million jobs.
5. This text was first written before two major social reforms – concerning respectively work-time reduction (the “35-hour week”) and pensions – implemented in 2000 and 2003. The author must admit that the ideas formulated here have had little impact on the social debate about these reforms. The questions of work time and pensions have been discussed and addressed separately, without any connection. Nonetheless, many people are conscious that the many underlying economic and social problems have not been adequately addressed and that the debates must continue. In the meantime, a lot of research has been conducted in different European countries concerning transitional labour markets. To end with, I think that the social strategy presented in the present text remains relevant, considering the social problems we shall face in a near future.

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CHAPTER 5

SOCIAL CONTRACT AND AGE AT RETIREMENT: SOME ELEMENTS OF A FRANCO-AMERICAN COMPARISON

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5.1 INTRODUCTION

Age at retirement is one of the key parameters of the intergenerational social contract that has been progressively set in place by developed countries, and its adaptation to the new demographic conditions of this century is at the center of the pension debate. This debate goes further than the adaptation of pension rules *stricto sensu*. The main impact of these pension rules is on labor supply (Blöndal and Scarpetta, 1999; Gruber and Wise, 2004; Duval, 2003). But the demand side of the labor market is now recognized as being equally important for explaining ages at effective exits from the labor force, and a specific role is also played by institutions that try to protect older workers from the consequences of low labor demand, such as pre-retirement schemes or specific adaptations of unemployment insurance targeted toward this category of workers (OECD, 2005).

France provides an interesting case study for analyzing how these various components interact. France is characterized by one of the world's lowest employment rates in the 55–64 age group, due to the superposition of relatively generous pension rules, a strong propensity of employers to get rid of more senior workers and the development of numerous opportunities to leave the labor force before normal retirement age (Lerais and Marioni, 2004; Marioni, 2005). Some significant steps have been made toward changing this state of affairs, through the 1993 and 2003 pension reforms, but the situation remains strongly contrasted with the situation of some other countries, especially the US, where labor force participation remains high for this age group.

The purpose of this chapter is precisely to develop the most salient aspects of the functioning of the labor market for French senior workers, using

the US case as a point of comparison. The analysis will focus both on the current situation and on prospects resulting from the two pension reforms.

The chapter will be organized as follows. After a brief presentation of some stylized facts concerning employment of older workers in France, Section 5.3 will concentrate on supply-side problems. Concerning France, the expected impacts of the two major pension reforms enacted in 1993 and 2003 on labor supply of older individuals will be assessed.

The fourth section discusses one of the most often cited obstacles to employment of older workers in France, i.e. their high cost relative to their productivity. The evidence on this point remains mixed: the productivity of older workers who are still in employment does not appear to be falling below their wage levels. But this does not rule out the hypothesis that large numbers of older individuals have left the labor market precisely because their productivity has been adversely affected by, for example, obsolescence of technologies they are able to use, or the emergence of new competitors on international markets. This can explain simultaneously why they may have been laid off by their former employers, and why it is difficult for them to re-enter the labor market.

This raises the question of the coverage offered by social protection against such negative shocks to the productivity of older workers. US data show that older workers who lose their jobs generally face relatively large wage cuts when they find a new job. It is precisely to offer coverage against such wage losses that pre-retirement schemes or special unemployment insurance schemes for older workers have been developed in France. In contrast, the US system assumes that older workers are flexible enough to cope with the wage cuts associated with involuntary job changes.

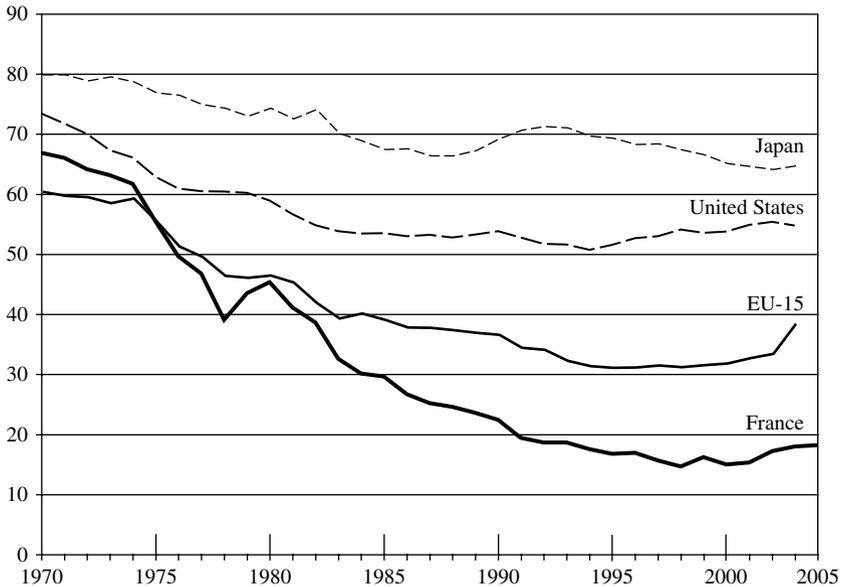
It is beyond the scope of this chapter to discuss the relative merits of these two very different forms of social contracts concerning older workers: they reflect different social choices or values. However, when protection is offered against negative productivity shocks at the end of one's career, as in France, it is important to understand how to avoid excessive use of this facility, in particular by employers themselves. In France, this has been attempted either by administrative control, or by financial penalties targeting lay-offs of older workers. The fifth section of this chapter uses recent research to assess the efficiency of this second group of instruments. Unfortunately, this efficiency remains limited: this suggests that these tools alone are not sufficient for regulating labor market transitions in this age group. Other actions are probably required: antidiscrimination policies such as those developed in the US are perhaps not directly transposable to France, but positive actions to combat employers' negative stereotypes of older workers would probably be of some use. A final section briefly concludes.

5.2 THE LABOR MARKET FOR OLDER WORKERS: BASIC STYLIZED FACTS

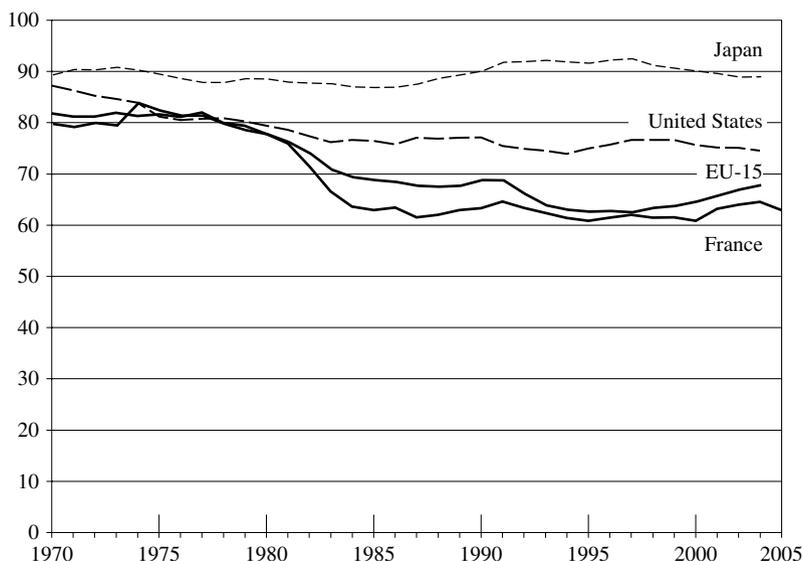
To start, we can briefly describe the main facts about employment of older workers in France. Figures 5.1a and 5.1b give employment rates for men since 1970. They confirm that France lies well behind a majority of developed countries, not only Japan and the US where employment rates of older workers remain quite high (and even exceptionally high in the case of Japan), but also compared to the average of EU-15 countries. This was not the case in the early 1970s, when French levels were comparable to the average. The relative decline of French employment rates started around 1974, first for the 60–64 age group¹, and then for the 55–59 age group during the first half of the 1980s. From the mid-1980s, the employment rate more or less stabilized in the 55–59 group, at about 65%, while the employment rate in the 60–64 age group continued declining and is now around 15%.

We do not show similar figures for women, which are less easy to interpret, due to the general increase in female employment rates across successive generations. But we give, for both men and women, labor force

Figure 5.1a. Employment Rates, Men, 60–64



Source: OECD

Figure 5.1b. Employment Rates, Men, 55–59

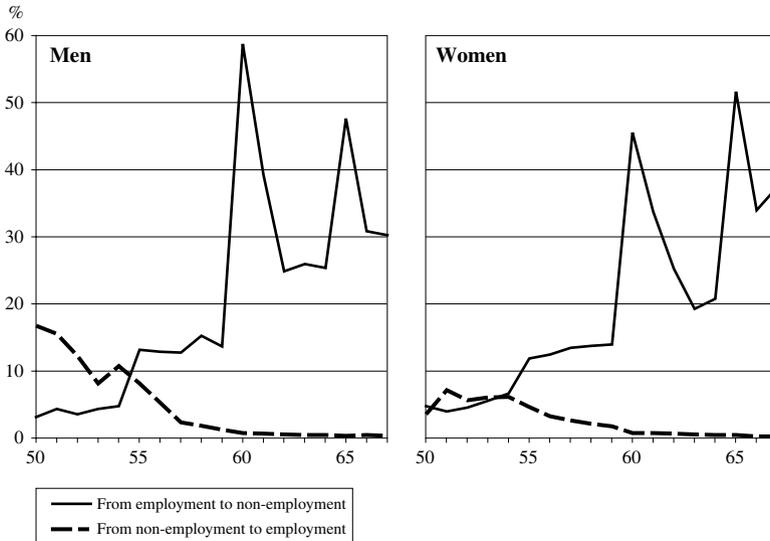
Source: OECD

transition rates between ages 50 and 70 which explain the profiles of employment rates at these ages (Figure 5.2). Transitions from employment to non-employment display spikes at the ages of 60 and 65, which, as we shall see in a moment, have a particular significance in the basic French pension system. But probabilities of leaving employment are already high before age 60, at more than 10% per year between 55 and 59. A more detailed analysis by Behaghel (2003) shows that this probability increased between the late 1970s and the 1990s: the group of workers aged 50 or more is an age group in which tenure has lost part of its protective role against the risk of job loss.

Conversely, while the probability of returning to employment from non-employment is still slightly positive at 50, it becomes practically equal to zero past ages 56 or 57.

This very low rate of return to employment sharply contrasts with the US situation where rates of return to employment, even though they also decline after 50, remain much higher than in France. An illustration is given by Figure 5.3, built from results given by Cohen and Dupas (2000). This figure gives rates of return of unemployed workers one year after job loss, evaluated respectively from the Panel Study on Income Dynamics (PSID) for the US, and from Labor Force Surveys for France. Data are relatively old, 1988–1992 for the US and

Figure 5.2. Transition Probabilities Between Employment and Non-employment, France



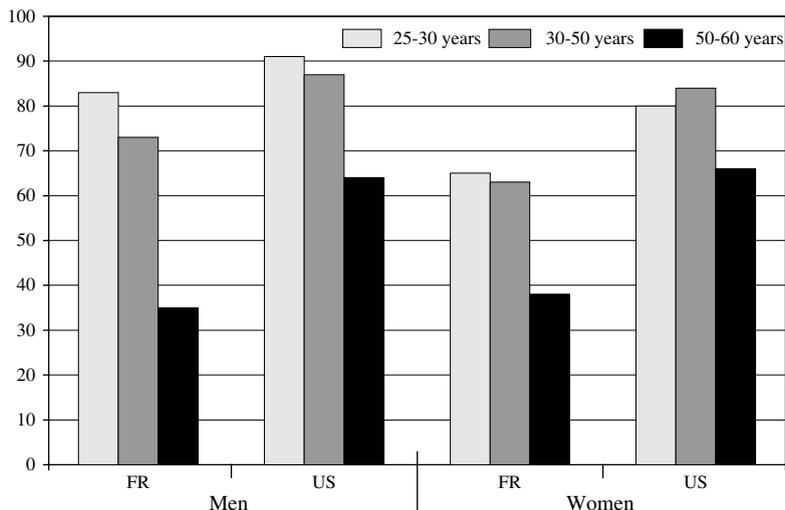
Source: LFS, INSEE. Probabilities of leaving employment are estimated for full-time workers only. Probabilities of returning to employment include returns to full-time and part-time employment.

1991–96 for France, but this does not matter that much for a comparison which is essentially structural. A difference between rates of return to employment is already observed at median ages, which reflects the greater fluidity of the US labor market. But this gap increases after 50: the re-employment probability is about 65% for a senior worker in the US, nearly twice the value observed for his or her French counterpart².

5.3 SUPPLY SIDE

Whatever the role of demand-side factors in the explanation of low French employment rates between ages 55 and 64, it is clear that supply-side considerations play an important role, specifically between ages 60 and 64. Low labor force participation (LFP) rates for France are the natural response to the fact that the French system does not encourage and even discourages work in this age bracket. These disincentives were intentional: the changes in pension rules implemented after the Social Security was set up in 1946, and in particular the

Figure 5.3. Annual Probabilities of Returning to Employment for Unemployed Workers in France and in the US, According to Gender and Age



Sources: Cohen and Dupas (2000). For the US, PSID data from the 1988–1992 period, for France, LFS data between, 1991 and 1996.

introduction of retirement at age 60 in 1983, were explicitly designed to favor massive exits from the labor force at this age which, at that time, was considered as the normal retirement age collectively endorsed by public opinion.

What are more precisely these incentive properties of the French pension system, and how do they compare with those in the US system? To avoid complexity, let us restrict ourselves for both countries to the first pillar schemes that have the largest coverage. In France, the largest scheme is the “general regime” which provides the first pillar pension for all private sector wage earners (about 60% of the total labor force). We shall compare this with the US Old Age and Survivors Insurance (OASI). Concerning France, we shall also describe some elements of pensions rules for civil servants, covering about 20% of the labor force.

Table 5.1 synthesizes rules of these different systems, including those that have applied until recently, and target rules that will result, ultimately, from reforms implemented over the last decades in the two countries. For France, these reforms took place in 1993 and 2003. In the US, a reform was introduced in 1983, but in both cases the reforms are expected to have their full effect around 2020. Let us start with the analysis of pre-reform situations, i.e. rules that prevailed in the two countries in the early 1990s.

Table 5.1. Pre- and Post-Reform Major Rules for the Main French and US Pension Schemes

	France, Regime General		France, Public Sector		USA (OASDI)		
	Before the 1993 reform	Changes introduced by the 1993 reform	Changes introduced by the 2003 reform	Before the 2003 reform	Changes introduced by the 2003 reform	Initial rules	Rules that will prevail after full implementation of the 1983 reform
First age at which retirement is possible	60	No change	No change	55 or 60 years, depending on categories	No change	62	62
Age or duration conditions for “normal” retirement	60 or more with at least N = 37.5 years of contribution, or 65 without any condition on N	Duration condition raised from 37.5 years to 40 years (in 2003)	Duration condition raised to 41 (between 2008 and 2012), and to be increased to 41.75 years in 2020*.	37.5 years	Duration condition raised to 41 (in 2012), and to be increased to 41.75 years in 2020*.	65	67
Pension level at the normal retirement age	If N = 37.5, 50% of the average of wages, truncated to the social security ceiling.	The period over which past wages are averaged is increased from 10 to	No change	75% of the last wage	No change	A fraction of the average wage over the 35 best years of ones career. The fraction is	No change

(Continued)

Table 5.1. (Continued)

	France, Regime General		France, Public Sector		USA (OASDI)		
	Before the 1993 reform	Changes introduced by the 1993 reform	Changes introduced by the 2003 reform	Before the 2003 reform	Changes introduced by the 2003 reform	Initial rules	Rules that will prevail after full implementation of the 1983 reform
Reduction for retirement before the NRA	over the 10 best years of ones career. If $N < 37.5$, this amount is prorated.	25 years. (process to take place between 1993 and 2008).	No change	Prorating effect plus a reduction of 10% for each missing year	Only the prorating effect	5/9th percent for each month before the NRA	5/9th percent per month between 64 and 67. 5/12th percent between 62 and 64.
Increase for retirement after the NRA	None	No change	No change	3% for each year of postponement	None	6% for each year of postponement	8% for each year of postponement

* Depending on future changes of life expectancy at 60.

5.3.1 Pre-reform Conditions

A first step is to describe “normal” retirement conditions. In France, we define “normal” retirement by reference to the concept of a “full-rate” pension. In the general regime this full rate pension is equal to 50% of a reference wage which, until the 1993 reform, was the average of past wages over the 10 best years of one’s career, truncated at the social security ceiling (the social security ceiling is roughly equivalent to the average wage)³.

In the US, an individual retiring at the normal age gets a pension level (PIA for Primary Insurance Amount) which is also a fraction of average past wages, with two major differences with respect to the French case. The first one is that the average of past wages (the AIME, Average Indexed Monthly Earnings) is computed over the quasi-totality of people’s careers (35 years); the second difference is that the ratio between this AIME and the PIA depends on the position in the hierarchy of wages, with a highly progressive formula. This introduces a component of vertical redistribution in the system, which does not exist in the more strictly Bismarckian French system.

On the whole, however, both systems offered a pension of 40–50% of average past wages to the *median* worker retiring at the *normal* age under standard conditions. The main differences concerned (a) the value of this normal age, and (b) how the pension changes when the actual retirement age differs from this normal age.

In the US, the normal retirement age (NRA) used to be 65, with a reduction of the pension by 5/9th of a percent for each month of pension receipt before 65 (with a minimum age of 62), and a bonus of 6% for each year of postponement past 65, up to age 70.

In France, since 1984, the normal age in the private sector can be considered as being 60, but the reality is a bit less simple because the conditions for obtaining the full rate involve not only age, but also the number of years of contribution, according to a complex non-linear formula. Let a be age at retirement, n the number of years of contributions at this age, and w the reference wage. Under pre-1993 rules, the replacement rate of 50% was applicable only for people retiring with at least $n_{\max} = 37.5$ years of contributions (and was not increased if n is higher than this number). In other cases, the pension was, if the individual retired at 65:

$$P = 0.5 (\min(n/n_{\max}, 1)).w$$

or, if he or she retired between 60 and 65:

$$P = (0.5 - 0.05 \min(65 - a, n_{\max} - n)) \cdot (\min(n/n_{\max}, 1)).w$$

In this latter case, the pension was affected by a double reduction: one due to the proportionality of the pension to the number of years of contribution, and

the other due to the fact that the proportionality factor was itself reduced. This additional reduction was quite substantial: it amounted to 5 percentage points (i.e. a 10% decrease) for each missing year to reach either age 65 or a number of years of contribution equal to n_{\max} (the condition that is more favorable to the individual is the one applied).

Finally, the rules for civil servants in France were more generous: the “normal” replacement rate was 70%. Part of this difference with the private sector corresponds to the fact that the pension system for civil servants is essentially a single pillar system, but civil servants also benefit from the fact that this replacement rate applies to their very last wage, and not to an average of past wages. Concerning age at retirement, the normal age is also 60 for a majority of these civil servants, but retirement can occur as early as 55 for some categories of workers exposed to more difficult working conditions.

We shall come back to the case of civil servants later, when commenting on the recent 2003 reform, and for simplicity, we shall now restrict ourselves to the comparison between the US OASI and the French General Regime. Figures 5.4a–5.4c give the profiles for replacement ratios depending on age at retirement for three cases corresponding to a worker who started working at

Figure 5.4a. Replacement Rate Depending on Age at Retirement. Individual Started Working at Age 17. (See Text for Details)

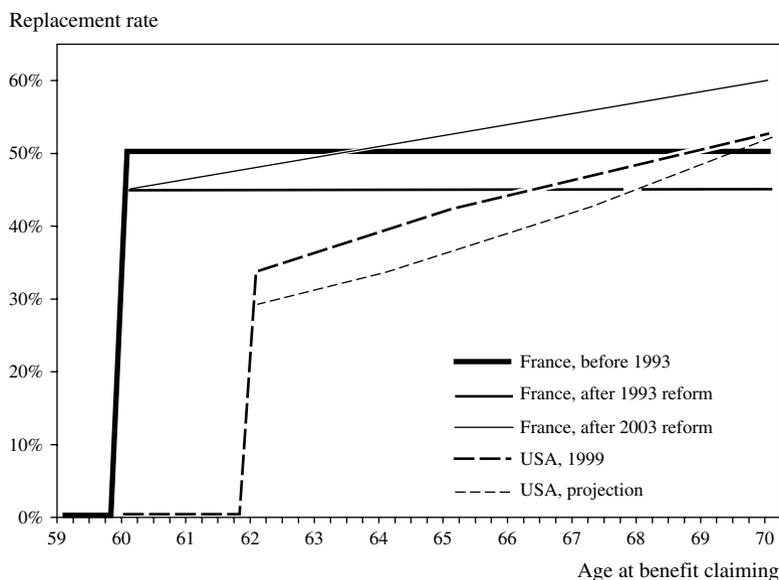
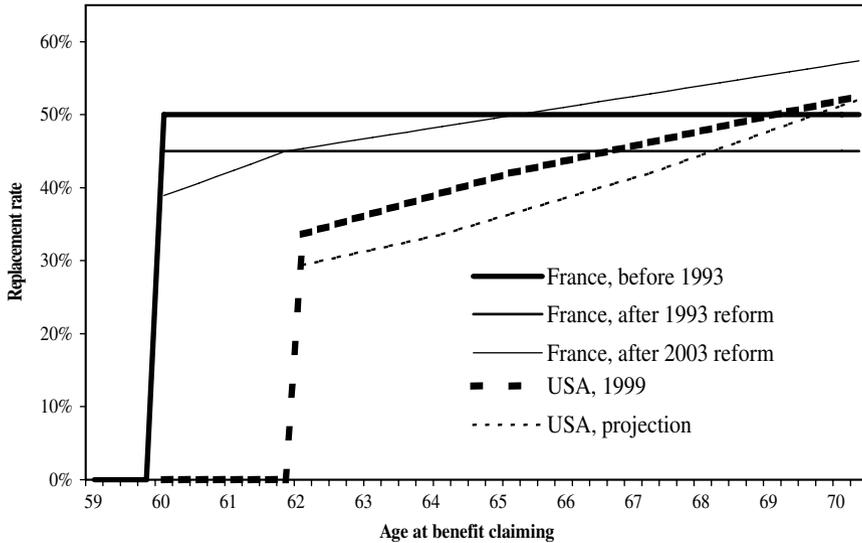


Figure 5.4b. Replacement Rate Depending on Age at Retirement. Individual Started Working at Age 20. (See Text for Details)



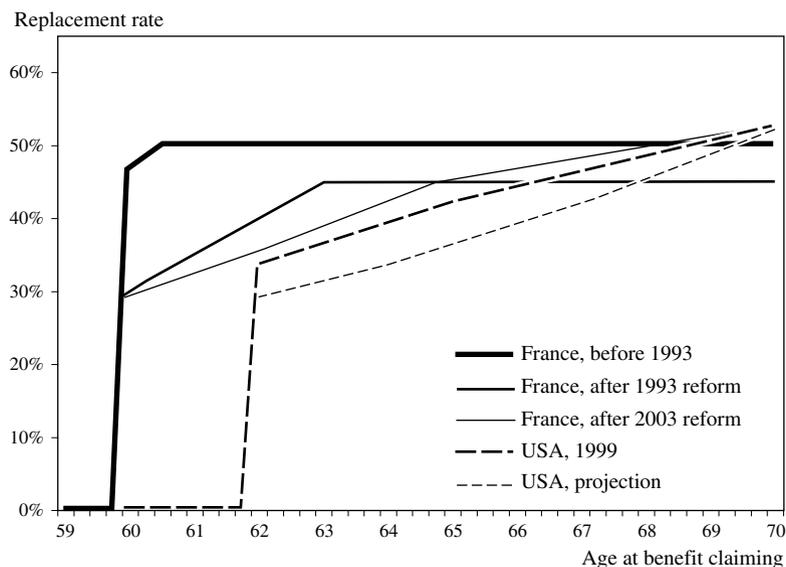
ages 17, 20 or 23, respectively, and supposed to have worked continuously until retirement. If we concentrate at this stage on the first and fourth series displayed on this graph, corresponding to our “initial” or “pre-reform” schedules for France and the US, we see the marked contrasts between the two schedules. The French replacement rate was generally at its maximum by age 60, the only exception being the case of the individual having started at age 23 who had to retire one half year after his sixtieth birthday in order to get the maximum replacement rate. The US schedule only starts at age 62, and generally provides a much lower replacement level.

5.3.2 Reform: Various Policy Options

How do such patterns affect retirement behavior? At least three main aspects must be distinguished (Duval, 2003):

- The impact of the normal age at retirement: we generally observe a concentration of departures at this age, due possibly to the adoption of this age as a social norm for retirement.

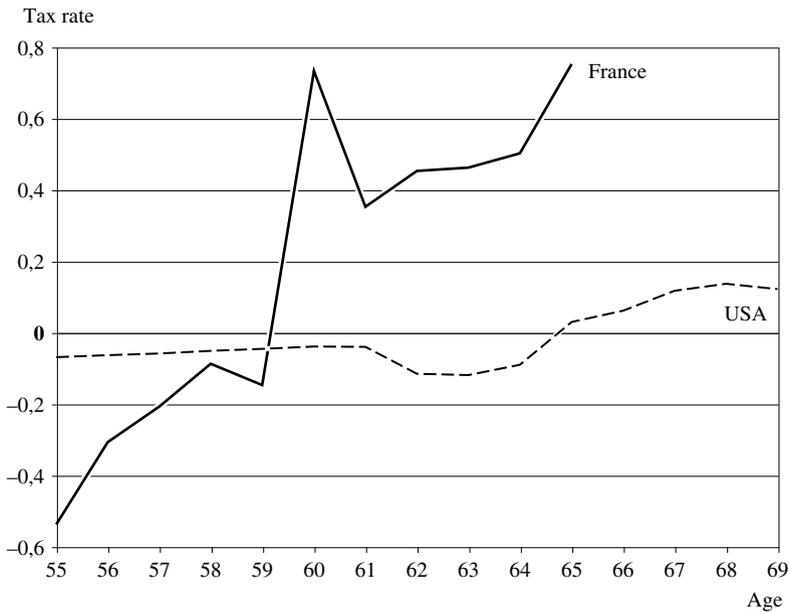
Figure 5.4c. Replacement Rate Depending on Age at Retirement. Individual Started Working at Age 23. (See Text for Details)



- The impact of overall generosity of benefits: at a given age, *ceteris paribus*, we expect that the probability of retiring will be higher, the higher the level of benefits available at this age.
- A slope effect, i.e. the impact of the increment to the expected present discounted value of net benefits over the whole retirement period resulting from postponement of retirement. A useful baseline for this slope effect is the case of actuarial neutrality where this net increment is zero: this occurs if the increase in the replacement rate for one year of additional work exactly offsets the additional year of pension contributions and the shorter expected duration of pension receipt. A positive increment can therefore be interpreted as a subsidy to postponement and a negative increment can be interpreted as a form of implicit labor taxation.

In practice, these effects are not independent from each other: in France, the NRA was the age at which the benefit level reached its maximum, and was also the age at which the slope effect changed abruptly from labor subsidy to labor taxation. Figure 5.5, drawn from Blanchet and Pelé (1999) and Diamond and Gruber (1999) provides a clear illustration of this taxation effect, compared to the situation that prevails in the US, computed for a median worker. Work in

Figure 5.5. *Implicit Tax on Continuing Employment as a Function of Age*

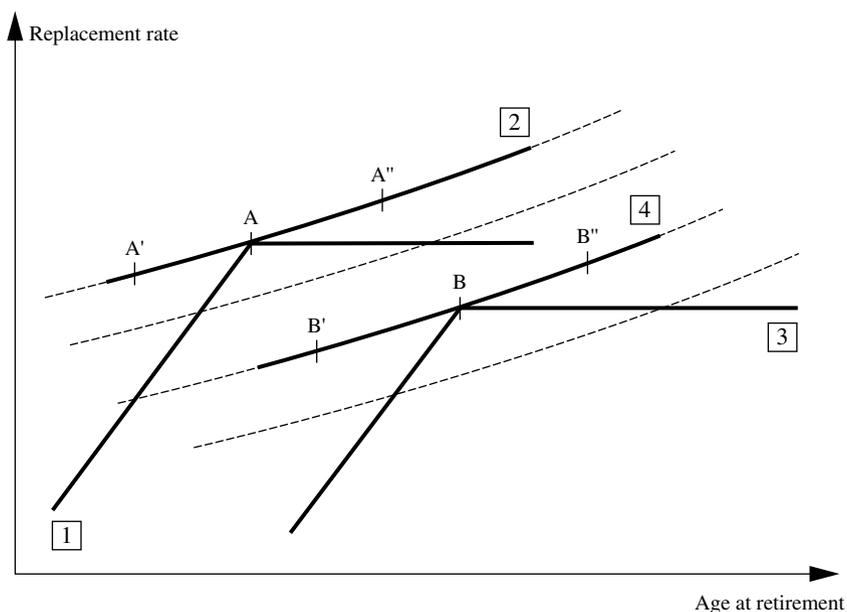


Source: Blanchet and Pelé (1999) and Diamond and Gruber (1999)

France was heavily “subsidized” until the age at which the full rate was attained, and heavily taxed after this age. The US profile of net implicit taxation is much flatter and closer to zero, corresponding to quasi-actuarial neutrality on both sides of the normal retirement age.

The three factors described above suggest that different options were available for trying to raise retirement age in a country like France. Figure 5.6 presents these three possibilities in a diagram again giving replacement ratios as a function of retirement age, and where the set of dotted lines describes the family of actuarially neutral schedules (there is actually an infinity of such schemes, each of them corresponding to a different equilibrium level of contribution rates to the pension system). Starting from schedule 1 which is a stylized representation of the initial French scheme, a first option was to move to schedule 2, i.e. a simple shift to actuarial neutrality around the normal retirement age (point A). A second option was to move to schedule 3 corresponding to a global down-and rightwards move of the initial schedule without any change of its general shape. The last option presented on the figure is the combination of these two policies, leading to schedule 4.

Figure 5.6. Three Scenarios for Changing the Schedule of Pension Benefits.



- 1: initial schedule.
- 2: new actuarial schedule with the same reference conditions as schedule 1.
- 3: simple translation of the non-actuarial schedule 1.
- 4: combination of change to schedule 2 and 3.

One can argue that the only point that matters for pension reform is to come as close as possible to actuarial neutrality, i.e. to choose any of the schedules represented by the dotted lines, no matter which one is finally chosen. The argument is the following. Assume that the schedule has been chosen too low: individuals who want to retire early with high replacement rates will compensate for this through increased savings before retirement (and more dissaving after) in order to retire at their preferred retirement age. Assume instead that the proposed schedule is too high: individuals who prefer a late retirement will nevertheless go on retiring late, and will adjust their consumption profile the other way round, by reducing their savings while active (or even running a debt that they would repay once retired). In such a setting, moving to schedule 2 could by itself be sufficient to provide appropriate incentives for retirement, without any need to globally move rightwards on the diagram.

But there are at least two reasons for considering such a policy as insufficient. The first is that we are clearly not in a world of perfect capital

markets, and empirical analysis confirms that retirement behavior is affected simultaneously by the implicit taxation of labor and by the level of benefits (see Mahieu and Blanchet, 2004 and more generally the collection of other national studies in Gruber and Wise, 2004).

The second reason applies even if we believe in the assumption of perfect capital markets. If the final goal is to limit the growth or level of pension expenditures, moving to schedule 2 is of no help: even if this move is successful in bringing age at retirement to point A" (which is not guaranteed at all, since behavior can move as well to point A'), this is compensated by a higher average level of pensions. By definition of actuarial neutrality, the two effects exactly compensate for each other in the long run⁴.

It comes as no surprise, therefore, that we have had reforms that also incorporate a global movement of the schedule in the south-east direction. This came in two steps, 1993 and 2003.

The 1993 reform has been exclusively of the 1→3 type. It instituted a progressive increase in the number of years of contribution required to reach full retirement, from 37.5 years for cohorts born in 1943 or before, to 40 years for cohorts born in 1943, 1953 and after, i.e. an increase by one quarter between each successive cohort, over ten years. Simultaneously, this reform changed the rules for computing the reference wage in a way which is expected to reduce the full-rate pension by about 10% in the long run (Bardaji et al., 2003): the main tool for doing so has been to increase the period over which past wages are averaged from 10 to 25 years, and to revalue these past wages on the basis of past prices instead of past average wages as before. On the whole, this corresponds to the kind of move from schedule 1 to schedule 3, without, at this stage, any attempt to bring the schedule closer to actuarial neutrality.

The second step, in 2003, was of the 1→4 type. One important feature of this reform has been to extend the application of the 1993 reform to the public sector (where the condition was still 37.5 years), with a convergence planned for 2008, then to program a parallel shift in the duration required to get the full rate in both sectors from 40 years in 2008 to 41 years in 2023. This will be followed by further changes indexed on the increase in life expectancy: the idea is to have each year of increase in life expectancy divided between additional years at work and additional years of retirement in a proportion of 2/3 and 1/3. Given current projections of life expectancy, this is expected to increase the contribution period to 41.75 years in 2020. Simultaneously, a move toward actuarial neutrality will occur under these new reference conditions for the full retirement, first by reducing the penalty for retirement before the full rate, and then by introducing an incentive to postpone retirement beyond this age, by offering a 3% bonus for each additional year of work. Similar mechanisms have been introduced for pensions in the public sector.

We can go back to Figures 5.4a to 5.4c to see more precisely the impact of these two reforms for our three reference situations. Since the reform does not directly affect age conditions, but acts on the duration condition, its impact is strongly differentiated by age at entry into the labor force. This property is desirable *per se* on equity grounds if it favors low-income workers who entered employment at very young ages and who generally have lower life expectancies than other categories of workers. The 2003 reform added one element in this direction, since it introduced possibilities of retirement before age 60 with 40 years of contributions for people currently in their fifties who started working as early as ages 14, 15 or 16.

The comparison of Figures 5.4a and 5.4c confirms this differentiated impact. For individuals who started working at ages 17 or 20 (assuming continuous activity after this age), the 1993 reform alone only entailed an overall decline in the pension level without any change in its profile, which remained flat before and after the reform. For individuals who started at age 23, the reform introduced an additional penalty for retirement at age 60. The 2003 reform has more far-reaching implications, even if it does not have any additional effect on the “normal” replacement rate. For individuals who started working early, it does not affect pension entitlement at age 60, but makes it possible to increase the pension level in case of postponement (note that since the bonus remains sub-actuarial, postponement for such individuals would lead to a reduction in the long-term burden of pensions). We could say that, for this specific case, the policy is more of the 1→2 type than of the 1→4 type.

For individuals who started working at age 20, the age at which the full rate is attained shifts rightwards from 60 to 61.75 years. Around this new pivotal age, they face a lower penalty than before in case of earlier retirement, and have an incentive to continue working beyond this age. We are now typically in a 1→4 change. It is for individuals who started working at age 23 that the reforms have had or will have the strongest effects. For these individuals, the 1993 reform had already introduced heavy penalties in case of a departure before age 63. The new 2003 reform will have little effect on the penalty in case of departure at the earliest age of 60, due to the offsetting effects of the increased duration required for the full rate and the reduced penalty for each year of retirement before this full rate, but it reduces the pension level for all cases of departure between 60 and 65.

In fact, for this particular case, the 2003 reform brings the schedule quite close to the initial US profile. However, at the same time, this US profile will have itself shifted rightwards, as a consequence of the long-term changes initiated by the 1983 reform. In this US case, the slope of the profile is not expected to change considerably: it was already close to actuarial neutrality, and the adjustments reinforce the bonus in case of late departure (from 6 to 8%

per additional year). A piecewise linear formula has been introduced in case of departure before the NRA (5/9th of a percent per month reduction for the first 36 months before the normal age but only 5/12th for the next 24 months before the normal age). The most important change concerns the NRA itself, which will be increased to 67 by 2022.

Thus, the conditions under which pensions are computed and their link to age will remain significantly different in the future between the two countries. However, it remains true that the 1993 and 2003 reforms in France already represent a significant change, especially if we consider that this change will interact with the fact that age at entry into the labor force has increased for more recent birth cohorts. The fact that the pension depends on the number of years of contribution at least as much as on age implies that age at entry into the labor force is of crucial importance: its shift upwards means that we will not only have the consequences of the rightward shift of benefit patterns described in figures 5.4a to 5.4c, but also that we will have a decreasing number of people for whom case 4.a is relevant, and increasing numbers of people facing constraints of the 4.b or 4.c types.

5.3.3 Assessing the Impact of the French 1993 and 2003 Reforms

How can we evaluate the impact of the French pension reforms on labor supply? We need two things: a behavioral model describing how a given individual reacts to the change in incentives that we have just described, and a model that projects, at various horizons, the distribution of people according to the age at entry into the labor force and other characteristics that affect these incentives. Given the rules for computing pensions, this requires a full projection of individual careers.

These two requirements are fulfilled by the Destinie dynamic microsimulation model, which has been developed at INSEE over the last ten years. This microsimulation model projects, at the horizon of 2040, full work and earnings histories for a sample of about 50,000 people⁵ drawn from a household asset survey which has the advantage of providing retrospective information on past careers. The current version of this model is based on the 1998 edition of this survey. Careers are projected in the model according to a set of transition probabilities and to individual wage equations estimated from labor force survey data. Early versions of this model used a simple representation of retirement behavior, namely the hypothesis of exogenous departure at the full rate. This assumption can be considered as relatively realistic for the past, but should become less relevant given the changes induced by ongoing reforms. In fact, sticking to this assumption would have meant denying any kind of impact of changes in penalty or bonus rules for retirement before or after the NRA, a position which is hard

to defend *ex ante*⁶. For this reason, the model has been enriched over the last years by a module that allows for choice of retirement behavior.

One possibility for this module could have been the implementation of semi-reduced form models such as those developed in the series of national studies coordinated by Gruber and Wise (2004). For this project, logit models of the retirement decision were developed and tested, with explanatory variables such as the benefit level, the implicit tax rate on continuing labor, or other indicators of the global shape of pension entitlements according to age at retirement. Such models have been used in these studies to model the impact of some “typical” reforms, such as a rightward shift of the whole schedule of pension entitlements by exactly three years (typically a 1→3 reform) or a “common reform” consisting in a quasi-actuarially fair scheme offering a replacement rate of 60% at age 65, with an early retirement age of 60 and penalty or bonus of 6% for each additional year below or above the age of 65 (Mahieu and Blanchet, 2004).

These studies show that the most efficient of these stylized reforms seemed to be the 3-year increase reform, but the predicted impact varies considerably according to the exact econometric specification of the retirement model; the predicted change in the average retirement rates may be as high as 3.14 years but as low as 0.19 years. Anyway, such models are not well suited for simulating the consequences of complex changes such as those entailed by the 1993 and 2003 reforms. In particular, the quality of the adjustment they give on existing data remains strongly dependent on specific age dummies, and we have no information on the way such dummies must be changed to take into account changes in pension rules introduced by the reforms. For this reason, the Destinie model instead uses a structural model, which is an adaptation of the Stock and Wise option value model (Stock and Wise, 1990; Mahieu and Sédillot, 2000).

Returning to Figure 5.6, the model computes the proportions of people who will react to the shift from schedule 1 to 4 by moving from point A to points such as B, B' and B". The model differentiates people according to age at entry into the labor market and sector of employment (private and public), since the impact of the reform is not the same in the two sectors: even if the reform organizes a convergence between these two sectors, this convergence is only partial, and points of departure are, in any case, extremely different.

Tables 5.2 and 5.3 sum up briefly the main results of recent explorations with the Destinie model. Table 5.2 is restricted to the private sector, since it presents results for the 1993 reform. In fact, two causes of changes in retirement age can be distinguished: even with the pre-1993 rule the increase in age at entry into the labor force would have caused an increase in the average retirement age by 0.3 years, from 61.2 to 61.5. To this we must add the impact of the reform itself, including its interaction with this increasing age at entry into the labor

Table 5.2. Impact of the 1993 Reform on Average Age at Retirement

Cohort	Before the Reform			After the Reform			Average Change Due to Reform		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1935–40	61.2	60.4	61.9	61.5	60.8	62.1	0.3	0.4	0.2
1940–44	61.3	60.4	62.2	61.6	60.6	62.5	0.2	0.2	0.3
1945–54	61.2	60.5	61.8	61.5	60.9	62.2	0.4	0.4	0.4
1955–64	61.1	60.7	61.4	61.5	61.1	61.9	0.5	0.4	0.5
1965–74	61.5	61.2	61.7	62.1	61.9	62.2	0.6	0.7	0.5

Source: DESTINIE model

market: this adds 0.6 years more, i.e. a nearly one-year increase between the 1935–40 and the 1965–74 cohorts.

Table 5.3 shows the additional effect of the 2003 reform. To give an idea of the differential impact according to age at entry into the labor market, this second table splits the population of each cohort into four groups, defined by quartiles of the number of years of education (this variable is also the proxy used by the model to describe relative social status for individuals). In the private sector, the additional impact of this new reform is weak compared to changes already generated by the 1993 reform. The impact is even negative for the more educated group. The 1965–74 birth cohort retires 0.4 years earlier than under the 1993 reform only: according to the model, this group takes advantage of the reduction in penalties for early retirement and retires at 62.9 instead of 63.4. All three other groups increase their retirement age, either because of the further increase in the contribution period required to get the full rate, or because they take advantage of the new bonuses for retirement after the normal age.

As expected, changes are much larger in the public sector. The reform results in changes of the age at retirement ranging between +1.5 and +2.4 years. The average level of education is higher in this sector, with the result that the new duration condition is on the average more constraining. Also, there is an increase rather than a reduction in penalties for retirement before this duration condition is attained. This is particularly constraining for people who previously could have retired as early as 55 without excessive penalties. This group will now face much stronger penalties if they leave at this age without having reached the 41 or 41.75 years of contributions.

On the whole, the global impact expected from this reform, on the supply side, is an increase in the average retirement age of about 1.8 years, which would correspond to an increase of the total labor force of about 640,000

Table 5.3. *Impact of the 2003 Reform on Average Age at Retirement, by Education Level*

Cohort	Private Sector					Public Sector				
	Total	Education Level				Total	Education Level			
		1	2	3	4		1	2	3	4
Before the 2003 reform										
1945–54	61.5	61.3	61.1	61.7	62.9	58.6	57.4	58.1	58.8	60.7
1955–64	61.5	61.3	61.0	61.5	62.7	57.9	57.2	57.6	58.3	59.3
1965–74	62.1	61.5	61.7	62.2	63.4	58.6	57.3	58.5	59.2	60.0
After the 2003 reform										
1945–54	61.6	61.0	61.3	61.6	62.8	60.2	58.7	59.9	60.8	62.1
1955–64	61.9	61.4	61.7	62.2	62.8	60.1	59.6	60.0	60.3	60.9
1965–74	62.3	61.7	62.3	62.5	62.9	60.8	59.8	60.8	61.4	61.5
Average change due to reform										
1945–54	0.0	–0.4	0.1	0.4	0.2	1.6	1.3	1.8	1.9	1.4
1955–64	0.4	0.2	0.6	0.8	0.1	2.2	2.4	2.4	2.1	1.7
1965–74	0.2	0.3	0.6	0.4	–0.4	2.2	2.4	2.3	2.2	1.5

Source: DESTINIE model, Buffeteau and Godefroy (2005)

people at the 2020 horizon. Globally, including the 1993 and the 2003 reform and the trend that would have occurred even without reform, LFP rates in 2020 are expected to be about 28% in the 60–64 age group compared with 16% in 2004. Of course, these results are no more than simulations that are strongly dependent on the quality of the underlying model. The robustness of the model is limited by the fact that, up to now, the French system left little room for the expression of individual preferences concerning income/leisure trade-offs: it is only by observing future consequences of the increased flexibility of retirement possibilities around the normal age that we can hope to have better estimates of the structural parameters that form the basis for these simulations. Even if these estimates were robust, one additional limit of such projections is the assumption of stability of these structural parameters.

A final important consideration in evaluating the simulation results is that they ignore the demand side of the labor market. What really matters for the equilibrium of the pension system is to know how these supply-side effects will translate into employment. As far as the public sector is concerned, the main effect of the projected delayed retirement age will be to slow down entry into

public employment, since it is unlikely that postponed retirement in the public sector will be accompanied by the creation of new public jobs. Positive effects on employment are, therefore, strictly dependent on the capacity of the private sector to simultaneously retain its oldest workers while absorbing the cohorts of new entrants.

This labor demand problem has two aspects. One concerns the future global balance between labor supply and labor demand over the next decades and is clearly beyond the scope of the current chapter. The other aspect specifically concerns the labor market for older workers: it is to understand whether and how these supply side changes will be accompanied by changes in employers' willingness to employ older workers. Actually, there are at least two indications that a demand-side problem exists for older individuals:

- The development of pre-retirement schemes has been an answer (even it was not necessarily the right one) to the propensity of firms to get rid of their older workers.
- Firms also have shown a tendency to hire relatively few older workers, even at ages where no pre-retirement schemes exist.

One can also mention at this level that the predictions by Stock and Wise type supply-side models for France cannot be considered as a proof that purely supply-side factors provide the main explanation for the employment rates of older workers in France. The spike of departures at the full rate is not only due to the fact that this age is the one that maximizes the discounted stream of benefits for the pensioner, but also to the fact that, until the 2003 reform⁷, this was the age at which the employer was allowed to freely terminate the labor contract without any penalty or other formality. The magnitude of the spike is thus compatible with demand-side as well as supply-side explanations for low employment rates of older workers in France. It is therefore important to look more closely at reasons that may explain employers' attitudes towards their ageing workers.

5.4 DEMAND SIDE

5.4.1 Three Candidates for Explaining Low Demand for Older Workers

What do we now know concerning the demand side in France? What are the elements of comparison with the US situation?

Three main explanations can be proposed for a low level of labor demand for older workers. One is non-economic: it consists of discrimination against older workers, due to stereotypes without any economic justification. The second, on the contrary, assumes that there is a real economic problem due to a gap between these workers' productivity and their wage, either the wage they get

as long as they remain in the same firm, or the wage they demand once they find themselves in unemployment (the reservation wage). A third explanation does not need to assume that there is a specific productivity problem for older workers. The idea is that firms are confronted with a *global* problem of excess labor, and they prefer to solve this problem by getting rid of older workers because this is socially better accepted than other forms of downsizing. Of course, this is the case precisely because these workers are covered by relatively generous pension or pre-retirement schemes.

The discrimination thesis deserves examination, but it is difficult to document with statistical evidence. Anti-discrimination policy is a central aspect of US demand side policy in favor of older workers, since the introduction of the Age Discrimination in Employment Act (ADEA) during the 1960s. There is no direct evidence about the extent of discrimination against older workers in the US before the ADEA, but there is some evidence that the ADEA and similar state laws had an impact on the labor market for older workers. For instance, Adams (2004) uses data from the Current Population Survey (CPS) on white men in the 1960s, the period when the federal law (ADEA) and many state laws took effect. He reports that employment among workers in the age range covered by the laws (typically 50–65) increased following passage of the laws in states that passed a law, relative to employment in states that did not or had not yet passed a law. Neumark and Stock (1999) use data on white men from the decennial censuses of 1940 through 1980. Like Adams, they find positive effects of anti-discrimination laws on employment of workers in the covered age ranges. In sum, the evidence suggests that US anti-discrimination laws succeeded in raising employment of covered workers, even if it may have been sometimes at the cost of reduced employment of uncovered workers.

Such tests are not possible in France. But a recent opinion survey conducted by the Ministry of Labor among managers or heads of human resource departments in a sample of 3,000 firms shows the existence of strong stereotypes concerning older workers (Minni and Topiol, 2004). The survey results also show that these stereotypes affect hiring decisions, but not separation decisions (Anglaret and Bernard 2003). Discrimination in hiring decisions is also apparent from the frequent references by employers to age in discussions of hiring (Marchal and Rieucan, 2005).

The question remains, however, whether such practices have no economic ground at all, or whether they have an economic basis: is the reluctance of employers to hire old workers completely arbitrary, or does it result from observations that these employers are actually making, on the average, concerning the productivity or the adaptability of these workers? In particular, what about the hypothesis that productivity declines relative to the wage at the end of the career?

5.4.2 Assessing the Wage-Productivity Gap for Older Workers: Mixed Evidence

Evidence in favor of a strong role for the wage-productivity gap in France comes for cross-country comparisons. The profile of the average wage by age is much steeper in France than in other OECD countries, except Japan. In particular, the relative wage premium associated with being aged 50–59 in France seems to be twice as high as in the US (Table 5.4). Provided that this figure reflects a truly faster wage growth in France, this leads to the conclusion that there is a productivity/wage ratio problem for older workers, unless we think that productivity grows much more rapidly with age in France than in the US.

Table 5.4. Relative Average Wage by Age in OECD Countries (2000)

Age	Men							
	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64
Japan	100.0	123.6	144.3	156.9	165.9	172.1	157.6	107.1
France	100.0	115.4	125.9	148.7	160.7	173.8	199.2	229.5
Germany	100.0	123.6	128.8	136.4	142.6	140.2	133.9	141.1
Italy	100.0	117.8	128.4	143.6	140.8	146.1	148.8	133.6
UK	100.0	121.3	133.4	131.3	128.9	134.3	117.5	107.4
US	100.0	113.0	130.5	135.0	138.3	143.1	139.9	127.7
Age	Women							
	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64
Japan	100.0	112.4	116.4	114.8	111.1	108.7	103.1	85.7
France	100.0	113.6	127.6	121.0	135.0	157.4	153.4	152.0
Germany	100.0	121.6	111.1	122.7	121.8	129.2	124.0	113.4
Italy	100.0	105.5	111.0	115.0	129.9	129.2	121.0	122.9
UK	100.0	113.1	109.7	111.1	108.0	100.2	101.1	
US	100.0	109.5	114.8	119.5	121.1	123.1	112.0	106.4

(These are relative average wages by age group. No controls for composition, selection or cohort effects are included.)

Source: OECD Wage Data base of Full Time Workers, quoted in Gautié 2004

Full-time workers, weekly (UK), monthly (Germany, France, Japan) or yearly (US, Italy) average gross wage; wages are after tax in Italy and exclude extras in Japan.

Sources for countries are: Japan: Basic Survey on wage structure (2000); France: Labor Force Survey (2000); Germany: German socioeconomic panel (1998); Italy: Survey of Italian household's income and wealth from Banca Italia (1998); United Kingdom: Labor Force Survey (2000); United States: Current Population Survey (2000).

Nonetheless, such data must be used with caution. First, conclusions vary a lot according to sources and methodology. For instance, using 1995 data, OECD (2000) finds virtually the same age profile of average wages in France and in the US. Second, Table 5.4 provides raw figures. Therefore, it does not account for the possibility of different composition or selection effects in different countries. In particular, the eviction of low wage older workers from the labor market in France might partly explain why the relative wage is higher for those older workers who remain on the labor market.

As a consequence, some attempts have been recently made to look at the productivity/wage ratio more closely. This has been done in relatively similar terms for the US and France, using micro-data. All studies rely on a production function approach to estimate separately productivity and wage. Workers' productivity by age is estimated as the contribution of the proportion of the age group in the firm's workforce to the average productivity of firms.

For the US, Hellerstein et al. (1999) find no evidence of a gap between wage and productivity at older ages. They find that productivity and wage increase with age at a similar rate. However, their estimates are quite imprecise. In particular, productivity differences across age groups are not statistically significant. Using a larger dataset, Hellerstein and Neumark (2004) find somehow different results. They find that productivity falls faster than the wage after 55. On the whole, older workers (aged more than 55) are estimated to be roughly 20% overpaid compared to prime aged workers (35–54 year old), whereas younger workers are about 10% underpaid.

Similar estimations have been performed in France by Crépon et al. (2003), using an even larger dataset. They find young workers (aged 25–34) to be the most productive group in the workforce. Although they use a different definition for age groups, their results are similar to those in Hellerstein and Neumark (2004) i.e. older workers (over 55) are about 10% overpaid compared to prime aged workers (35–49), whereas younger workers (below 35) are 10–15% underpaid.

But these first results suffer from two symmetrical biases. First of all, they only apply to workers who are still in employment. By construction, they tell us nothing about the productivity of workers that have been excluded from the labor market. *A priori*, this bias would rather play toward an overestimation of average productivity at higher ages. On the opposite side, this approach can underestimate the intrinsic productivity of older workers due to a problem of inverse causality: if a firm is less productive than the average, it is likely that it will lose part of its market, hence grow less or even decline, leading to lower hiring rates and an increasing age of its workers. In that case, labor force ageing will be a consequence rather than an explanatory factor of a lower productivity.

Aubert and Crépon (2003) provide estimations that control for the second of these two biases. Estimations are run on a dataset of French firms similar to the one in Crépon et al. (2003), and using thinner age groups (i.e. 9 age groups of size 5 years). They find that productivity increases with age until 40 and remains quite flat afterwards. They also find that the productivity/wage ratio remains constant across age until 55. It decreases by 5–10 % across sectors after 55, but this decrease is not statistically significant. The correction of the second of the two biases that we have mentioned therefore goes in the right direction and leads to a message that is much less negative concerning the relative productivity of senior workers. But this first bias remains, particularly for ages where exclusion from the labor market is frequent, i.e. after 55.

A second group of studies tries to avoid this other bias. They do not try to measure productivity but concentrate instead on labor demand by firms, and examine whether the composition of labor demand by age varies according to factors such as technological or organizational changes. The idea is to give up the goal of trying to produce a full comparison of productivity levels by age, but instead to see whether these technological or organizational changes affect the relative productivities of the different age groups, leading to changes in the structure of demand. These studies bring us back to a less optimistic view: it actually seems that technological or organizational changes play against the employability of older workers.

Such an approach has been developed by Aubert et al. (2006) for industry and extended to the service sector by Ananian and Aubert (2004). They implement this approach in two ways, a static and a dynamic one. The static approach consists in comparing the relative shares of the different age groups in the total wage bills of innovating and non-innovating firms. Technological innovation is measured by indicators such as use of the internet or of microcomputers. Organizational innovation is measured by indicators such as the practice of just-in-time or quality circles, the development of polyvalence or autonomy by workers. A positive association between innovation and the share of the youngest age groups in the total wage bill is considered as evidence of a bias of innovation against older workers. Here again, we face circularity problems. Is it technological change that leads to changes in the age structure? Is it a younger age structure that makes change easier? Or is it only a result of the fact that firms that are more innovative grow faster, have higher hiring rates, leading them to a younger age structure? The dynamic approach helps solving this identification problem, examining how technological or organizational changes affect the age structure of hiring and separations *after* they have been introduced. If there is a relation, it can be more unambiguously interpreted as running from innovation to recruitment practices. Actually, this dynamic approach confirms the age bias measured by the static approach.

On the whole, the conclusions of all these studies are therefore mixed. There is at least one result that seems robust. The Aubert-Crépon study rejects the idea that productivity starts declining strongly as soon as age 50, since the selection bias that we have in their approach cannot play a strong role at this age. Their study also excludes the idea that a wage-productivity discrepancy would also exist for older workers that are still in employment: this result was not warranted *ex ante*. It means that there are no apparent cross-subsidies between age groups of workers within firms. But this does not tell us anything about the relative productivity of workers aged 55 or more who are outside employment. For these workers, the second group of studies suggest that technological and organizational change actually restricts the apparent employability of such workers. It is therefore not excluded at all that this unfavorable effect plays a role in the exclusion of at least one part of these workers. In fact, the results of the two groups of studies are consistent with the assumption of a labor market whose selectivity increases with age. This selectivity would lead to a filtering of those aging workers whose skills are better protected against technological or organizational changes or to the effects of national or international competition.

Now, tenants of the discrimination hypothesis can oppose that biases in labor demand measured by the second group of studies do not necessarily reveal real biases of innovation against older workers, but only employers' beliefs concerning these biases. If employers who innovate have a bias in favor of younger workers, we cannot say whether this is due to the fact that these workers actually have a lower capacity to adapt to these changes, or whether this only reflects stereotypes of employers concerning this adaptability. Such results are therefore not sufficient to invalidate the discrimination hypothesis. In fact, it is plausible that reality mixes the two elements.

5.5 REGULATING THE MARKET FOR OLDER WORKERS: TWO VERY DIFFERENT OPTIONS

5.5.1 A System Without Specific Protection of Older Workers: What Consequences for the Old Unemployed?

Even in the absence of technological or organizational change and even without discrimination, other factors can explain low rates of re-employment for workers losing their jobs at relatively old ages. The increase in productivity with age for workers in employment that appears in the Aubert-Crépon analysis has, in fact, three components:

- The first one is the accumulation of general human capital that can be used in all firms or at least in a relatively large number of firms.

- The second one is the accumulation of firm-specific human capital that can be used only in the firm where the worker currently works.
- The third one results from the fact that the quality of the matching between the worker and his job generally increases with his age. The first job for an employee is not necessarily the one in which his skills or abilities are optimally valued, and professional mobility is generally one means to improve this matching and to increase one's productivity and wage.

It is only the first of these three factors that has value on the labor market after a job loss. Firm or sector-specific human capital or the fact of having progressively improved the match between one's abilities and one's occupation during the previous phases of one's career are lost. This could explain the low rate of voluntary mobility by older workers and the fact that an older worker who has lost his job will generally not be able to find a new one without accepting a large wage reduction.

There are, therefore, a large number of factors that can lead to significant reductions in economic status for workers losing their jobs at relatively old ages. Measuring the magnitude of this reduction has been the object of many studies in the US. We shall rely here on one of the most recent ones, the study by Farber (2003). The study uses data from the Displaced Worker Supplement (DWS) to the monthly Current Population Survey (CPS). This dataset provides information that can be used to estimate the earnings loss of workers who lose a job. The DWS has been added to the regular CPS instrument in either January or February of even-numbered years since 1984. Individuals interviewed in these months are asked if they were displaced from a job at any time in the preceding five years (1984–92) or three years (1994–2002). Displacement is defined as involuntary separation due to a plant closing, a layoff, or an employer going out of business. Farber (2003) provides a detailed discussion of conceptual and measurement issues concerning the DWS. He also provides an analysis of the data from the 1984–2002 surveys. We can use his estimates to illustrate the magnitude of earnings losses of displaced older workers.

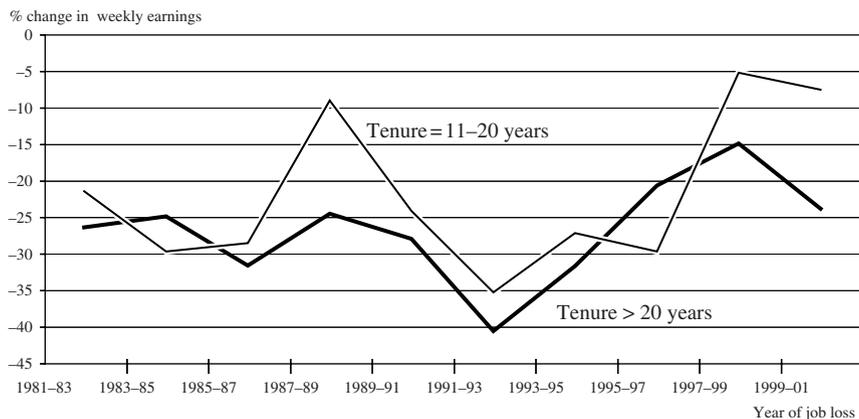
Farber estimates a regression in which the dependent variable is the logarithm of real weekly earnings at the survey date minus the logarithm of real weekly earnings at the date of job loss. The sample consists of individuals who were displaced from a full time job during the three years preceding the survey and who were reemployed at a full time job at the survey date. The regression is estimated separately for each survey, and the entire sample of eligible workers is pooled for each year. The sample contains individuals aged 20–64. The explanatory variables include dummy variables for race, sex, age categories, education categories, job tenure (on the lost job) categories, and years-since-job-loss categories. We use the regression estimates reported in Table 5.3 of

Farber (2003) to measure the average earnings loss of white men aged 55–64 (at the survey date) with exactly 12 years of schooling (a high school diploma) who were displaced in the calendar year immediately prior to the survey date (for example, calendar year 2001 for individuals interviewed in January 2002). We report separate estimates for workers with 11–20 years and with more than 20 years of job tenure on the old job at the time of displacement. These categories of job tenure seem most relevant, because the majority of older workers have long job tenure.

The estimates are summarized in Figure 5.7. We observe job losses that vary according to the economic cycle, ranging from more than 40% during the 1991–93 recession to less than 10% during the two expansion periods, for workers with tenure between 11 and 20 years. Losses estimated for the two tenure groups are often close to each other, but with differences that are generally larger during expansion periods. The unweighted average wage loss over the entire period is 29% for workers with tenure between 11 and 20 years, and 37% for workers whose tenure is greater than 20 years.

Individual consequences of a job loss, which are important at all ages, are therefore particularly unfavorable for older workers, since they are much more likely to belong to the group of workers with long tenure. We note that these estimates are probably underestimates of the magnitude of the loss in wages that are offered to these workers, since observations are only available for those who actually return to employment.

Figure 5.7. Earnings Loss of Displaced Workers in the U.S.



Source: Farber (2003)

5.5.2 Passive Compensation of Job Loss: A System that Has Been Difficult to Regulate

For France, it is difficult to build equivalent estimates for workers over 55, since returning to employment in this age group after losing one's job is an almost non-existent phenomenon, as was shown in Figure 5.2. We can however make a comparison with the US for younger age groups, and make the assumption that the comparison over these age groups can be extrapolated to older ones. One can for instance rely on Lefranc (2003), who made the same kind of computation as Farber with PSID data on the US side and LFS data on the French side. For the 25–55 age group, wage losses entailed by an unemployment spell are relatively similar effects in the two countries. One can also mention results for France by Lainé (2003) who finds relatively divergent results: these results suggest a relatively limited wage loss between two successive jobs, even at older ages, even when the two jobs are separated by an unemployment spell. There is therefore an apparent uncertainty about the magnitude of the problem. But we face once again a selectivity bias: at higher ages, reemployment becomes increasingly selective, so that we certainly strongly underestimate the average level of wages offered to older employees who have lost their previous jobs.

It is precisely to avoid these losses that France has opted, over the last decades, and in contrast to the US, for a policy of relatively generous coverage of older unemployed workers. This policy certainly lowered the social costs of major restructuring that occurred in some industrial sectors (e.g. the steel industry). But there is now a widespread feeling that it has, in turn, exacerbated the natural downward tendency of employment in the 55–64 age bracket, with the creation of a form of “pre-retirement culture” (Guillemard, 2003) without any of the positive impact that was sometimes expected *ex ante* on employment rates of other demographic groups.

A brief look at the history of the French pre-retirement system is useful at this stage. It is illustrated in Table 5.5 and Figure 5.8. In a first step, pre-retirement schemes were targeted toward the 60–64 age group and very specific sectors. The first pre-retirement schemes were introduced in the early 1970s. During this first stage, pre-retirement was considered as exceptional, and not really welcomed by employees themselves for whom this form of exclusion from the labor market was considered as a denigration of their social value. However, in the face of declining demand and rising unemployment, this method has been increasingly considered by firms as a convenient way to deal with excess capacity, while the idea of an early exit from the labor force became progressively more popular among employees themselves.

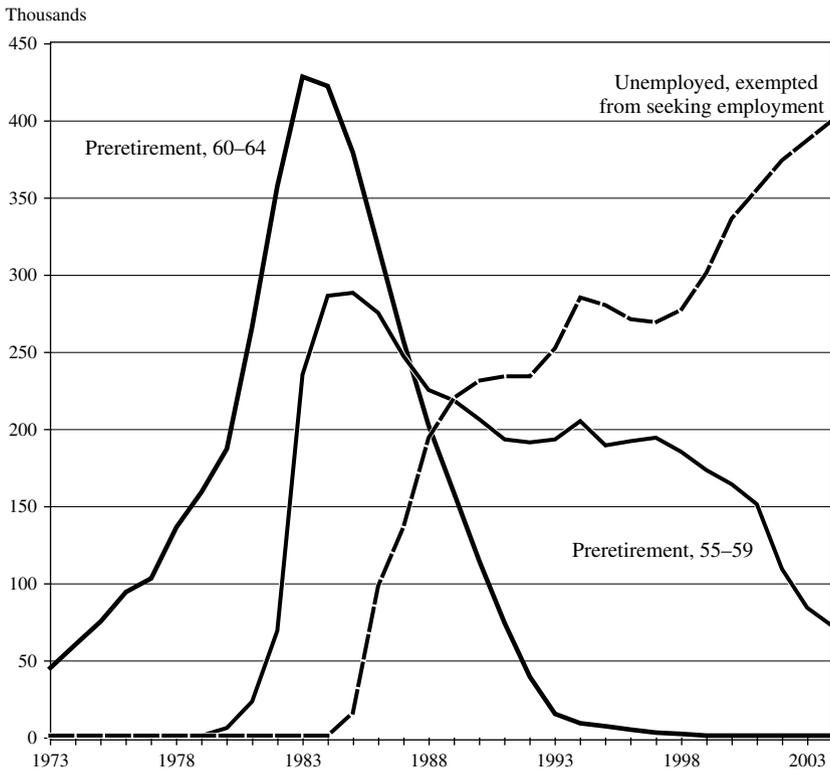
The growth of pre-retirement in the 60–64 age bracket can be observed in Figure 5.8: the total stock of people in these schemes grew to more

Table 5.5. Main Characteristics of Pre-retirement Schemes Developed since 1972.

	1972	1977	1982	1983	1985	1992	1996	1997	1999	2000	2004	Age Groups Covered
Pre-retirement Schemes (private sector)												
Garantie de ressources-licenciement	■											60-64
Garantie de Ressources demission	■	■	■	■	■	■	■	■	■	■	■	60-64
Allocation Specificque du Fonds National pour l'Emploi (ASFENE)	■	■	■	■	■	■	■	■	■	■	■	>56 (or 50)
Contrat de solidarit� d�mission			■	■	■	■	■	■	■	■	■	>55
Contrat de solidarit� retraite progressive			■	■	■	■	■	■	■	■	■	>55
Preretraits Progressives (PRP)						■	■	■	■	■	■	>55
Allocation de remplacement pour l'emploi (ARPE)						■	■	■	■	■	■	>58
Cessation anticip�e de certains travailleurs salari�s (CATS)							■	■	■	■	■	>55
Cessation anticip�e d'activit� des travailleurs de l'amiante (CAATA)							■	■	■	■	■	>55
Pre-retirement schemes (public sector)												
Cong� de fin d'activit� (CFA)								■	■	■	■	>57,5
Dispense de recherche d'emploi (DRE)								■	■	■	■	>57,5

(Grey areas correspond to periods when schemes have been effective)

Source: updating of Burricand and Roth (2000)

Figure 5.8. Population in Pre-retirement Schemes

Source: DARES

than 400,000 by 2003. This contributed substantially to the strong decline in employment rates between ages 60 and 64 shown in Figure 5.1a. This explains why the availability of retirement at age 60, in 1984, does not show up in Figure 5.1a in the form of a sudden drop of employment rates in the 60–64 age bracket: to a large extent, this reform essentially consisted in a transformation of pre-retired people into “normal” retirees.

After the introduction of retirement at age 60, the belief was that pre-retirement schemes were no longer necessary. Figure 5.8 shows that, instead, the pre-retirement problem tended to reconstitute itself below the new NRA, resulting in a decline in employment rates in the 55–59 age group. It did so in two ways. One was the development or the introduction of new pre-retirement schemes in the 55–59 age group (the main scheme being at that time the ASFNE, a specific

allowance financed by the State, through the National Fund for Employment). The other was the development of specific schemes for older unemployed people in the national system of unemployment insurance: not only do workers, past certain ages, benefit from larger allowances which are maintained until they are entitled to normal retirement, but, since 1985, these workers have not been required to seek employment (DRE, for *Dispense de Recherche d'Emploi*). The development of these two routes explains a large part of the decline in employment rates in the 55–59 age bracket that occurred during the second half of the 80s and which are illustrated in Figure 5.1b. This time, it was agreed that such a decline could not be allowed to continue, and policies were introduced to regulate the use of pre-retirement. What were these policies, and what are we able to say, *ex post*, about their effectiveness?

Access to most pre-retirement schemes is restricted to people laid-off in the context of collective “social plans” which are negotiated between firms and the Ministry of Labor. Regulation can therefore be quantitative: flows of entry into pre-retirement can be regulated according to predefined quotas. Since 1994, there has been a continuous decline in the largest of these schemes, the ASFNE, for which the number of beneficiaries declined from nearly 180,000 to only 38,000 at the end of 2002. Even though this decline has been partly offset by the development of the various alternative schemes mentioned in Table 5.5, the overall trend has been a decline in the total number of pre-retired people in the 55–59 age group.

But the efficiency of this regulation has been limited by the existence of the other route for early exits, i.e. unemployment insurance. Until 1986, access to unemployment insurance was itself subject to a form of direct control, since any lay-off for economic reasons required an administrative authorization. But this administrative authorization was abolished in 1986. In this new context, restrictions of access to pre-retirement have tended to be offset by a redirection of flows of older workers toward unemployment insurance: the transfer from the “pre-retirement” to the DRE category over the last decade is also very neatly illustrated by Figure 5.8. Since the end of the 1980s, the movements of the two series have been strongly symmetrical.

In order to discourage use of the DRE category, it was decided to penalize employers in case of lay-offs of older workers, with the introduction of the Delalande tax in 1987. The idea was dictated by efficiency as well as by equity considerations. Workers laid-off at older ages are more costly for unemployment insurance. An employer who lays-off such a worker imposes a cost that is supported by the community of all employers and employees, since it is financed by employers’ and employees’ contributions on wages. Introducing a form of co-payment by the employer who is responsible for the lay-off mitigates this externality. This system bears some resemblance to the US

system of experience rating, which is another form of co-payment imposed on employers who have an excessive tendency to lay-off. The US experience rating system applies to all categories of laid-off workers, while the Delalande system is specifically devoted to the group of older laid-off workers.

Are we able to assess the efficiency of this system? As with any form of firing costs, there are both direct and indirect effects. The direct effect is that the Delalande contribution should, in principle, dissuade employers from dismissing workers in the relevant age groups. The indirect effect is that it might also dissuade employers from hiring such workers or workers approaching these age groups, since an eventual separation from such workers will be costly.

Variation over time in the coverage of the Delalande contribution offers the opportunity to partly identify and quantify these two effects. Table 5.6 summarizes the changes in the Delalande system over time. Two studies (Bommier et al., 2003 and Behaghel et al., 2005) have exploited these changes and have examined their impact on labor market transitions of various age groups using LFS data.

Given the global observation from Figure 5.8 that DREs have continuously increased over the last 15 years, it comes as no surprise that these two studies find impacts of the Delalande tax that are at best marginal. Behaghel et al. (2005) test the

Table 5.6. Amount of the Delalande Tax (in Proportion to Gross Monthly Earnings)

	Firm Size	Age at Lay-Off										Exemptions
		50	51	52	53	54	55	56	57	58	59	
From July 1987 to June 1992	All sizes							3	3	3	3	
From July 1992 to Dec. 1992	>20	1	1	2	2	4	5	6	6	6	6	No tax for employees hired after age 50.
	<20	0.5	0.5	1	1	2	2.5	3	3	3	3	
From Jan. 1993 to Dec. 1998	All sizes	1	1	2	2	4	5	6	6	6	6	
Since Jan. 1999	>50	2	3	5	6	8	10	12	12	10	8	
	<50	1	1	2	2	4	5	6	6	6	6	

Source: Behaghel et al. (2005)

direct and indirect effect. They split the direct effect itself in two subcomponents: a level effect and a slope effect. The level effect is due to the fact that a higher level of the tax dissuades an employer from laying-off a worker. The slope effect results from the fact that the tax rate increases with age-at-layoff within some age ranges (see Table 5.6), and this can have the opposite effect of accelerating lay-offs: the employer may prefer laying-off his worker immediately at a low cost, rather than bearing the risk of being obliged to do so later at a higher cost. These level and slope effects are introduced in logit or probit models of lay-offs, estimated on individual LFS data. The estimated effects do not appear to be very robust: they are not completely inconsistent with prior expectations, but depend on specification and vary across socio-economic groups.

On the other hand, Behaghel et al. argue that the Delalande Tax may have had the negative indirect effect of reducing hiring of older workers. This hypothesis is tested using the exemption introduced in 1992 as a natural experiment. Using double difference methodology, they show that the exemption of the Delalande Tax for workers hired after age 50 has had opposite effects on hiring rates of workers over and below 50. Hirings for the latter category have been reduced. However, they acknowledge that this change could be explained as well by the development, over the same period, of some subsidized contracts for workers over 50 (CRE for *Contrats de Retour à l'Emploi*).

Bommier et al. (2003) reach relatively similar conclusions concerning the weakness of direct effects of the Delalande tax on lay-off rates. Their test consists of observing the consequences of the 1992 extension of the tax to the 50–55 group. This extension seems to have lowered, as expected, transitions rates from employment to unemployment in this age group, but this result is not robust to controls for whether the individual was hired before age 50 or not. On the other hand, using the same data and the same methodology, they confirm the idea that the introduction of the DRE in 1985 had the effect of increasing the transition rate from employment to unemployment (this is consistent with the fact that DREs have been a substitute for other forms of pre-retirement). However, they do not observe any significant impact of DRE on the rate of return to employment: freeing older unemployed people from job seeking obligations has been almost neutral on their rate of return to employment, since these job-seeking efforts were already, *de facto*, inefficient.

5.6 CONCLUSION

As announced in the introduction, this chapter does not offer a full comparison of labor markets for French and US senior workers. Many aspects of this comparison deserve further exploration: bridge jobs, the role of part-time employment, but also the role of early retirement plans provided by firms. A full

comparative analysis between the two countries would also require a comparison of skill levels by cohorts, of modalities of certification for skills that are acquired on the job, of life-long learning.

But these additional elements would certainly not contradict the major observation that, at the onset of the 1990s, the French and US “social contracts” concerning older workers were characterized by two major differences:

- Concerning retirement *stricto sensu*, a US pension system which was both less generous than the French system (providing lower benefits at a given age), and closer to actuarial neutrality with respect to the incentive to retire at any specific age.
- Concerning the management of non-employment before normal retirement, the French system has opted for relatively generous systems of subsidies to older non-employed workers who are not yet eligible for retirement, while the US system leaves the burden of adjustment to employment shocks to workers themselves, the only regulation being the one provided by anti-discrimination legislation.

The 2003 pension reform in France represents a significant attempt to correct the strongest of the distortions that existed in the French pension system and which had been left uncorrected by the previous 1993 reform. At this stage, according to available projection tools (the Destinie model), this is expected to lead to 650,000 more labor force participants at horizon 2020. This step is not insignificant. But it will contribute to solving pension problems only if these additional older labor force participants can actually find jobs. Attention has therefore shifted to the demand side of the labor market.

On this demand side, one common opinion is that low demand for older workers is explained by a large gap between their wages and their productivity. Evidence is far less overwhelming than could have been expected, but studies of the wage-productivity differential suffer from the fact that wages and productivities are only observed for people who are still in employment. Further work needs to be done concerning people who are out of employment. At this stage, we cannot rule out the hypothesis that some senior workers are out of the labor market because of negative productivity shocks either at the individual level or at the level of the firms they were working in. This is at least what is suggested by the negative association observed between technological and organizational changes and the age structure of labor demand. This is also what is shown by conditions of reemployment of laid-off senior workers who are able to return to employment, especially in the US.

Of course, such results do not completely solve the problem of sorting out what is due to true productivity problems and what results from employers’ a priori beliefs concerning that productivity. Have all these people been laid off because of a decline in their productivity/wage ratio? Are they victims of

the stereotypes concerning their productivity or their adaptability? Or is there a deliberate choice to rely on this age group for adjusting to global problems of excess labor capacity, simply because the existence of a better safety net for these workers makes this choice socially more acceptable? The historical development of French pre-retirement lends support to the latter thesis, but this does not rule out the two other ones. These three factors are not mutually exclusive. They even have a tendency to reinforce each other: the development of pre-retirement schemes may have helped maintain relatively high wage levels for people who remain in employment, and it may also have reinforced stereotypes concerning the productivity or adaptability of older workers, calling in turn for further extensions of pre-retirement.

Since the early 1990s, the French system has succeeded in containing the trend toward earlier exits from the labor force. It is still too soon to know whether it will be able to shift from simple stabilization of employment rates in these age groups at a low level to the substantially higher employment rates necessary for the long-term fiscal balance of the pension system.

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NOTES

1. The brief upswing in 1977–79 is due to a composition effect. The 1975–79 period corresponds to the period where small cohorts born during WWI transited through this age group. This first accelerated the decline of the average activity rate in this group (due to the lower weight of the youngest people in this age group, whose activity rates are higher), compensated by an opposite movement in the following years (Givord, 2002).
2. This gap is still higher if we enlarge the age bracket to 50–64, as done in Cohen (1997): according to them, the ratio between the two probabilities on this age group is from 1 to 10 between France and the US. These transition rates are monthly rates however, which present much more variability than annual ones (annual probabilities neutralize infra-annual movements that compensate for each other).
3. This first pillar pension is supplemented by one or two pensions awarded by complementary pension schemes (the largest ones are ARRCO and AGIRC). These

complementary schemes are mandatory: the general regime and these complementary schemes together provide replacement rates of about 80% of the last net wage.

4. Two reports from the late 1990s are illustrative of the opposition between these two options. The Charpin report (Charpin, 1999) explored the idea of a substantial shift of the normal retirement age (a duration condition raised to 42.5 years) associated with increased flexibility of the schedule around this new retirement age, while the Taddei report (Taddei, 2000) only argued for increased flexibility of access to retirement around the current NRA.
5. The model also projects full demographic histories, used for computing additional pension benefits linked to the fact of having raised children, and also used for simulating survivors' pensions.
6. Even for the 1993 reform, it seems that postponement of the retirement age did not exactly follow the increase in age of entitlement to the full-rate pension (Bozio, 2004).
7. This 2003 reform globally increases this age to 65, whatever the pension entitlements at this age. However, the former rule was maintained for some sectors in response to employers' demands.

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CHAPTER 6

LONGEVITY AND WORK

PIERRE PESTIEAU

6.1 INTRODUCTION

The pension and health systems in many countries are in crisis. This much-heralded crisis is attributed to the worrying trend of the dependency ratio. The dependency ratio that concerns us here is the number of pensioners to the number of workers contributing to the pension and healthcare systems. This ratio is increasing, not only because life expectancy continues to rise, but also because the retirement age has continuously fallen over the past few decades.

We have many reasons to be thankful that we now live not only longer, but in better health. In the space of 30 years, we have gained an average 10 years of longevity, and the possibility of a life expectancy of more than 90 years within a generation has even been suggested. Over the same period, the effective retirement age has fallen steadily. It is now 57 for men and 54 for women in countries such as France, Italy and Belgium.

In this paper, I would first like to present some data on the effective dependency ratio and particularly on the determinants of the downward trend in the retirement age. Then I will address normative aspects, in particular the issue of an optimal retirement age. This is a complex issue if we take inequality of health and asymmetry of information between insured and insurers into account. Lastly, I will explain why an obviously needed reform, i.e. a gradual increase in the retirement age, is being delayed in many countries. Vested interests, which in other cases are justified, stand in the way of any reform of the social welfare system, and the ensuing delay has a high social cost.

6.2 WHEREIN LIES THE PROBLEM?

But before I go any further, I would like to explain why population ageing is triggering a crisis in the pay-as-you-go (PAYG) pension system.

Basically, a PAYG pension system can be defined by a small number of parameters: the contribution rate of workers, the relative level of benefits (the replacement rate of the pension in relation to income from work), the total duration of contributions and therefore the retirement age. In addition to those parameters, on which policymakers can theoretically act, there are other exogenous factors that also play a crucial role in the funding and future of the pension system: the increase in the productivity of labour, the birth and death rates, and the rate of return on financial capital (interest rate).

In order to illustrate the fundamental choices facing today's policymakers, let us use an overlapping generations model¹ and divide adults' lives into two periods. The first period is a period of work (age bracket from 20 to 50 years); the second period, which begins at 50, is spent partly working and partly in retirement. Life expectancy that increases over time (e.g. 80 years now) can be represented by the increasing value given to a parameter ℓ . If a parameter a denotes the number of years of work after the age of 50, the size L_t of the generation born in t is expressed as $L_t = L_{t-1}(1+n)$, where n is the fertility rate.

Assuming that individuals are only distinguished by age, the PAYG system implies a pension p_t paid out for time t to $L_{t-1}(\ell - a)$ retirees and funded by $L_t + aL_{t-1}$ workers. We choose our unit of measure so that young people work one unit of time and old people a proportion a , which increases the later they retire. Since ℓ represents length of life, the length of retirement is $\ell - a$.² A balanced pension system can be summarised by the following equation:

$$(\ell - a)p_t L_{t-1} = L_t \tau_t w_t + L_{t-1} \tau_t w_t a,$$

where τ_t is the contribution rate and w_t the wage level³.

By using $L_t = (1+n)L_{t-1}$ and simplifying, we obtain:

$$(\ell - a)p_t = (1+n+a)\tau_t w_t \quad (6.1)$$

If the replacement rate is defined as $\rho_t = \frac{p_t}{w_{t-1}}$ and if g denotes the rate of increase in the productivity of labour ($w_t = w_{t-1}(1+g)$), equation (6.1) can be rewritten as:

$$\rho_t = \frac{\tau_t (1+g)(1+n+a)}{\ell - a} \quad (6.2)$$

Expression (6.2) highlights policymakers' fundamental choices. Given a declining fertility rate n^4 and the considerable increase in life expectancy ℓ that we are witnessing now, governments concerned to maintain a reasonable replacement rate without a major increase in contributions (because of tax competition) should adjust the retirement age a to adapt to the variations in n and ℓ . However, over the past few decades, quite the opposite has occurred.

6.3 INCREASING LONGEVITY AND EARLY RETIREMENT

6.3.1 Dependency Ratio

We have just shown that if longevity is increasing, fertility declining and the retirement age falling, a PAYG pension system cannot avoid necessary reform.

We generally represent the impact of population ageing on the pension system as the expected trend of the dependency ratio, i.e. the ratio of people aged over 60 years to the group of individuals aged between 20 and 59 years. That ratio is given in Table 6.1 for several countries and for the years 1995, 2020 and 2050.

For all countries in the European Union, the dependency ratio will practically double between 1995 and 2050 from 37 to 72.

This is a worrying prospect and yet it might even underestimate the problem. The dependency ratio used implies that the dependent population consists only of people aged over 60, which raises two questions. Firstly, when we attempt to evaluate the proportion of inactive people, the ratio should be refined to take into account the variability in time and space of the pivotal ages used. Secondly, while the population is inevitably getting older in demographic terms, it is not necessarily ageing to the same degree in physiological terms. Indeed, we must decide what we mean by "old". There is no comparison between the average state of health of a person aged 60 today and a person of the same age

Table 6.1. Dependency Ratio and Participation Rate

	Dependency Ratio (60 Years)			Participation Rate Men Aged 55–64 Years	
	1995	2020	2050	1980	1995
Belgium	39	54	66	51	36
France	37	53	71	70	42
Germany	36	52	64	67	54
Italy	40	56	82	56	44
Netherlands	31	50	62	65	41
Spain	38	48	83	77	55
Sweden	41	53	59	79	70
UK	38	48	67	79	62
EU average	37	51	72	65	52

Source: Eurostat

40 years ago. Here we are only dealing with the first objection whose relevance we can see in relation to the decrease in the participation rate of men aged 55 to 64 years, shown in Table 6.1—more than 13 points in 15 years in the European Union (Lannoy and Lipszyc, 2000).

The participation rate of older workers is a good indicator of dependency. We also use the effective retirement age to determine the effective burden on the working population (and the public purse). The trend in the age of transition to inactivity is shown in Table 6.2, as estimated by the OECD for Belgium in a recent international comparison (Blondal and Scarpetta, 1998).

To summarise, between 1950 and 1995 the average retirement age fell from 65 to 57.6 years for men, and from 63 to 54 years for women. We can recalculate the past trend of the dependency ratio on the basis of these estimated effective ages (adjusted ratios). The results are also shown in Table 6.2. It goes without saying that the constant decrease in the age of transition results in a higher dependency ratio, especially for women, as well as a sharper increase in that ratio.

Another enlightening exercise is forecasting. Continuing with the example of Belgium, we can imagine three scenarios. In the first, the effective retirement ages would remain at the level estimated for 1995, i.e. 58 years for men and 54 years for women (scenario 1). The second scenario would extend the past trend (1950–1995) to future years. Finally, the third scenario would keep the average length of retirement⁵ constant for each sex (i.e. in 1995, 17 years for men and 27 years for women). The results are given in Table 6.3 for the years 2025 and 2050⁶.

The importance of the scenario we choose becomes clear immediately, for both men and women. If the current effective age is maintained, the

Table 6.2. Estimated Average Age of Transition to Inactivity Among Older Workers

	Average Age		Dependency Ratio 60		Adjusted Ratios	
	Men	Women	Men	Women	Men	Women
1950	64.8	62.9	–	–	–	–
1960	63.3	60.8	–	–	–	–
1970	62.6	59.1	32.3	43.5	24.3	47.1
1980	61.1	57.5	27.7	37.5	25.6	47.4
1990	58.3	54.7	30.8	44.0	36.6	62.2
1995	57.6	54.1	32.5	45.7	37.6	65.9
Decrease 1995–60	–5.6	–6.7				

Source: OECD ECO/WKP(98)15, own calculations.

Table 6.3. Forecast Dependency Ratio

		Men			Women		
		1995	2025	2050	1995	2025	2050
Scenario 1	Effective age	58 years	58 years	58 years	54 years	54 years	54 years
	Ratio	37.6	58.6	67.4	65.9	95.6	108.0
Scenario 2	Effective age	58 years	54 years	51 years	54 years	49 years	45 years
	Ratio	37.6	78.2	105.8	65.9	130.3	184.5
Scenario 3	Effective age	58 years	61 years	65 years	54 years	57 years	61 years
	Ratio	37.6	46.1	41.2	65.9	78.6	70.5
Traditional ratio		32.5	50.1	58.6	45.7	63.8	75.0

Source: Lannoy and Lipszyc (2000)

dependency ratio of course continues to increase, particularly in the initial years. But the disastrous effect of the effective age continuing to come down is most obvious in the second scenario. Only the third scenario, maintaining the average length of retirement constant—via an increased retirement age—offers hope of the ratio starting to decrease in the second half of the period under consideration, when the effect of the increase in the retirement age will no longer be compensated by the effect of the baby-boomers reaching old age (after 2015). The second scenario is clearly unrealistic; we trust that the third scenario will be implemented.

6.3.2 Retirement Age and Pension System

As we have just seen for Belgium, the effective retirement age is much lower than the official retirement age of 65. It is important to note that there is no mandatory retirement age, but rather an age at which people qualify for a full pension (65 years in Belgium). Every system stipulates an age at which a person who has completed a full career is entitled to receive a full pension. However, most pension systems also provide for early and/or late retirement. Sometimes the amount of the pension is adjusted to take the period of contribution into account, and sometimes this amount is limited by floors and caps. In some cases, it is adjusted to take into account the longer (or shorter) period for which people taking an early (or late) retirement will be drawing a pension.

We would like to show that the effective retirement age varies from country to country largely because tax and other incentives vary too. We can see an interesting link between the rate of implicit tax levied on a person aged over 54 who decides to work an extra year, and the non-utilisation of older workers. The results for 11 OECD countries are taken from Gruber and Wise (1999) and are shown in Table 6.4. In the table, total implicit tax represents the total cost of continuing to work beyond some minimum early retirement age. This cost consists of the various forms of income tax and the loss of the replacement income over the whole period from the age of entitlement to a pension to the age of 69. Intuitively, the tax represents the difference between the cost and benefits of working in relation to the expected gross income. It is calculated for each age then aggregated to obtain the total implicit tax. It ranges from 165 in Japan to 887 in Belgium⁷. The concept and calculation of implicit tax are not easy, but it is important to have an approximate idea of their impact. We observe a fairly strong correlation between the implicit tax on working beyond the retirement age and what Gruber and Wise refer to as the deficit in labour-force participation (the linear correlation rate is 0.84). These results show clearly that if we want to decrease the dependency ratio, we must reduce the incentives to retire early.

Table 6.4. *Implicit Tax and Non-participation*

Country	Non-utilisation of Workers Aged 55–65 (%)	Retired Men at 59 Years (%)	Total Implicit Tax ⁺
Belgium	67	58	887
France	60	53	725
Italy	59	53	920
Netherlands	58	47	832
UK	55	38	377
Germany	48	34	345
Spain	47	36	249
Canada	45	37	237
USA	37	26	157
Sweden	35	26	218
Japan	22	13	165

⁺Sum of the implicit taxes between the minimum normal or early retirement age and age 69.

Source: Gruber and Wise (1999)

6.4 OPTIMAL RETIREMENT AGE

6.4.1 Choosing the Retirement Age

In a market economy with no government at all, individuals would choose their retirement age on the basis of several parameters:

- Their preference for the leisure time offered by retirement;
- Their total income, which enables them to finance their consumption before and after retirement;
- The return on an additional year of work.

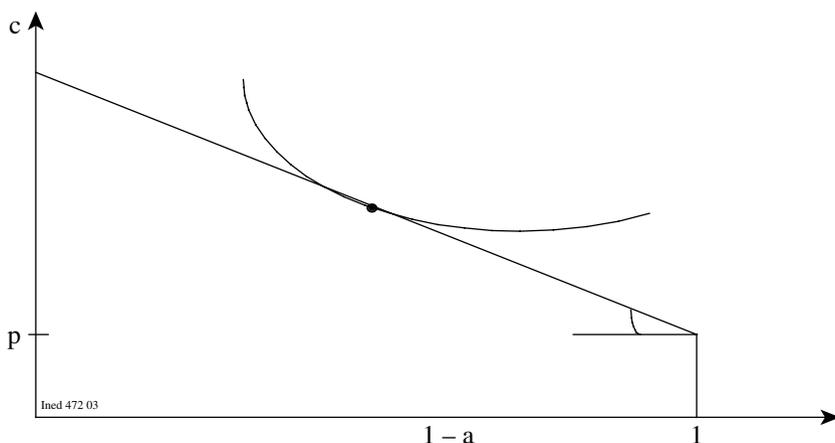
In short form, we could express an individual's level of utility as a function of the level of his/her consumption c , and the length of retirement. If his/her lifespan is equal to l and if he/she works a number a of years, his/her budget constraint is expressed:

$$c = w(1 - \tau)a + p(1 - a),$$

where w is the wage, τ the contribution rate, p the pension benefit and $(l - a)$ the length of retirement.

In diagram form, we represent this constraint by a straight line, and the utility that depends on c and $l - a$ by a curve (Figure 6.1). The individual's

Figure 6.1. Choice of Retirement Age



choice corresponds to the point of tangency between the curve and the line. We can rewrite the budget line as:

$$c = aw(1 - (\tau + \rho)) + p$$

where $\rho (= p/w)$ is the replacement rate. We see that work is doubly penalised by tax τ and by the forgone pension ρ . The term $w(1 - (\tau + \rho))$ is the net wage; that is the slope of the budget line.

If there is no pension benefit p and tax τ , the budget line would be steeper and, all other things being equal, the worker would choose to retire later and to consume more⁸.

We cannot avoid taxation, but we should lessen it for the years preceding the decision to retire. In other words, we need non-linear taxation that would interfere as little as possible with the decision to stop working. However, as we have just seen, in many countries we observe the opposite. During those years, marginal taxation is highest; it comprises the explicit rate τ and the pension shortfall ρ (Michel, Pestieau, 2003, 2000).

By this reasoning, on average workers would prefer to work longer, but will only do so if the pension system has fewer allocation distortions. It is not possible to say by how much the retirement age should be raised. However, it is certain that an average of 57 years is too low and untenable.

6.4.2 Retirement and Health

There are two potential types of opposition to raising the retirement age. Firstly, the transition generation would have to work more without having

been prepared financially or psychologically. Secondly, for some workers even the current retirement age is too high because they suffer from physical or psychological disabilities. These disabilities may be endogenous or result from particularly difficult working conditions.

Let us imagine that society consists of three types of workers characterised by their productivity, which may be low or high, and by their state of health, good or bad. Type 1 has low productivity and poor health, which is reflected in a greater aversion to work. Type 2 is in good health, but his productivity is low. Type 3 is highly productive and healthy.

In a market economy without a State, Type 1 workers would retire earlier and would earn much less than Type 3 workers. Type 2 workers would fall somewhere between those two extremes.

A “benevolent” and “omniscient” government would allow Type 1 workers to retire early and consume as much as other workers. Unfortunately (or fortunately), the government is not omniscient (and may not even be benevolent). If the government does not observe either the state of health or the productivity of workers, the first-best policy that has just been outlined is not possible. Indeed, there is nothing to stop a Type 3 worker from passing him/herself off as less productive or healthy than he/she really is and from thus enjoying a great deal of leisure (the government observes income, but not productivity or labour supply) and high consumption. Therefore the pension system must be redesigned to prevent this type of strategic behaviour (Diamond, Mirrlees, 1986; Diamond, Sheshinski, 1995).

The resulting pension policy is a second-best optimum. It prevents Type 3 workers from passing themselves off as Type 2 and Type 2 workers from passing themselves off as Type 1. Concretely, it still sets a retirement age that is lower for Type 1 than for Type 2, and lower for Type 2 than for Type 3. But at the same time, pensions will be lower. The second-best policy thus represents a compromise between the market solution and the first-best optimum.

How close do our pension systems come to this model? To some extent, the retirement age and pension benefits appear to be increasing with improving productivity and health in many countries.

How should this model be changed as longevity increases? It seems necessary to raise the retirement age for all three types of worker, but the increase should be smaller for workers in poor health⁹. A reform must certainly take these considerations into account and allow more flexibility than the current system.

Why can't we reform the pension system—in particular raise the retirement age—when that would manifestly be socially beneficial? In fact, it would be beneficial for everyone if the transition generation were correctly compensated for the loss incurred. We will attempt to answer that question.

6.5 THE POLITICAL ECONOMY OF PENSIONS

Many economists are convinced that the current retirement age is too low, particularly given the prospect of an ageing population. That means that if we could decide on a new pension system—contributions, benefits and retirement age—behind the veil of ignorance, the retirement age would be higher and adjusted according to life expectancy and productivity.

Our current pension system was designed several decades ago under particular conditions: the first generations of retirees received benefits that they did not fund themselves; the dependency ratio was favourable, and in some countries, governments thought that by offering generous early retirement incentives they would reduce unemployment among young people. The situation is quite different today. The system has reached maturity; the effects of the ageing population are being felt and we have less faith in the impact of early retirement on youth employment. It therefore seems sensible to reform the pension system. However, any reform, particularly raising the retirement age, threatens the existing entitlements of certain categories of workers.

In this type of situation, we propose a reform with a transition period enabling a gradual shift from one system to another. In Belgium, the legal retirement age for women was 60. To align it with the legal retirement age for men of 65, a 15-year transition period was proposed. Women who retire now are disadvantaged in relation to their elders, but the loss is progressive and the Belgian government was able to cite new European requirements.

Opposition to a broader reform concerning all workers is stronger. Several authors have shown that there is a blocking majority when two conditions were are present: existing entitlements and a redistributive system. Retirees and people close to retirement have every reason to oppose a reduction in their entitlements—a higher retirement age and a cutback in benefits—even if their entitlements are not based on financial arguments, which would be the case with a funded pension system. Young workers who earn below-average wages benefit from a redistributive system, i.e. one that offers relatively higher benefits for low incomes than a purely contributive system (the term Bismarckian is sometimes used) (Cremer, Pestieau, 2000; Conde Ruiz, Galasso, 2003; coate, Morris, 2000).

If there is a vote on the reduction of pensions and early-retirement schemes, we can demonstrate that it will be opposed by a majority coalition comprising all retirees and the least productive workers as far as cutting benefits is concerned, and a share of retirees and least productive workers with regard to raising the retirement age. This is why reforms are so difficult in countries with PAYG pension systems that are not fully contributive. Fortunately, paralysis by majority vote does not always occur, which explains why some countries

have been able to undertake radical reform. Recent history nevertheless shows that political parties that have included this type of reform in their electoral programme have often been ousted at the polls.

For countries in the European Union, salvation could come from European directives requiring national governments to undertake fundamental reforms without delay. After all, reducing benefits and raising the retirement age stem from the same approach as the application of the famous Maastricht criteria.

6.6 CONCLUSIONS

In the debate over the future of pension systems, too much emphasis is often put on demographic aspects. In fact, the increase in the effective dependency ratio is due as much to the decline in paid employment among older people as to population ageing. While we can have only little, and delayed, influence over demographic factors, we can do something about incentives to retire from the workforce prematurely.

In my view it is urgent to acknowledge the necessity of raising the retirement age. This will not be easy, especially in countries where defence of existing privileges can block such a reform. In those countries, reform is possible, but costly. It is important for pension reform to take account of the heterogeneity of the population: individuals have different states of health and life expectancies. To take this heterogeneity into consideration, we need to introduce simple rules that meet two requirements: equity, which is all the more imperative for a vulnerable population, and asymmetry of information regarding health, life expectancy and productivity.

NOTES

1. Economists use the term “generation” whereas demographers use the term “cohort”.
2. We assume that $a < \ell < 1$.
3. For simplicity's sake, we assume that at any given time older and young workers have the same productivity and the same wage.
4. The demographic growth rate is equal to the fertility rate plus the rate of increase of life expectancy duly weighted.
5. I.e. the difference between life expectancy and the estimated effective age.
6. For reasons of data availability.
7. For Belgium, the total implicit tax is based on the assumption that individuals can retire from the labour market from the age of 55 thanks to unemployment or disability insurance as well as bridge pensions schemes. Similar assumptions are made for most other European countries.

8. Assuming that the system is actuarially neutral, i.e. that on average the present discounted values of pensions and contributions are equal.
9. This is the case if the state of health, i.e. the difficulty of working beyond a certain age, does not change.

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PART III

FAMILY AND RELATIONSHIPS BETWEEN GENERATIONS

CHAPTER 7

CHANGES TO THE LEGAL RELATIONSHIP BETWEEN GRANDPARENTS AND GRANDCHILDREN IN QUEBEC: A DISCONCERTING EVOLUTION

RENÉE JOYAL

7.1 INTRODUCTION

With regard to the relationship between grandparents and grandchildren, within the space of 15 years the Quebec legislator adopted provisions that at first glance appear contradictory. Firstly, under the family law reform of 1980, a provision recognising the special nature of the relationship between grandparents and grandchildren was introduced into the Civil Code¹. It read: “In no case may the father or mother, without a grave reason, interfere with personal relations between the child and his grandparents. Failing agreement between the parties, the terms and conditions of these relations are decided by the court”. The provision, inspired by a recommendation from the Quebec Civil Code Revision Office (1977) and based on an article of the French Civil Code, thus consolidated the relationship between grandparents and grandchildren, by granting grandparents rights enforceable by the court.

By contrast, the abolition of reciprocal maintenance obligations between grandparents and grandchildren² by the National Assembly in 1996 endorses a weaker relationship between grandparents and grandchildren. The legislator limited family maintenance obligations to first-degree ascendants and descendants, thus ending an immemorial tradition.

How should we interpret these amendments that at first glance appear inconsistent with each other? To fully understand their import, we need to look back at the key socio-cultural developments in Quebec and particularly the major turning point of the 1960s. We will see that, paradoxically, the seemingly

contradictory provisions that interest us here were largely prompted by the same factors.

7.2 THE LEGACY OF THE PAST: FAMILY SOLIDARITY AND EXCLUSION

When the Civil Code of Lower Canada was adopted in 1866, the family in Quebec still followed a traditional model. Mass industrialisation did not begin until the twentieth century and the number of rural dwellers exceeded the urban population until 1920. The family was monolithic in structure. Founded on marriage, it was indissoluble for the majority of the population of Quebec, who were Roman Catholic. Relations between spouses, and between parents and children were governed respectively by the concepts of marital power and paternal power.

It was a “tight-knit” family, to borrow the expression that sociologist Marcel Rioux used to describe Quebec society as a whole. Family units were governed by a set of highly integrated legal and moral standards, reinforced by the community and church leaders. In addition to the legal maintenance obligations between ascendants and descendants—which also extended to relatives by marriage, i.e. to fathers-in-law, mothers-in-law, sons-in-law and daughters-in-law—there were others of a moral nature. We know of many examples of families that took in a needy uncle, aunt or cousin, or an orphaned niece or nephew.

While this was a praiseworthy attitude, it also stems from the fact that children could contribute to the family farm or trade by working from a young age and old people could also play a useful role in the family business until the end of their lives. These human groupings, which often lived and worked under the same roof, “formed not only social units, but economic units of production and consumption: the members of the unit produced together, under the leadership of one of their own, and benefited jointly from the fruits of their labour” (Zay, 1970).

As to personal relations between grandparents and grandchildren, they went without saying, with some exceptions of course, and by fostering them, parents were simply fulfilling their filial duty towards their ascendants.

However, at the time the family was restricted to the legitimate family, i.e. that founded on marriage. We recall the saying “bâtards n’ont point de famille” (bastards have no family). Illegitimate and adopted children did not belong to the approved lineage sanctioned by the Civil Code.

A child born out of wedlock had maintenance rights only with regard to his/her father and mother, and only if his/her filiation was recognised. If their parents died or were destitute, illegitimate children could not invoke the law to

claim support from their grandparents or great-grandparents. Nor were they the legitimate heirs of their parents, and even less of their grandparents.

The situation of adopted children at the time of the codification of 1866 was not recognised by the law at all. Individuals or couples that took care of orphaned or abandoned children did so out of Christian charity or, no doubt in some cases, for utilitarian motives. Adopted children had no rights in relation to the people who took them in or their family³.

7.3 RAPID SOCIAL CHANGE: TOWARDS AN EQUAL STATUS FOR ALL CHILDREN

The situation described above altered substantially in the twentieth century, with change accelerating from the 1960s onwards. First, the mass industrialisation of the early part of the twentieth century pushed many rural families to emigrate to the towns, which altered their living conditions and cut them off from their traditional support networks. Simultaneously, there was a major influx of immigrants, mainly from Ireland and later from other European countries. In response to these changes, the State, both federal and provincial, began to intervene in an attempt to remedy the new social problems generated by unemployment and the breakdown of traditional solidarity. New welfare measures gradually replaced traditional reliance on the family, raising the question of the relevance of maintenance obligations between ascendants and descendants given the financial support now provided by the State.

A formerly monolithic society became pluralistic, not only because of increased and more diverse immigration, but also because of a wider range of life choices offered to the original population, over whom the Catholic Church was losing influence, particularly from the 1960s onwards. Women sought equality before the law, which they obtained gradually, notably with the recognition of the rights of married women in 1964⁴ and the matrimonial property reform of 1970⁵. Women were attending colleges and universities in greater numbers and accounted for a larger share of the workforce, and sought new forms of social and economic emancipation as well as equality before the law. Lifestyles also became more diverse: *de facto* unions became a respectable option and, consequently, births out of wedlock became more common. The concept of the rights of the child emerged and, consequently, some of the inequalities between children due to the circumstances of their birth became socially unacceptable (Joyal, 1999).

Meanwhile, the provisions of the Civil Code on family matters changed slowly. In 1924, the Quebec legislator passed the first adoption act, which gave adopted children a legal status⁶. Under the act, when the stipulated conditions for adoption are met, the adoption judgement ends the child's original filiation and establishes a new filiation. The adopters are bound to feed, maintain and raise

the child “as their own”. The adoptee is subject to paternal power and becomes the legal heir of his/her father and mother. However, adopted children are only integrated into the nuclear family. Their status does not entitle them to maintenance or inheritance rights in relation to the ascendants of their adoptive parents.

The rapid change that took place in the 1960s also called for major legal changes with regard to children. In 1969, a new Adoption Act⁷ was passed that brought tangible improvements to the status of adopted children. Under the act, they became the adopters’ children “in every respect and in respect of everyone”, an expression that incorporates them into the lineage, exactly as if they were children born of their parents’ marriage. Adopted children simultaneously acquired maintenance and inheritance rights with regard to their grandparents and great-grandparents.

In 1970, improvements were made to the status of natural children. Because of the factors mentioned above, by that date society considered the rules that disadvantaged children born out of wedlock to be unfair and outmoded. People no longer accepted the idea that these children were paying the price for a situation for which they were in no way responsible. A law of 1970 tightened the rules applicable to them⁸, by providing expressly for parents to “feed, maintain and raise” their natural children. This is the same expression used for children born inside marriage. Natural parents were thus bound to a full obligation of maintenance and upbringing from that date onwards. The changes clarified and significantly improved the situation of natural children. However, they only granted them rights with regard to their father and mother, excluding their other ascendants.

It was not until the reform of 1980 that equal rights for all children, regardless of the circumstances of their birth, were enacted⁹. From that date onwards, all children, be they adopted, born within or outside marriage, have enjoyed the same rights and obligations with regard to their parents and their parents’ family.

The 1980 reform represented a watershed in terms of the recognition of children’s rights in Quebec civil law. Following the reform, all children belong to a lineage, founded no longer on marriage, but on filiation. However, the diversification of types of conjugal life and the increase in the divorce rate, particularly since the adoption of the Divorce Act¹⁰ in 1968, soon introduced factors into the family economy that would take the applicable rules in an altogether different direction.

7.4 POST-MODERN BREAKDOWN

In 1969, shortly after the adoption of the Divorce Act and a direct consequence of the recognition of marital breakdown, an amendment to the

Civil Code ended the maintenance obligation between sons- and daughters-in-law and their fathers- and mothers-in-law when the marriage that established that bond is dissolved by divorce¹¹. Consequently, there are no longer any reciprocal maintenance obligations between, for example, a father-in-law and his ex-daughter-in-law, even if there are children born of the marriage that established the former bond between them.

A decade later, a new stage was crossed when maintenance obligations between sons- and daughters-in-law and their fathers- and mothers-in-law disappeared completely from the Civil Code with the reform of 1980¹². This amendment can doubtless be attributed not only to the weakening of relationships between in-laws since the Divorce Act passed 12 years earlier, but also to changes in inter-generational relationships.

The family is gradually unravelling. Not only are marriages no longer indissoluble, but *de facto* unions, more and more frequent, are often temporary. Young people show more independence of spirit and decision-making than the previous generation. Lineage evidently no longer plays its traditional role of integration and regulation. Parents have less and less influence over their children's life choices.

This is the general backdrop to the abolition of maintenance obligations between grandparents and grandchildren. We should, however, recall the immediate circumstances in which the issue was debated. Strong media coverage of several legal decisions enforcing grandparents' obligation to pay child support to their grandchildren sparked a protest movement. The protesters wanted the issue to be taken away from the courts. The debate became a public-interest issue and was turned into a case of "money-grabbing daughters-in-law" and "persecuted grandparents"! Some grandparents, stressing their sense of responsibility towards their grandchildren, however expressed their opposition to court orders enforcing their maintenance obligations, because of the uncertainty of the outcome of legal action; others also made the point that they had no say in their children's choices or their grandchildren's upbringing (Quebec Bar, 1996; p.10). The problems raised thus concerned the uncertainty and cost of legal proceedings, and consequently the wider issue of access to justice, and the substance of the provisions at issue, called into question because of family breakdown.

Some representatives of the "grey power" lobby put strong pressure on the Minister of Justice and members of the government to abolish the maintenance obligation altogether. Despite reservations expressed, notably by the Quebec Bar (1996), Family Council, Council of Elders and the Permanent Youth Council (1996), which would have preferred to see grandparents' maintenance obligation clarified and properly defined, a bill abolishing it was soon

passed by the National Assembly, thus ending a tradition that dated back to the foundation of New France.

In this context, how can we explain the introduction into the Civil Code in 1980 of provisions recognising the special nature of the relationship between grandparents and grandchildren and granting grandparents rights in that regard that can be enforced by the court? The two approaches hardly seem compatible. Was the recognition of special relationship between grandparents and grandchildren simply a last convulsion of the principle of integrating children into a lineage? Was it a temporary aberration that was expected to disappear within a short time?

In fact, despite the changes to inter-generational relationships in recent decades, many grandparents play an important role towards their grandchildren, precisely because of the social changes that have affected those relationships. A combination of factors over the past 40 years has encouraged sustained and voluntary involvement of a proportion of grandparents in the family unit. The extension of life expectancy, the significant rise in the number of separations and divorces and the increased participation of women in the workforce are all factors behind the contribution of grandparents to raising their grandchildren. And it is often grandparents who provide the necessary continuity to children in periods of transition or crisis situations¹³.

The legislator thus had legitimate reasons to recognise the contribution of grandparents to the upbringing of their grandchildren. But why go so far as to allow grandparents recourse to the courts to enforce their rights? A quick look at the circumstances in which grandparents refer matters to the courts answers that question. Some court cases are sparked by a family dispute over a will or, more frequently, upbringing methods. But, in the vast majority of cases, legal action is taken against a son- or daughter-in-law. Most disputes are between parents-and children-in-law, or between people who are legally unrelated to each other, as in the case of a parent who previously lived in a *de facto* union refusing to allow his/her ex-spouse's parents to see their grandchildren. Very often, this type of dispute arises when the non-custodial parent dies, is imprisoned or is otherwise absent from his/her children's lives. The exclusion of the grandparents by the custodial parent is usually the consequence of a divorce, a separation or a difficult mourning process and reflects a wish to delete a painful past, especially if the parent is in the process of making a new life with a new spouse¹⁴.

In a majority of cases, grandparents are granted visiting and taking out rights, with the courts only rejecting such requests if the grandparents fail to demonstrate that they had established a significant relationship with their grandchildren prior to the legal action, or if the relationship between the parents and grandparents is deemed so acrimonious that it seems to be

against the child's interest to be exposed to the crossfire between his ascendants. However, grandparents often have great difficulty having the court's decision respected.

7.5 CONCLUSION

Be that as it may, it is still surprising that, on the basis of the same observations of changes to family and marital life, the legislator adopted, within the space of 15 years, provisions that, in one case, consolidate inter-generational relations and, in the other, acknowledge their breakdown. At the same time, these legislative changes first increased grandparents' rights and secondly reduced their obligations. If we were to take a cynical view, we could say that grandparents win on all counts. But if we look at the situation from the point of view of children and their integration into the family and society, the abolition of grandparents' maintenance obligation represents a loss for grandchildren and probably also for grandparents. It represents a material loss for grandchildren, of course, but above all a symbolic loss¹⁵ for both, particularly at a time when it is difficult to draw a line between a "before" and an "after". As the psychoanalyst Willy Apollon put it so aptly, "grandparenthood is above all a persistent link between the experience of the past and the innovations of the future", our grandparents are "the last witnesses of the meaning of life," because "whether we like it or not, we not only live off the experience that we owe them, they remain among us, as guardians of the threshold" (Apollon, 1994).

NOTES

1. Act to establish a new Civil Code and to reform family law (Loi instituant un nouveau Code civil et portant réforme du droit de la famille), L. Q. 1980, ch. 39.
2. Act to amend the Civil Code *as regards the obligation of support* (Loi modifiant le Code civil en matière d'obligation alimentaire), L.Q. 1996, ch. 28.
3. On the limited legal effects of de facto adoption, see: Dominique Goubau and Claire O'Neil (2000), "L'adoption, l'Église et l'État. Les origines tumultueuses d'une institution légale", p. 97.
4. Act respecting the legal capacity of married women (Loi sur la capacité juridique de la femme mariée), L.Q. 1964, ch. 66.
5. *Act respecting matrimonial regimes* (Loi concernant les régimes matrimoniaux), L.Q. 1969, ch. 77.
6. *Act respecting adoption* (Loi concernant l'adoption), S.Q. 1924, ch. 75.
7. *Adoption Act* (Loi concernant l'adoption), L.Q. 1969, ch. 64.
8. Act to amend the Civil Code *respecting* natural children (Loi modifiant le Code civil et concernant les enfants naturels), L.Q. 1970, ch. 62.

9. Act to establish a new Civil Code and to reform family law (Loi instituant un nouveau Code civil et portant réforme du droit de la famille), L.Q. 1980, ch. 39.
10. *Divorce Act* (Loi sur le divorce), S. C. 1967–1968, ch. 24; L.R.C., ch. D-3.4.
11. Act to amend the Civil Code (Loi modifiant le Code civil), L.Q. 1969, ch. 74.
12. Act to establish a new Civil Code and to reform family law (Loi instituant un nouveau Code civil et portant réforme du droit de la famille), L.Q. 1980, ch. 39.
13. Barreau du Québec, *op. cit.*, note 12, p. 8.
14. See the well-documented study by Dominique Goubau, “Obligations and droits des grands-parents” (1992), p. 35 and ss.
15. The same trend towards the disappearance of lineage and the genealogical nature of family relations is evident in the recent Act instituting civil unions and establishing new rules of filiation (Loi instituant l’union civile et établissant de nouvelles règles de filiation) (L.Q. 2002, ch. 6). The new act paves the way for adoption by a same-sex partner of his/her partner’s child, or adoption by a same-sex couple of a child available for adoption. It also provides for the establishment of a bond of filiation between two women when one gives birth to a child that they intend to raise together. Here again, the legislator acted hastily under pressure from lobbies.

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CHAPTER 8

DEMOGRAPHIC CHANGE AND THE SOCIAL CONTRACT OF INFORMAL SUPPORT WITHIN THE FAMILY

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8.1 INTRODUCTION

It is generally believed that population ageing affects many spheres of life, such as intergenerational exchange of emotional and instrumental support, supply of labour, the pension system, the health care system, and other types of collective facilities.

Attention is predominantly focused on the financial-economic consequences of ageing. The financing of state pensions is being debated in many countries, as is the organization and financing of health care and other public services to be provided for the elderly. Owing to this preoccupation with the financial-economic consequences of ageing, the effects of population ageing on the broader family life, the social network of interpersonal relationships, and the (potential for) informal support for the older adults have been receiving relatively little attention. However, given the changing characteristics of older adults and their preference for continuing life as they used to do, one of the main challenges of the future will be to guarantee the social embeddedness and social well-being of older adults, in addition to financial security and an income above poverty level.

In this chapter the effects of the ongoing ageing process on the embeddedness of young-old and older-old adults in the network of family members will be addressed with a special focus on the intergenerational informal support that is potentially available. Firstly, some of the already existing demographic ratios for comparing trends in this field will be presented and discussed briefly. All demographers will agree that the present demographic ratios for old-age dependency do not differentiate between the young-old and older-old people, and between older persons who manage to live independently and those who

need help. Secondly, I will propose a new, more nuanced approach to address the intergenerational support potential. In this context, an overarching macro survey data set will be used, constructed explicitly to monitor the diversity of these and related developments at the national level. More diversified information about the familial relationships of young-old women and their parent(s), including some information about these relationships as they might develop over time, will be presented.

8.2 THE 65 PLUS POPULATION: INDEPENDENCE OR DEPENDENCE?

Although there is a tendency, as reflected in the term ‘old age dependency ratio’ (defined as the number of persons aged 65 and over in comparison to the population aged 20–64 years of age) to view all the adults aged 65 and over as dependent and a ‘social burden’, one should not lose sight of the fact that the majority of older people continue to lead their lives as they always have done; and on the other hand, not all adults between 20 and 64 are involved in the economic and social activities of society in an equal way.

Most of the older adults, especially those below 80 years of age, are in fairly good health. Illness and handicaps are not a universal characteristic of all the over 65s, not even in the oldest age groups. The vast majority of older people remain capable of caring for themselves and live independently in their own homes. Severe incapacity is typical for only a minority of the older adults. International overviews estimate the proportion of persons aged 65 and over who are severely handicapped at between 10 and 20% (Dooghe, 1992). With advancing age, and especially after the 80th year of life, the likelihood of developing chronic diseases and functional incapacities gradually increases, and so does the need for informal assistance with the activities of daily living, and the need for medical care. Given the increase in educational levels among the cohorts that have recently entered retirement, and given the effects of preventive health care, a decline in age-specific levels of disability has already been observed in several countries (Freedman et al., 2004.; Lutz & Scherbov, 2003; National Research Council, 2001). Consequently, it is to be expected that the demand for informal support and formal services will gradually shift to old-old age groups. This will go together with an overall increase in the quality of life (economic situation, housing conditions etc.) of older adults. It is to be expected that independence will be attainable for more and more of this section of society until a more advanced age, so it is better not to use a fixed age boundary in this context. Moreover, the developments mentioned point in the direction of an older population in the industrialized western world that – to a large extent –

do not fit the ideas of dependency starting at age 65, or starting on the day of retirement.

In this context, a provocative point of view on the definition of old age, as developed by De Santis (2003), is worth mentioning. De Santis proposes that, in the light of the sharp increase in life expectancy and also therefore in ageing all over the world, it is rather illogical to retain the traditional age boundary of 60 (or 65) years of age for the transition of persons to the category of the older population. He suggests moving the age boundary ahead and demarcating a new borderline, in the sense that a country ends up with a *fixed* proportion of relative shares for old age, and consequently *flexible* age boundaries. So, after a certain transitional period the proportion of older persons will be uniquely determined as an unchanging proportion of the total population. As a consequence, there is no need to indicate ageing as a process that will eventually lead to countries being 'crushed' under the weight of their aged, dependent population.

8.3 THE INFORMAL SUPPORT POTENTIAL FOR OLDER ADULTS IN NEED OF HELP: PRIMARILY INTERGENERATIONAL OR INTRAGENERATIONAL AND INTERGENERATIONAL?

Several researchers have investigated the trends in the so-called 'inter-generational or family' burden associated with the process of ageing. This indicator is intended to be more precise than the aforementioned 'old age dependency ratio' in that it tries to nuance the group of older adults in need of help as well as the group of support providers. One of the examples is the 'Inter-generationale Unterstützungsrate' or 'intergenerational/familial support rate' (Myers, 1992), used among others by Kytir & Münz (2000) and De Jong Gierveld & Van Solinge (1995). In this indicator, the number of adult 'children' in one or more cohorts is compared with the size of a single generation of 'parents' who would have borne them, e.g. the number of those older adults aged 80 and over, and the number of 50–64-year-olds. In this indicator, the support of the older parents' cohorts is directly related to the children's cohorts, assumed to be the support givers. Another example is the 'Mother-daughter-Ratio' in which each of the 65-and-over cohorts are weighted and related to the cohorts of younger persons.

However, these types of indicators do not take into account the fact that if older adults do need help with the activities of daily living or otherwise, *spouses* provide the largest proportion of assistance (De Jong Gierveld, 1998). Spouses can and will serve as the optimal (long-term) provider of emotional as well as instrumental support (Walen & Lachman, 2000). Nearly all older husbands rely on their spouses (Kendig et al., 1999; Peters & Liefbroer, 1997; Stoller & Cutler, 1992). Spouses have the proximity, the long-term commitment

and the similarity in interests and values that underpin this type of support (Dykstra, 1993). Kin – siblings, cousins – might also be involved in the process of care giving. Moreover, neighbours and friends are frequently mentioned as providers of various types of support. This informal support is characterized as support from older adults to other older adults, and as such is characterized as intragenerational support (Keating et al., 2002; Komter & Vollebergh, 2002).

Predominantly, in cases of absence of a spouse, the children and children-in-law step in and take responsibility for supporting the parent who needs help (Bisschop et al., 2003; Broese van Groenou & Knipscheer, 1999; De Jong Gierveld & Dykstra, 2002; Klein Ikkink et al., 1999). However, it is necessary to be aware of the fact that in addition to support from the younger generation to the older generation, even more support is provided by the older generation to the younger ones, be it financially, or, for example, through help with caring for grandchildren. Data point out that many older adults are more likely to give help to others than to receive it (Kendig, 1986; Kohli et al., 2000; Kohli, 2004).

8.4 THE INFORMAL SUPPORT POTENTIAL FOR OLDER ADULTS IN NEED OF HELP: PRIMARILY ORIENTED TOWARDS THE FAMILY POTENTIAL OR ALSO COMING FROM OUTSIDE

Spouses, partners and other persons sharing the living quarters form the core or the basis of the support network. It is not yet generally recognized that for those persons who lack important potential support network members, such as the childless, parents whose children have migrated, and never-married persons, other members of the social network step in to function as caregivers for (younger or older) persons in need of support (Johnson & Catalano, 1981; Lang & Carstensen, 1994). So, in principle it is important to know more about all the network members who feel legally or emotionally close and ‘obliged’ to provide care, and to be well aware of the fact that family members other than the spouse and the children are involved in the support network, as well as non-kin members.

In conclusion, the aforementioned rates of the social support network infrastructure or the potential for informal support for older adults as available at a certain moment, are characterized by several implicit or explicit weaknesses. Most of the indicators are based on fixed age boundaries for the dependent as well as the support providers’ side. Making exclusive use of fixed age boundaries does not contribute to a nuanced view of the process of aging in general, and the support relationships in particular. Other indicators rely on the idea that informal support goes exclusively from younger to older generations, and that comparing age groups of ‘parents’ to age groups of ‘children’ will bring us to

a realistic point of view. These indicators, however, do not point to the large amount of intragenerational support flows. Moreover, none of the indicators take into account the variety in living arrangements and network compositions as realized by older adults. Do older adults have living children, and if not, how do they manage to seek informal support? Can and do support-giving network members, e.g. children, rely on their brothers and sisters – if alive – to help the parent in need? This type of in-depth description of patterns of social relationships and the living arrangements of older persons has been predominantly carried out by social gerontologists and sociologists, rather than by demographers. With survey research they provide the possibility of in-depth analysis of the patterns of family relationships and support arrangements. Panel data and longitudinal survey research covering several cohorts of persons is needed in order to provide information about trends and changes in people's life trajectories, and about patterns of family relationships and support arrangements. However, these types of investigations are very costly and consequently scarce. Moreover, these data frequently lack the size and overarching (national) characteristics that are urgently needed and appreciated by demographers.

8.5 NEW PATHWAYS

In the past, census taking and large-scale surveys were predominantly oriented towards fertility and family themes. In investigating fertility and family, a large array of indicators is available, mostly in an internationally comparable format. Varied data are available about the mother's age at first and subsequent births. There is also an abundance of data on parity, spacing, trajectories between the births of children, partner situation and partner history of the parents. Comparative details about older people's situations remain largely absent; with the exception of the UN ECE data set of the PAU programme "Dynamics of Ageing". As mentioned before, for information about older persons and their embeddedness in the networks of family and non-family members we must rely on semi-optimal indicators. Up to now, researchers studying family and ageing lacked cohort data. In cases where cohort data are available, the range of cohorts investigated is frequently restricted and/or the main themes of research are restricted to a few domains of life and/or the sample size is relatively small and consequently insufficient. Recently, however, demographers of the Netherlands Interdisciplinary Demographic Institute (NIDI) combined the outcomes of seven large-scale surveys, characterized by a more or less identical sets of information (Liefbroer & Dykstra, 2000). The surveys, originating from Statistics Netherlands, from universities and the NIDI, have never been *used in combination* before. The piecing together of the survey data has resulted in a combined data set spanning the birth cohorts 1903–1977. Only the birth cohorts 1903–70

are included in the final data set, because the life courses of those born after 1970 can be followed over only a relatively short period of time. Altogether, life course data from 26,000 men and women have been assembled: a sufficiently large number of persons to carefully analyse demographic patterns and changes in the life course on a cohort basis. This data set allows researchers to study shifts in the timing and sequencing of family and other transitions. The project considers not only *single* transitions (e.g. the start of widowhood) but also *combinations* of roles (e.g. the time spent with dependent children living at home). This focus on trajectories, rather than transitions only, makes the project unique.

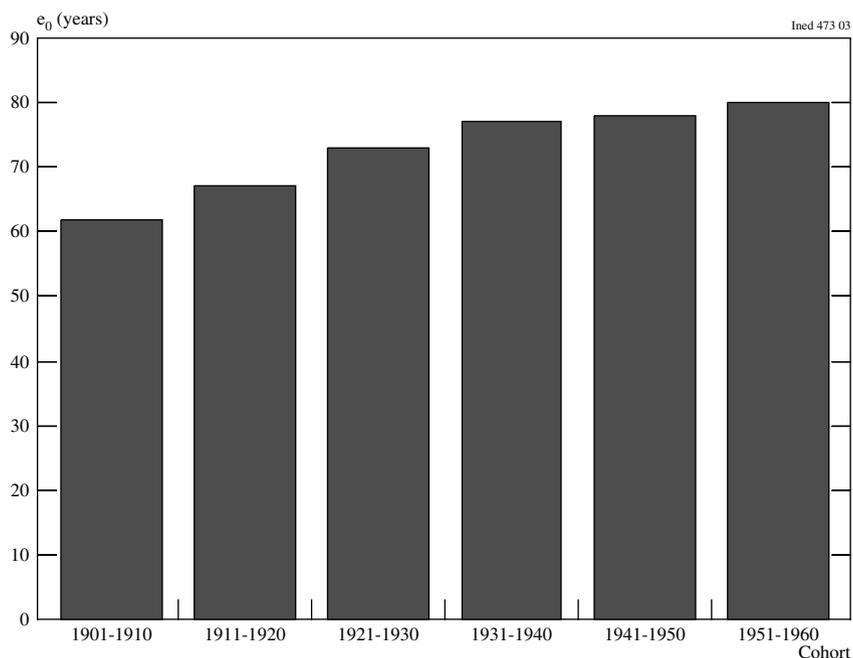
In cases where the data-set is insufficient because information about future developments in the life courses of the younger cohorts is censored, prognoses have been used. In this context, firstly the KINSIM program (Post et al., 1997), developed to simulate the size and composition of family networks of men and women in the Netherlands, should be mentioned (see Figures 8.3 and 8.4). In some other cases, the 1996 household forecasts of Statistics Netherlands were used (e.g. in Figure 8.2 for the youngest cohort).

In the following section we will use the aforementioned data set to describe the familial support potential of young-old and older-old persons in the Netherlands. In doing so, we take the young-old people, aged 50–60 years, as the starting point. This is the age group that nowadays is in charge of care-giving when the old-old parents need support. In concordance with information available, we concentrate on daughters. It is well known that children, daughters especially, are the first to step in when instrumental or emotional support is needed (Dautzenberg, 2000; Lopata, 1996). Findings of the 1994 European ‘Community Household Panel’ revealed that there was a high degree of involvement by adult children in the informal care of the older generation. The predominant carers were women. Women accounted for approximately 14% and men 6%. In the Western and Northern European countries the female support providers are predominantly around 50 and 60 years of age (De Jong Gierveld, 1998).

8.6 RESULTS

In this section we will present information about the family and household situation of young-old women.

In Figure 8.1, life expectancy data of women are presented according to 10-year birth cohorts. The data illustrate the well-known fact that life expectancy at birth for women in the Netherlands (as elsewhere) increased very rapidly, starting in the 20th century at 62 years for the birth cohort 1901–10, and rising to 80 for the birth cohorts of 1951–60. Note that these are cohort data, not

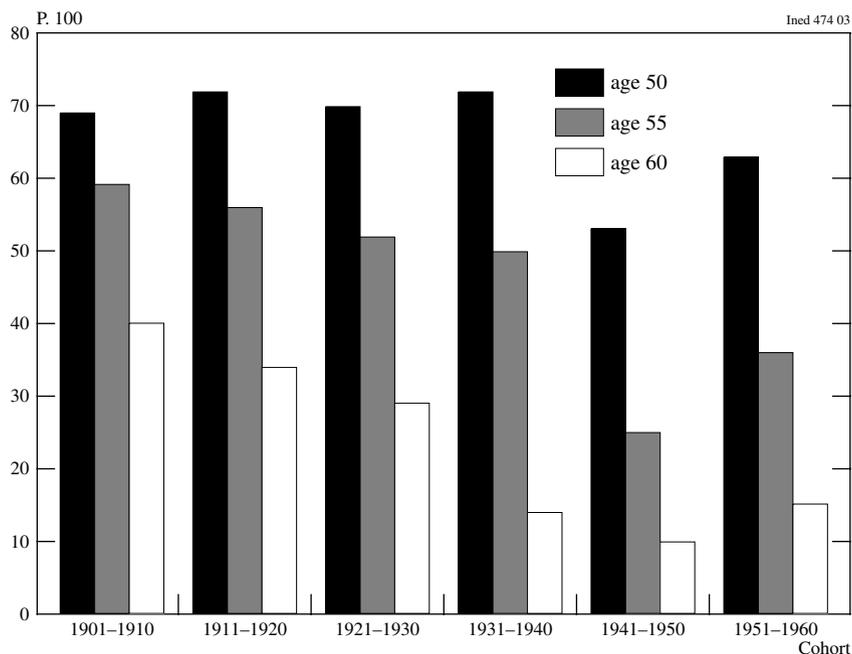
Figure 8.1. Life Expectancy at Birth for Women, by Cohort

Source: Liefbroer & Dykstra (2000)

period data. The crucial question is to determine whether living for an extra 18 years is related to a longer period of interpersonal bonds within the family, when comparing the family and household situations of the cohorts of women born in 1901–10 and 1951–60, respectively. Life course data are especially welcome as they will allow these questions to be answered.

Next, *the interweaving of young-old women's lives with the younger family generation* is addressed. In the context of family bonds of young-old women, the presence of children in the household or co-residence with young or young-adult children is selected. The data presented in Figure 8.2 clearly indicate that at the age of 50, about 69% of the women born in 1901–10 had one or more children at home, in contrast to 53% of the women born between 1941 and 1950. It is expected that about 63% of the women born in 1951–60 will have one or more children at home at age 50. At the age of 55 and 60 the differences are even more pronounced.

Figure 8.2. Percentage of Women With One Coresiding Child at Age 50, 55 and 60, by Cohort



Source: Liefbroer & Dykstra (2000)

At age sixty, 40% of the women of the birth cohort 1901-10 continued to live together with one or more of their children in the same household. Of the women born between 1951 and 1960 the comparative figure is expected to be about 15%. We have to conclude that the increase in life expectancy goes together with a lengthening of the period of the empty-nest phase by many years. One can try to explain which mechanisms are behind this phenomenon. The change will have been affected – to a certain extent – by a decrease in the mean number of children born to women of younger birth cohorts. On the other hand, a change in age of the mothers at childbirth might have affected the difference. A change in the age of young adults at leaving home (leaving home at a younger age to live independently alone) might be another determinant of the phenomenon under investigation. This chapter does not seek to explain the trends as recognized in Figure 8.2 – this has been done by many well-known scholars already – but to use the outcomes of the analyses in the light of macro-

and meso- level patterns affecting the life course and the social embeddedness of women belonging to different birth cohorts.

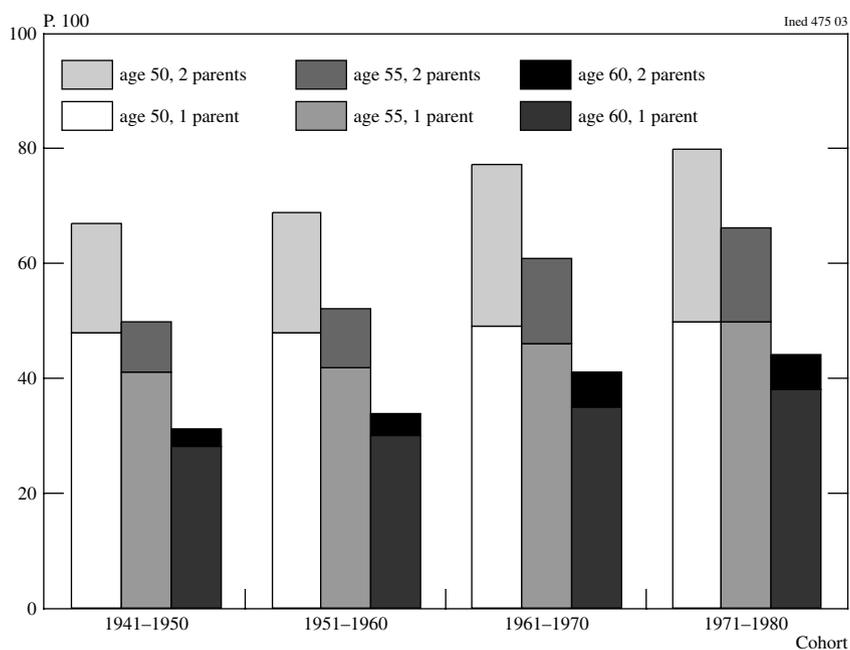
In sum, it can be stated that an increase in life expectancy goes together with a decrease in co-residence of young old women and their children. This trend implies an ever-expanding empty nest phase and as such a weakening of family bonds of young-old women with the younger generation.

The database now available provides a good basis for further in-depth research into this important phenomenon on a cohort basis.

Secondly, *the interweaving of young-old women's lives with the older family generation* will be addressed.

Figure 8.3 presents data about the family bonds of young-old women with regard to relationships with the older generation, both now and as a forecast for the future. Based on the data set as developed by Liefbroer and Dykstra (2000), a clear picture of the trends in overlapping life courses of the young-old women and their parents is provided. The percentage of women of

Figure 8.3. Percentage of Women With One or Both Surviving Parents at Age 50, 55 and 60, by Cohort



Source: Liefbroer & Dykstra (2000)

50 years and older with one or two living parents increases rapidly when we compare women from older and younger birth cohorts. At the age of 50, the percentage of women with two living parents shows an explosive trend in the younger birth cohorts: from 19% for women born between 1941 and 1950 to an expected 30% for women of the birth cohort 1971–80. At the age of 60, a stabilization of women with two living parents is observed.

However, when focusing on the family bonds that more or less correspond with the potential care-giving network, we must take into account that not all parents of these young-old daughters who are recorded in Figure 8.3 are expected to require the help of their daughters.

In general, older *couples* have ample opportunities for mutual support based on a lifelong common history. Older persons living alone, however, are more likely to be in need of support from network members outside the household. Figure 8.3 also provides data about this characteristic on a cohort basis.

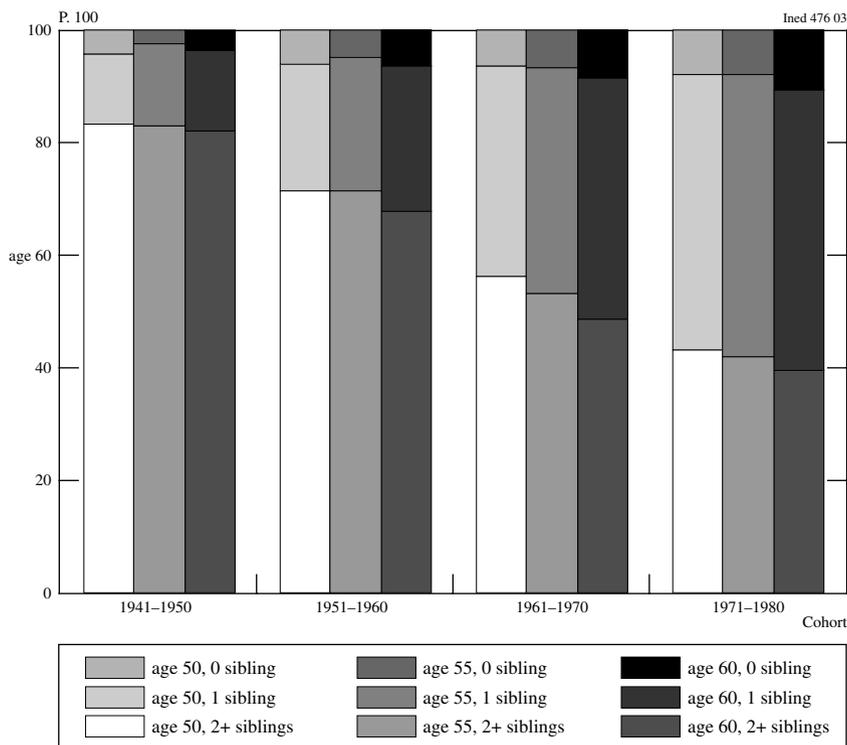
The percentage of women aged 55 with one living parent will increase from 41% for the birth cohort 1941–50 to 50% for the generation 1971–80. And even when they reach the age of 60, about 38% of the women born in 1971–80 are expected to have one (old-old) parent alive, in addition to 6% with two parents alive at that time. So, in the future, 38% of the 60-year-old women born between 1971 and 1980 will be (potentially) involved in the informal care-giving network of an older-old parent living alone.

Additionally it is important to know more about the *intragenerational* position of the young-old women: do young-old women have sisters and brothers alive to share the (potential) care-giving, and to broaden the intergenerational informal familial support network? Life course data again can provide the information we need.

Focusing on women with one living parent, Figure 8.4 provides evidence that the number of siblings available to support young-old women in helping their potentially frail older parent, is on the decrease. At the age of fifty, 83% of the women with one parent alive, and born in the period 1941–50 will be connected to two or more brothers and sisters. However, for the 50-year-old women with one living parent and born between 1951–60, 1961–70, and 1971–80, the percentages with two or more siblings alive decrease from 71% to 56% and 43% respectively. At the age of 60, the comparable figures are 82% for the cohort 1941–50, and this decreases gradually towards 39% for the birth cohort 1971–80. Half of the 60-year-old women with one parent alive, and born in 1971–80 are expected to have only one brother or sister to share in the regular chores involved in (potentially) taking care of older-old parents living alone.

In principle, given the data set, it is possible to further differentiate the (potential) support familial networks, among others, by taking into account the

Figure 8.4. Percentage of Women With One Surviving Parent, According to the Number of Siblings (0, 1, 2 or more), at Age 50, 55 and 60, by Cohort



Source: Liefbroer & Dykstra (2000)

partner history of the old parent(s), and the marital status and partner history of the young-old daughter.

8.7 CONCLUDING REMARKS AND DISCUSSION

The aforementioned findings, given the nuanced basis of differentiating between older persons living alone and living as a couple, connecting these data to the life-course data of their daughters (including the household situation of the daughters: co-residence with children), and additionally relating the data to the intragenerational position of young-old women (the interlinking with sisters and brothers), provide a solid basis for estimating the potential familial support

network, and for policy making at the national level. In this context I would like to make a plea for replacing the standard demographic indicators of total and old-age dependency ratios by more nuanced ones.

However, one has to bear in mind that both the (old age) dependency ratio and the more nuanced insights into the changing patterns of family embeddedness as proposed in this chapter, concentrate on the available support *potential*. Whether or not support will actually be provided in cases where help is needed is another question; the answers to this question must take several other variables into account, such as the health status of the older person and of the children, the number of children available, the travel distance to the nearest child, current partner status of the parent and of the child, partner history of the parent and the child, and the availability of non-kin support. Answering this question was not the aim of this chapter.

Thanks to the methodological expertise of two devoted demographers, Pearl Dykstra and Aat Liefbroer, the urgently required basic information for the Netherlands, spanning a broad array of life-course transitions and trajectories of the birth cohorts 1900–1970, has now become available for in-depth (multivariate) studies. It is hoped that in the near future demographers of other countries will start to co-operate and provide population researchers with internationally comparable databases to support all researchers – demographers as well as other social scientists – in providing new possibilities for in-depth studies in the field of ageing.

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CHAPTER 9

CHANGE AND RECIPROCITY IN INTERGENERATIONAL RELATIONSHIPS: THE DISCOURSE OF SPANISH WORKING MOTHERS*

CONSTANZA TOBÍO

9.1 INTRODUCTION

Women's involvement in paid work is lower in Spain than in other developed countries. The female activity rate (15–64 age group) for the European Union in 2003 was 61.3% compared with 55.7% in Spain (OECD 2004: 296). However, women's participation in the labour market has increased rapidly in the last 20 years, especially for women below 40. The younger generations are introducing a new pattern of activity based on most women entering the labour market and, more importantly, remaining in paid work during the period of higher fertility. The activity of women between 30 and 40 years of age has more than doubled in the last 20 years¹. A new model based on women's involvement in paid work is emerging. Only 20

*The chapter is based on findings of four different research projects:

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- “Las Familias Monoparentales en España” financed by the Ministerio de Asuntos Sociales (Convenio con la Universidad Carlos III de Madrid 1996–1998)
- “Obstáculos para la incorporación de la mujeres a la actividad laboral en la periferia rural y metropolitana de la Comunidad de Madrid” financed by the Dirección General de la Mujer de la Comunidad de Madrid (Convenio con la Universidad Carlos III de Madrid 1996–1999)
- “Encuesta de Compatibilización Familia-Empleo” supported by the III National Plan for R+D, Programme for Research on Women and Gender.

years ago most middle aged women, a majority of whom were mothers of small children, were housewives. Today, two-thirds of them are in the labour market.

Today's mothers in Spain represent the first generation of women with a majority of members in the labour market; grandmothers represent the last generation of housewives. Today's mothers perceive themselves as a transitional generation, very different from their own mothers, but also very different from their daughters, who they think will continue along the path that they have initiated. Grandmothers represent past times when women depended on the family, or more precisely, on the men of the family. Home was their space, childbearing and care their occupation, sacrifice their main characteristic. Dependence and security are the two complementary elements that explain the rationale of their situation. Today's mothers perceive their own situation as different. The rules have changed, first because the family is no longer the secure institution for life that it used to be. Women's security, in the broad sense (economic, social, and personal) is no longer directly linked to the position in the family, but increasingly to individual independence achieved through employment. For today's mothers, paid work represents the main factor of personal autonomy, as well as of a new desired identity. There are, however, many obstacles and difficulties involved in making family and employment compatible². Today's working mothers see themselves as pioneers, as a social group that has begun a process not yet fully completed, in which the object of rejection (the past) is clearer than the final objective. This can be partially observed in the discourse that emerges when working mothers are asked to speak about how they think their daughters will be in the future, when they become adults. Discourse on the future and on other persons who are different but similar (mother-daughter relationship) helps them to project and express current conscious or subconscious desires, fantasies and expectations.

Today's grandmothers are playing a fundamental role in the rapid extension of women's economic activity. Social policies focusing on reconciling family and employment³ are scarce and few women work part time⁴. In this context, the help provided by grandmothers who take care of their grandchildren is a form of solidarity between generations that is enabling women to change their economic and social position. There is a certain paradox in the fact that old gender roles can be transformed because grandmothers are assuming the traditional mothering role, thus liberating their daughters. Strong family ties are necessary to change the family. The help of grandmothers, and to a lesser extent grandfathers is, however, a temporary solution, according to the working mothers' discourse. Just an emergency solution for a transitional generation that

is encountering new problems for which there is not yet an answer that can be considered as a model for the future.

The paper is based on working mothers' narratives on the preceding generation of women – how they were and how they lived –, on themselves and on the future generations of women: how they will be, how they will live. In the last part of the paper, the exchange system between current generations of women is discussed. The main hypothesis is that we have reached the end of a cycle, as social change experienced by the working mothers of today liberates them from the obligation of intergenerational reciprocity, at least in the way it was traditionally understood.

9.2 WORKING MOTHERS' DISCOURSE ON THREE GENERATIONS OF WOMEN

The following section is based on qualitative interviews and discussion groups with working mothers. The interviewees were asked to speak about differences and similarities between themselves, their mothers and their daughters⁵.

9.2.1 Grandmothers: Yesterday's Mothers

References to the grandmother's generation relate back to a kind of woman who seems to be much further away in time than the 30 or 40 years ago to which they generally refer. The words most frequently used to describe them are *no choice*, *confinement*, *fear*, *sacrifice* and *endure*.

Mother was then another word for housewife, as there were few other options for women with children. The normal fate of mothers was to take care of the house and the family. Women lived inside the home, their social relations were normally limited to the family and this way of *being out of touch with the world* was associated with not knowing, not understanding, all of which devalued their statements or opinions.

It was a normal thing for him to say [the father of the interviewee to the mother] You don't know because you are not in the world of work... so it was not contempt, it was simply that not being in the world she could not give an opinion, she was not there, she couldn't know how things were.

(In-depth interview, Madrid, working lone mother, intermediate SES)

It is said that women in the past were afraid to speak, to say certain things to their husbands, to lose their economic support. Conflicts used to be hidden, even when women were abused or battered by men. All this determined a typical 'feminine' way of being, based on 'sacrifice'. It is the mother whose

existence is justified by the others, her life is the well-being of the husband and the children.

This almost inhuman capacity for sacrifice of their mothers and their mothers' generation is referred to by interviewees with surprise and even admiration, as women of today are incapable of such extreme stoicism, which also represents a certain kind of power. One interviewee speaks about *the power of sacrifice*.

I admire women in the past [...] for that power of sacrifice which they had.
(Discussion group, Bilbao, working lone mothers, low SES)

All these attitudes are summed up in the word *endure*. Women in the past used to endure in general, as a normal attitude towards life and this made them very different to women of today, who do not endure. Maybe, it is said, they endure too little.

Women endured a lot, nowadays we do not endure our husbands, nor our children. If our husband says "Uh!" we are immediately asking for divorce.
(Discussion group, Bilbao, working lone mothers, low SES)

In spite of that, there are some more positive references to past times that have to do with 'quietness' and 'having time'. In the past, it is said, women had more time for everything, even for themselves, they *could do more things and more intensely*. Being away from the world of work and economic survival meant that they could concentrate in other interests, develop more deeply personal relationships and forget about the outside world.

They had more time for everything [...] maybe they stayed more at home, they knew less people, now at work you meet more people but you do not really get to know them, they had much more time for all that...
(In depth interview, Madrid, working lone mother, intermediate SES)

There is a certain longing for a time when the limited lives of women and the few options available to them meant at the same time a sort of peace, if they accepted their situation, as they often did. Nostalgia for *dependence* and for the sense of *security* that came with it, is looked at from today's perspective, when the variety of options and the freedom to choose are associated with individual responsibility, sometimes with fear and anxiety. A fantasy of *regression* to a past time when everything was simpler builds up around a critique of excessive consumption. They wonder whether women have not fallen into a trap, if the real reason why they have entered the labour market might not be to obey the dominant logic of increasing consumption. They speak about fictitious and superfluous needs. Food is mentioned as an example. In the past, it was better and healthier although now it is more abundant and there is a greater variety of products.

I used to eat "cocido"⁶, beans, lentils or a cooked potato, just as I can eat it now, only now I have in the fridge half a dozen yoghurts of different flavours, cakes, chocolates, all sorts of different things that we didn't have in the past, but if we speak of real food...

(Discussion group, Madrid, working mothers married or living with a partner, aged 40 and more)

In short, grandmothers are represented as women of old times, whose personal security was related to their position in the family, always depending on a man. Their space was the home; their occupation was childbearing and care of their family members; and their typical virtue was sacrifice. Dependence and security are the two main complementary aspects that help to understand the logic of their situation, as perceived by working mothers of today.

9.2.2 The Sandwich Generation: Workers and Mothers

The women interviewed, working mothers usually between 20 and 50 years old, perceive themselves as very different to their mothers. They are generational *pioneers*. They are not reproducing the behaviour of their mothers. In most cases, they are the first in their female lineage to enter the labour market and to stay in it for good, as shown by the fact that they continue to work despite having children. They have studied, found jobs, they speak openly, they decide when and how many children they want to have and their relations with men are much more 'pure', in the sense Giddens (1995: 60–61) gives to this adjective⁷.

Access to *paid work* appears in their discourse as the essential element underpinning the change in the position of women in society. Employment is both the mainstay of their newly acquired autonomy and independence, and the activity in which they are most clearly expressed.

I think it is fundamental to have economic independence [...] that is a very important change, the most important change.

(Discussion group, Madrid, working lone mother works, high SES)

It makes you feel secure [to have a job], not just from an economic point of view but...

(In depth interview, Valencia, married working mother, intermediate SES)

My husband is a lawyer too and he hates going to court. Me, I love it. I love my work, I love going to the trials, to the courts of justice.

(In depth interview, Madrid, married working mother, high SES)

Women are changing their traditional role as housewives as they enter the labour market but have not really abandoned their old role; in fact, they are *superimposing* their new role as workers upon the old one as carers. They perceive themselves as free to develop new activities and responsibilities, but not to leave their traditional role in the family.

OK! Very well! You can work here, there, wherever you want. You can have a professional life, a social life, a cultural life, whatever you want, but the other role [as housewife], that you cannot leave.

(Discussion group, Barcelona, working mothers, married or living with a partner, intermediate SES)

The effect of the superimposition of professional and domestic work is often that they feel very tired, even *exhausted*. Sometimes they also feel that they have fallen into a trap, that the effort is not worthwhile. They are not just physically tired but also psychologically extenuated by the weight of domestic responsibility that never leaves them, that goes with them everywhere. They say that they are living “an impossible situation”. They, working mothers, say it is not possible to be both mother and worker at the same time.

You cannot be a housewife, mother and work. I cannot really conceive it.

(Discussion group, Madrid, working mothers, married or living with a partner, high SES)

The frequent references to ‘living something impossible’ are probably a means of expressing a way of living in the present, giving solutions to new problems as they arise, with *no previous models* to provide support and orientation. The present situation does not seem to configure a model for the future, current solutions can only be considered as provisional. The interviewees see themselves as members of a generation of *transition* in which social change is taking shape. Many of them were educated to be housewives and this is now a handicap for their professional career.

We couldn't imagine ourselves as women who would work throughout their lives.

(Discussion group, Madrid, working mothers, married or living with a partner, low SES)

Others were educated to be professional women and were not aware of the burden of motherhood for women who work.

Whatever I wanted but of course I had to get a university degree. Five years at the university, of course. . . I had no choice. I was educated to work. I finish my studies, I begin to work in a firm, I begin my professional career, with great success. Then I marry, I have a child. Now I often have to say “Please, mummy, come” [She often has to ask her own mother to help her with the

child]. *And my mother now says "That's bad, that's really bad. This child... I do not know... women nowadays lead such a life..." And I say "But you have educated me for this. How can you criticise me now?"*

(Discussion group, Madrid, working mothers, married or living with a partner, high SES)

They perceive themselves as an intermediate generation, a *sandwich* generation between the past, represented by their mothers, and the future, when the new position of women in society will be taken for granted. In many of their activities, they are the first women in their family to act they way they do: study, work, planned fertility, divorce, etc. This has a cost both in terms of social acceptance and in terms of practical solutions to deal with a new situation.

and we are in between, like in a sandwich. Between our mothers who forbade their sons to do any domestic tasks because they were not appropriate for men, and ourselves who are trying to educate our children differently so that what has happened to us will not happen to them.

(Discussion group, Bilbao, working lone mothers, low SES)

9.2.3 The Daughters and the Future

The daughters represent the *continuation* of the process initiated by the working mothers of today. They think the next generation of women will continue along the same path. They see their daughters, and young girls in general, like themselves but better, more sure of themselves, more strong, more prepared. What they have not been able to achieve or what represented a big effort for them will, they think, be much easier for the younger generation.

The main idea they want to transmit to their daughters is that the most important thing is their own *individual autonomy*, concretised in their capacity to earn their own living. They will not need a man for that. Marriage and the family are no longer an alternative but a complement of their autonomy, not even a necessary complement. A man is no longer a 'destiny' for women, nor marriage a 'vocation', but just one more aspect of life more related to emotions than to survival. Paid work will increasingly be a fact for women, it will no longer be a choice: they will all work. It is *marriage and children* that will be a *choice*, rather than work.

What they will choose will be if they marry or do not marry; they won't be able to choose if they will or will not work.

(Discussion group, Madrid, working mothers, married or living with a partner, high SES)

A rather catastrophic vision underlies the discourse on family and children, as well as a magnified vision of a powerful woman who will not accept what they themselves have had to accept. However, there is sometimes a certain ambivalence between a new model of women that represents the autonomy and independence that they like to recognise in themselves, and the fear of losing the old mothering role. There is also something like resentment, maybe an unconscious vengeance, that expresses itself through a terrible prediction: women will not have children any more.

- [in the future] *it is going to be the female-male, well, something different.*
- *Of course she [the woman of the future] is not going to have children, she will not go after... , she will not put out an ironed tablecloth... all that.*

[...]

- *I wouldn't like the home, the nucleus of the family to be lost [...] because we are speaking about women, but the children of those women will be the parents of tomorrow. So I would not like everything to be artificial [...] Society is based on the family!*

[...]

- *Well, it will be very difficult for them to have children.*

[...]

- *Very few couples will have children.*

(Discussion group, Madrid, working mothers, married or living with a partner, high SES)

The lower SES group of working mothers gives explicit economic reasons to explain current low fertility⁸.

Now there are no children because it is not possible to have more children.

(Discussion group, Bilbao, working mothers, married or living with a partner, low SES)

Lone mothers develop a discourse about *self-sufficient women* who do not need men, who will not need men in the future. A family model based on a mother with her children is conceived as desirable, maybe a gratifying projection of their own situation.

Maybe tomorrow people will live like that, women with their children, if they can live by themselves, of course, I do not know, it is a distant future, I don't know. But, but, well maybe like the lionesses in the jungle, yes, that's it. [...]. Husbands are not necessary any more, that's what I say, like the lionesses with their cubs and when the cubs become independent the lioness goes on with her life hunting and the lion is just sitting under a tree and the lionesses hunting... [she laughs]

(In depth interview, Madrid, working lone mother, intermediate SES)

9.3 EXCHANGE, SOLIDARITY AND RECIPROCITY

Though there are few references to collective action relating to the new problems faced by women today, there is a strong consciousness of belonging to a social group in a process of social change. Women perceive themselves as marching with other women towards a better future, where access to space or responsibility will no longer be denied to them. They feel they are changing their position in society through their action and successfully fighting men's opposition.

It is very clear to me that nothing will stop them [women]

(In depth interview, Madrid, married working mother, high SES)

They must now accept that there will be women everywhere

(In depth interview, Valencia, married working mother, intermediate SES)

Change is conceptualised in working mothers' discourse as collective action that links current generations of women with past and future generations. What women of today are achieving relates to what women in the past achieved or tried to achieve, even if they were not successful. This probably explains why even if working mothers of today say that they do not want to be like their mothers, the lack of a model or of a desire to perpetuate past tradition is not a subject of conflict between them. Mothers and grandmothers perceive themselves as being close in spite of their differences, as if a common path led to the same objectives.

There is an active and direct implication of grandmothers in the professional development of their daughters. The contradiction between new roles in the labour market and old roles in the family is partly solved by the help of the preceding generation of women who take care of their grandchildren while their daughters are at work. According to a quantitative survey⁹ conducted in 1998, most Spanish working mothers (77%) have a close relative living in the same town, in 56% of the cases this includes their own mother. In 44% of the cases it includes their father, 43% their mother-in-law and in 37% their father in law. The help they provide to working mothers is important, especially in the case of maternal grandmothers.

The role of grandmothers is specially important when they live with their daughters or sons, but this is the exception, as traditional three-generation extended families represent only 16.6% of all families, according to data from the Census of Population of 1991, and this percentage is steadily decreasing. In many of these cases, the elderly are the receivers of care rather than the givers. A new kind of extended family seems to be emerging, with separate households but often in the same building, street or neighbourhood. Using grandmothers as a resource to help reconcile family and employment is frequently combined with spatial

strategies to reduce distances. The mother's and grandmother's home, though different, appear as a sort of continuum, with children living everyday life in one or the other and considering both of them as "home". Specific spatial strategies are developed to shorten distances between them. Four in ten interviewees with a mother living in the same town live in the same neighbourhood, in one-third of the cases in the same home, building or street. They often look for an apartment or house near their mother's which sometimes means their sister or sisters also live near. This offers the double advantage of mutual help between sisters and making it easier for grandparents to help both daughters. The decision to live near is often taken when they get married, when they have children, or when a divorce takes place and support from grandparents becomes more important or even necessary.

Among low SES working mothers, the help of grandmothers is the most important strategy because there is little choice. Among intermediate SES families, grandmothers are often preferred to hiring a 'stranger' or taking small children to day care centres, partly for economic reasons. High SES families usually rely on hired domestic workers, most of them immigrants, but even in this case grandmothers play a role controlling their daughters domestic organization or helping in exceptional situations, as well as indirectly through 'global care chains' (Hochschild 2000) as in many cases the carer's children are cared for by family networks, mainly grandmothers, in their countries of origin.

Most of the help provided by grandparents involves taking care of grandchildren. In half of cases (52%), the maternal grandmother takes care of pre-school children (when they live in the same town and when working mothers have at least one child below age 4). In another 44.5% of cases, maternal grandmothers take care of the children when they come home after school, either in their own home or in their daughter's home. Often (23%) they prepare meals for their children and grandchildren or they take the children to school and collect them in the afternoon (22%).

The help of the preceding generation seems to follow a double logic of consanguinity and gender. On the one hand, consanguineous relatives help more, thus explaining why mothers help more than mothers-in-law. On the other hand, women help more than men, which explains why mothers help more than fathers and mothers-in-law more than fathers-in-law. For example, as already mentioned, 22% per cent of maternal grandmothers take their grandchildren to school, compared with only 12.5% in the case of maternal grandfathers, 9% of paternal grandmothers and 5% of paternal grandfathers. This same hierarchy is reproduced in most tasks. But these data can be misleading, as the grandfathers' help is highly dependent upon the grandmothers (their spouses), who organise, co-ordinate tasks and often tell them what to do. When grandfathers are alone their help decreases considerably.

In the case of maternal grandmothers only, the percentages of those who help in domestic tasks not directly related to childcare (cleaning, ironing, sewing) are significant but never exceed 10% of the answers.

The help of grandparents becomes even more important in exceptional circumstances, which are in fact not so very exceptional. Two-thirds of working mothers count on their own mothers, when they live in the same town, for situations such as children's illnesses, school holidays, staying with the children in the evening when the parents go out or keeping them for the week-end. The percentages for maternal grandfathers is 40%, for paternal grandmothers 35% and for paternal grandfathers 22%.

The help provided by grandparents in exceptional circumstances is not related to social or economic status (as is the case for ordinary domestic tasks): all working mothers, regardless of their economic and social position are helped by grandparents on these occasions.

Help from grandmothers is clearly related to geographical proximity. Three in four working mothers with their own mother living in the same home, building or street are helped by them to take care of the children. The percentage drops to 51% for those living in the same neighbourhood and to 38% for those living in the same town in a different neighbourhood.

Table 9.1. Kinship support for working mothers by specific ordinary tasks (% of working mothers with relatives living in the same town who are helped by them)

TASK	Maternal Grand-mother	Maternal Grand-father	Paternal Grand-mother	Paternal Grand-father
Take care of pre-school children *	52.1	20.3	22.0	9.9
Take care of children after school **	44.5	17.7	20.4	9.7
Take/pick up children from school	21.8	12.5	9.4	5.1
Prepare children's meals	23.0	4.5	6.0	1.1
Prepare daughter's meals	18.3	2.2	3.1	0
Prepare daughter's husband's meals	11.9	1.5	3.1	0.2
Clean the house	9.4	0.7	1.7	0
Wash clothes	8.6	0.4	1.7	0
Iron	8.8	0.2	2.3	0
Do the shopping	8.6	0.7	2.5	0
Take the children to the doctor	8.6	1.9	3.9	0.1
None of these tasks	46.2	73.8	75.9	87.4

* When working mothers have at least one child below age 4.

** When working mothers have at least one child below age 12.

Source: Encuesta de Compatibilización Familia-Empleo, 1998 (special tabulation).

For most working mothers kinship support is important and this perception is clearly associated with age. It is among the younger working mothers that a higher proportion mention the importance of this kind of help. Conversely, social status is not a very relevant variable for explaining how the help from family networks is perceived. For almost half of the interviewees, the key person from whom they receive help is their own mother, for 11% their

Table 9.2. Kinship support for working mothers in exceptional circumstances (% of working mothers with relatives living in the same town who are helped by them)

They Take Care	Maternal Grand-mother	Maternal Grand-father	Paternal Grand-mother	Paternal Grand-father
On week-ends	29.9	20.4	13.8	9.6
In the evenings when parents go out	33.7	18.9	16.7	11.2
When children are sick	41.6	21.9	16.7	9.9
During school vacation	33.0	19.8	13.8	8.5
If normal carer not available	11.7	6.5	5.3	3.4
In other exceptional circumstances	38.9	22.8	18.3	12.6
None of these tasks	35.1	60.2	65.0	78.0

Source: Encuesta de Compatibilización Familia-Empleo, 1998 (special tabulation).

Table 9.3. Working mothers' mothers who help take care of the children by place of residence (Data refer to interviewees with a mother living in the same town)

	Same home	Same building	Same street	Same neighbourhood	Same town
Grandmothers who help take care of their grandchildren	79.2	56.7	72.7	51.3	37.6
Grandmothers who do not help take care of grandchildren	20.8	43.3	27.3	48.7	62.4
TOTAL	100	100	100	100	100

Chi square = 50.579, significance = .000.

Source: Encuesta de Compatibilización Familia-Empleo, 1998 (special tabulation).

mother in law, 8% other female relatives and 5% other male relatives. For the rest of the interviewees, help from their family network is not important.

Grandmothers are playing the role of the mother. They are vicarious mothers or substitute mothers for their daughters. Help is usually transmitted through the female lineage, as is the case in other countries (Bloch and Buisson 1996). Often they are willing to help their daughters, partly because through them they can fulfil their desire for independence, which they cannot obtain directly by themselves. Grandmothers are available because most of them have been housewives throughout their life. Many of them, according to their daughters, seem to be quite happy taking care of their grandchildren, as it is a way to continue doing what they have done all their lives. Even if their husbands are retired, most of them do not consider themselves as retirees but as housewives¹⁰. The traditional ideology of women and 'sacrifice' might also underlie their commitment to taking care of their grandchildren while their daughters are at work. The role of grandmother carers is especially important for low-skilled working mothers who have a very limited range of options for taking care of their children.

- *Who takes care of your children when you are at work?*
- *My mother*
- *In my case, my mother.*
- *My mother too.*
- *Our mothers*
- *My sister.*

(Discussion group, Madrid, working mothers married or living with a partner, low SES, aged 20–29)

If it weren't for my mother I do not know how I would be able to manage.

(In depth interview, Madrid, married working mother, intermediate SES)

Table 9.4. Working mothers' perception of the importance of kinship support by age (Data refer to interviewees with family network in the town where they live)

Importance of Kinship Support	< 30	30–39	> 39	TOTAL
Without its help they could not work	37.3	18.5	4.9	16.9
Very important	31.7	30.8	17.5	26.7
Important	17.5	24.8	13.6	20.2
Not very important	13.5	26.0	64.0	36.2
Total	100	100	100	100

Chi square = 177.522 significance = .000.

Source: Encuesta de Compatibilización Familia-Emplo, 1998 (special tabulation).

When our grandmothers disappear I do not know what will become of us.

(In depth interview, Bilbao, married working mother, low SES, aged 20–29)

The help of grandmothers is often necessary for lone mothers who work.

She knows [her mother] that she is the only person who I can ask for help. [...] If I didn't have my mother I wouldn't be able to do anything.

(In depth interview, Madrid, working lone mother, low SES)

In other cases, even if grandmothers do not take care of their grandchildren on a daily basis, they are the person to be relied upon in exceptional circumstances such as, for example, school vacations, when children fall ill or if the person who normally takes care of them is not available.

The first generation of Spanish working mothers is receiving extensive and necessary help from the preceding generation. The strong family ties between mothers and daughters, a characteristic of the traditional family, are playing a decisive role in the involvement of the younger generations of women in the labour market. The growing involvement of women in paid work is already changing the family and will probably continue to do so. Thus the traditional family is actively collaborating in its change through the help that mothers of today are receiving from the preceding generation of women.

For working mothers, the help of grandmothers does not seem to be considered as a model for the future but just a temporary solution for a transitional generation. This explains why there is no idea of reciprocity with the following generation, their daughters. When asked if they would play a helper's role in the future when their own daughters face the problems they are facing now, working mothers of today who are now helped by their own mothers say that they will not. In the future, when they reach the age their mothers are now, they see themselves working or retired but not playing the role of the traditional mother with their grandchildren (which they are not playing even as real mothers).

– *Of course I will not stay at home taking care of my grandchildren. That's very clear for me.*

– *Not as a hobby, I mean I will not take care of my grandchildren just for the sake of my daughter making more money or leading a better life. I also want to have a better life, I have gone through a lot.*

(Discussion group, working mothers married or living with a partner, Madrid, low SES, age 20–29)

Oh, I will not leave my job to take care of my daughter's children.

(In depth interview, married working mother, intermediate SES, age 30–39)

9.4 CONCLUSION

There is no notion of reciprocity in working mothers' discourse, or any sense of guilt towards their mothers or their daughters. At least this does not appear to be the case for the younger generations, as if the cycle of intergenerational reciprocity was closed and finished. There might be some implicit reciprocity related to taking care of grandparents when they get old. Grandmothers of today are quite young and often they take care not only of grandchildren but also of their own parents (the great-grandparents). It could be that working mothers of today accept implicitly that they will have to take care of their ageing parents, probably after they retire and before they themselves get old. However, this is not what appears explicitly in their discourse where retirement is rather envisaged as a golden age not to be disturbed by the chore of caring for others.

The last generation of housewives plays twice the role of the mother, first with their own children, then with their daughter's children. The first generation of working mothers will not reproduce the role of the grandmother carer, or at least that is what they think now. In spite of that belief – or desire – there is some evidence, as mentioned before, that grandparents represent an important resource for child care, even in countries with generous state provision (Cooley et al. 1991, Voran et al. 1993, Kornhaber 1996, Eurostat 1997, Attias-Donfut and Segalen 1998). What will really happen in the future depends on the evolution of various factors like the age of retirement, geographical mobility trends or social policies to reconcile family and employment. But in any case, the last generation of the old gendered family has provided a double amount of intergenerational solidarity, with their children first, followed by their grandchildren, while the first generation of working women has received a double amount of help from the preceding generation. Exchange is not equivalent and it is not certain if reciprocity will be established with the following generation. The cycle seems to be coming to an end, and what was just a women's issue is now emerging as a new social problem concerning everybody. Public childcare policies appear in working mothers' discourse only marginally, maybe due to the problems the young Spanish welfare state has experienced in the last years, which makes it difficult to include new issues not yet socially perceived to be as relevant as old age pensions or health. Nonetheless, proposals for new policies for reconciling work and family life have very recently been put forward by the two main political parties (Partido Popular and Partido Socialista Obrero Español) and increasing concern about low fertility is developing public debate on the subject, which will hopefully push towards much needed social policies.

NOTES

1. The female activity rate for ages 30–34 was 30.9% in 1981; by 2005 it had increased to 75.6%. A similar trend can be observed for ages 35–39: in 1981 the rate was 28.25%, in 2005 69.0% (Labour Force Surveys, own calculations).
2. “Family-employment” has been conceptualised as a new field of research, between sociology of work and sociology of the family, seeking to understand the structural logic that links the spheres of paid and unpaid work (Commaille 1993, Barrère-Maurisson 1992, 1995).
3. In 1999, a law was passed by the Spanish Parliament to help reconcile family and employment (Ley 39/1999, de 5 de noviembre, para promover la conciliación de la vida familiar y laboral de las personas trabajadoras) to adapt the legal situation in Spain to the European Directive 96/34CE, 1996 on parental leave. The new law introduces the right for parents to take leave to raise children below eight years of age for a maximum period of three years. For other relatives, the maximum period of leave is one year. The law represents a first recognition of the problem posed by the increasing involvement of women in paid work, but probably only a minority of mothers and fathers will be able to benefit from this measure, as the leave is unpaid.
4. In Spain, 16.5% of employed women work part time and 2.5% of employed men compared to 30.1% and 6.3% in the EU (OECD 2004: 310).
5. Data comes from three different samples. The first one includes six discussion groups and eighteen in-depth interviews with working mothers living with a partner. The main variables to define the social profiles of the interviewees were age (20–29, 30–39, 40+) socio-economic status (based on the occupational status of the interviewee) and city of residence (Madrid, Barcelona, Valencia, Bilbao). The second sample duplicates the first one for working mothers who do not live with a partner, i.e. single, separated/divorced, widows. The third sample is limited to the peripheral areas, both urban-metropolitan and rural, in the region of Madrid, i.e. excluding the city of Madrid. It includes eight discussion groups and fifty in-depth interviews with women living in the area, segmented according to age, economic activity, family position and socio-economic status (SES).
6. A traditional Spanish dish made of boiled meat, chicken, pork and vegetables.
7. Giddens defines a “pure relationship” as one in which the individuals concerned are the only ones to determine the conditions of their association.
8. Spain has the lowest fertility in Europe with a TFR of 1.15, compared with 1.44 in EU15 (Eurostat 1998). At the world level, very few countries have lower fertility. They include Lithuania, Armenia, Bulgaria, Macao and Ukraine, all with a TFR of 1.10 (United Nations 2001).
9. The quantitative survey (Tobío et al. 1998) was based on 1200 interviews representative of Spanish working mothers defined as those living with a child below 18 years old. It includes questions on practical strategies used by the interviewees to reconcile their dual responsibility in the family and in the workplace. The information was collected through personal interviewing. The maximum error for the whole sample is 3% for a level of confidence of 95% (2 sigma). The fieldwork was done between March and June 1998.

10. In fact women who have been housewives throughout their lives tend to consider themselves as such until their husbands die, when they receive a widow's pension and they do not have to "work" any more (Tobío 1995).

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CHAPTER 10

INTERGENERATIONAL EXCHANGES IN OLDER POPULATIONS

EMILY GRUNDY

10.1 INTRODUCTION

Intergenerational exchanges are an essential component of the social and economic fabric of all societies and an element of major importance in the lives of nearly all individuals throughout the lifecourse. In modern industrialised societies much intergenerational exchange is mediated by state and civic authorities, which provide, for example, schools for children and pensions for the retired. Demographic changes, such as population ageing, clearly have implications for these collective support systems, as discussed in other chapters in this book. The focus of this chapter is on the ‘informal’ intergenerational exchanges that take place within family and kin groups. It is clear that such exchanges are considerable and important. Most obviously the raising of children involves substantial transfers of all types of support, predominantly from parents. At the other end of the age range, relatives provide much of the practical help and emotional support needed by elderly people with disabilities (Sundström 1994; Havens 1997). In this sense intergenerational exchanges operate similarly to formal welfare and social insurance systems in effectively facilitating transfers from one part of the life cycle to another – parents who provide a lot of help to adult children and grandchildren, for example, may expect some reciprocal assistance in old age.

Although age structure changes have led many to identify support for elderly people as one of the most pressing policy issues, it is important to note that both the limited amount of British research and the more extensive body of work from the US and elsewhere shows that the volume of transfers (of money, time and other types of support) from old to young adults is substantial. US and European research indicates the net flow of transfers is from older to younger generations, although this may reverse in very elderly groups (Kronebusch and Schlesinger 1994; Kohli 2004).

Just as population ageing is perceived as a threat to the stability of existing formal transfer and support schemes, so too is it regarded as potentially disruptive of intergenerational exchanges within the family. Other social, economic, and cultural changes also present challenges to intergenerational exchange systems. These include longer youth dependency occasioned by labour market changes and wider educational opportunities; greater labour market involvement of women, and increases in the complexity of partnership and parenting histories (European Commission 1995). Theorists have associated these latter changes with a shift from familial to individualistic aspirations and behaviours (Goldscheider and Waite 1991). If so we might expect to see a decline over time in frequent contact and exchanges of help between relatives, and perhaps a consequent increase in the demand for non-kin support not only for frail older people but also from groups such as lone parents and working mothers. However, many governments in industrialised countries have been seeking to curtail, rather than expand, public expenditures and support programmes suggesting greater pressure on family resources (Ogawa and Retherford 1997; Sundström and Tortosa 1999).

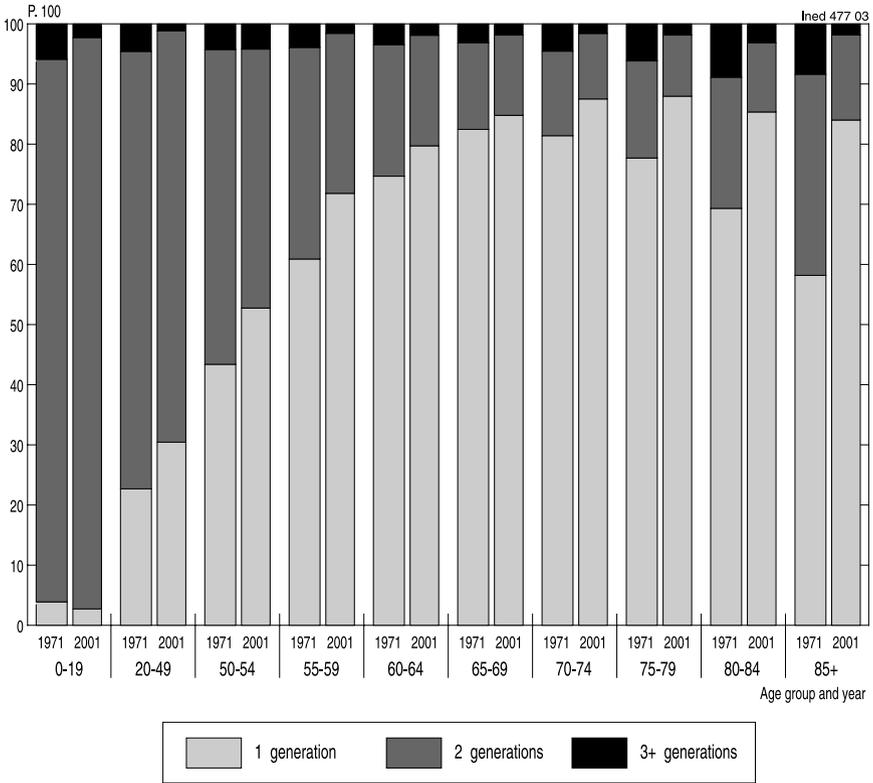
Demographic research on the family has traditionally focused on the analysis of family and household formation, change and dissolution with an emphasis on co-resident parent-child or husband-wife configurations (Burch and Matthews 1987). The demographic and social changes referred to above mean that such an approach is increasingly limited in what it can tell us about potential and actual exchanges of support between related, but not necessarily co-resident, individuals and there is a growing need for data sets which allow analyses of extra-household, as well as intra household, relationships. Nevertheless inter-generational co-residence remains important both as an indicator, albeit a partial one, of expectations about inter generational support exchanges and because for certain groups, such as the minority of older people with high assistance needs or seriously disabled adult children, co-residence may provide the only alternative to heavy reliance on formally provided long term care. For this reason trends in intergenerational co-residence are considered briefly below.

10.2 INTERGENERATIONAL CO-RESIDENCE INVOLVING ELDERLY PEOPLE

Declines in the proportion of older people living in inter-generational households in the twentieth century data have been so great that they have been described as 'a quiet demographic revolution' (Elman and Uhlenberg 1995). Results from an assortment of surveys show that in the 1950s and early 1960s between a third and a half of elderly people in several Nordic countries, England and Wales and the USA lived in households including at least one of their

children. More recent data for the early 1990s show that these populations were by then characterised by high levels of residential independence with the proportions of elderly people living with children in the region of 5–15% (Grundy 1992, 1999; Sundström et al. 1989; Sundström 1994). Trends in other industrialised countries show similar substantial declines even though the extent of co-residence continues to vary and is higher in Southern Europe and in Japan than in other industrialised countries (Ogawa and Retherford 1997; Reher 1998). These changes have involved the oldest old, as well as younger elderly people, as illustrated for England and Wales in Figure 10.1. This shows the distribution of women in by number of generations they lived with in 1971 and 2001. In

Figure 10.1. Women by age group and number of generations in their household, England and Wales 1971 and 2001



Source: Author’s analysis of ONS Longitudinal Study data.

all adult age groups the proportion living in three generational households was lower in 2001 than in 1971 but the most marked changes are apparent in the oldest age groups. In 1971, 41% of women aged 85 years and over lived in two or three generational households; by 2001 this proportion had fallen to 16%.

Trends and differentials in inter-generational co-residence viewed from the elderly person's perspective are not necessarily the same as those that may appear important from the perspective of the adult child, a proviso that applies to other forms of exchange as well. Differences in the size of 'parent' and 'child' generational groups mean that the proportion of elderly people living with a child is much higher than the proportion of adult children living with a parent. Thus the downward trend in the proportion of elderly parents living with children does not of itself imply a similar downward trend in the proportion of adult children living with a parent. Moreover while improvements in the health status and financial security of many older adults may have enabled more to continue living independently, the proportions of mid life adults who need the support of their parents may be increasing. Several studies have shown that divorce may lead to a return to the parental home and, especially among the younger middle aged, a high proportion of returns home are undertaken for the child's benefit (Ward et al. 1996). Analysis of data from the ONS Longitudinal Study, a large record linkage study of the population of England and Wales, showed that between 1981 and 1991 there was a marked fall in the proportion of mid life adults living with a parent (Grundy 2000). For example, in 1981 47% of never married childless women aged 33–44 lived with a parent compared with only 19% in 1991 (despite a probable increase in the proportion who had a parent still alive). Declines in co-residence were higher among more advantaged groups so that the characteristics of intergenerational households were rather less favourable in 1991 than in 1981.

The literature on living arrangement choices of older adults has identified changes in the economic ability of elderly people to maintain separate households, changes in age and gender roles and attitudes, including the growing value attached to privacy, changes in the availability of kin with whom to co-reside and possible improvements in health status as key variables underlying the trend towards residential independence (Michael et al. 1980; Pampel 1992; Wolf 1994; Weinick 1995). Studies of cross-sectional variations in living arrangements and transitions between household types broadly support this interpretation and show differentials in the extent of co-residence among older people by level of economic resources and by health and change in health (Crimmins and Ingegneri 1990; Hoyert 1991) and by number and demographic characteristics of children (Spitze and Logan 1992; Wolf 1994); as well as considerable variation between countries, regions, and ethnic groups (Clarke and Neidert 1992; Pampel 1992; Wolf 1990; 1995; Tomassini et al. 2004a).

Smaller families are less likely to include an adult child with the characteristics most likely to lead to co-residence with an elderly parent, hence the finding reported in a number of studies of a link between number of children and living arrangements. However the very large differences between populations and population subgroups with similar levels of fertility suggest that this effect has been relatively minor. Moreover, until recently the declines in fertility largely responsible for population ageing have been achieved through reductions in family size rather than by increases in childlessness and of course in many western populations fertility rates were in any case higher in the post world war two baby boom than in the inter-war period. As a result in many European populations, and in Canada, rates of childlessness are lower among those cohorts born in the inter-war decades (parents of the baby boom) than among either preceding or succeeding ones (Prioux 1993; Grundy 1996; Légaré 1998; Murphy and Grundy 2003). Most commentators agree that changing living arrangements of elderly people reflect wider choices rather than tighter constraints resulting from lower fertility. However, it should be noted that cohorts born after 1955 exhibit a return to higher rates of childlessness. Mortality as well as fertility plays an important part in determining availability of various kin. Falls in mortality result in more children surviving to their parents' old age, later widowhood (on average), longer co-survival with siblings and of course an increase in the number of older generation relatives still alive.

10.3 KIN AVAILABILITY AND INTERGENERATIONAL EXCHANGE

The changing demographic and socio-economic context of intergenerational relationships means that analyses based on indicators such as co-residence are now inadequate on their own. We need information on what kin – both extra resident and co-resident – are available to people at different stages of the life cycle, how much contact and support is exchanged with these kin and what effect socio-demographic and socio-economic factors have on both availability of kin and intergenerational exchange.

In 1999 the author, in collaboration with Mike Murphy, designed a module on kin availability and kin exchange which was included in two rounds of the British Omnibus Survey, a monthly survey of approximately 1,800 randomly chosen adults living in private households (Grundy et al. 1999). These data are used here to examine variations in intergenerational kin availability and exchanges of help. We also report results on trends using information from this survey and two rounds of the British Social Attitudes survey and on comparisons with the USA based on analyses of the USA Health and Retirement Survey (HRS) and the British Retirement and Retirement Plans Survey (RRPS) (both restricted to particular age groups).

Table 10.1. Distribution of Adults by Living Parents and Children and Grouped Social Class, Britain 1999

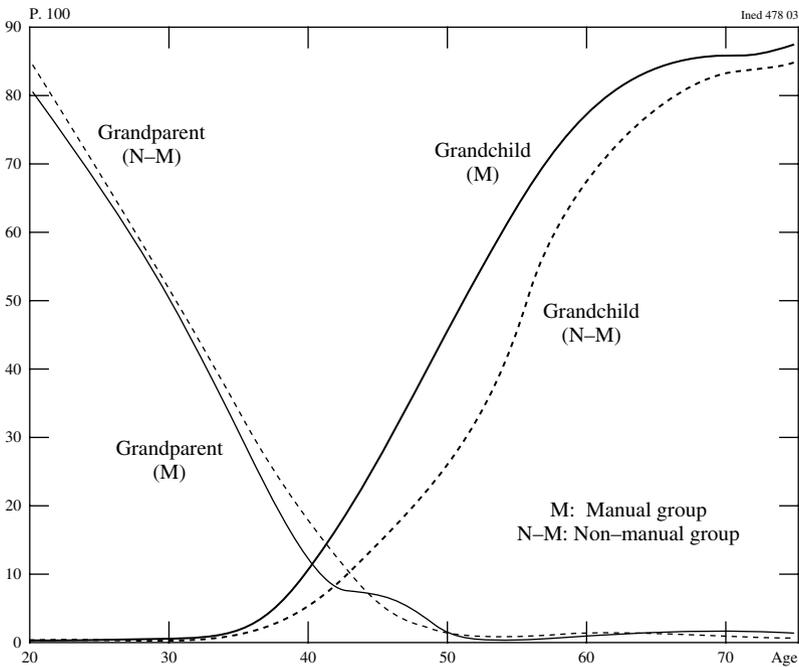
	16-29		30-44		45-69		70+		16+	
	Non-manual	Manual								
No parent, no child	0.3	0.3	1.4	2.3	8.4	8.9	17.3	15.1	6.0	6.3
Parent(s), no child	74.4	72.7	25.5	13.8	6.2	3.1	0.4	1.2	23.4	22.0
Child(ren), no parents	0.6	0.3	3.0	7.7	46.3	55.5	81.1	82.6	29.2	35.2
Parents and Children	24.7	26.8	70.0	76.2	39.1	23.3	1.2	1.2	41.1	36.6
All	100	100	100	100	100	100	100	100	100	100
N	352	392	624	390	775	604	208	211	2008	1644

Source: Analysis of 1999 Omnibus Survey module on kin and kin contact.

As shown in Table 10.1, the 1999 survey of kin and kin contacts in Britain found that only 6% of adults had neither a parent nor a child alive, although this proportion was 16% for those aged 70 or over. The vast majority of adults aged under 45 still had a living parent, this proportion was slightly higher among those from non manual groups reflecting their generally lower mortality.

Figure 10.2 shows the proportions at different ages with one or more living grandchildren or grandparents. Results (smoothed in order to reduce variations due to sampling error) are shown separately for those from non-manual and manual groups (based on last or current occupation) because of known social class differences in mortality and fertility. These figures show that by the age of 50 half the sample were grandparents. (In interpreting the charts it is important to remember that as they come from a cross sectional survey they reflect the experiences of different cohorts.) Men and women from manual social backgrounds become grandparents on average four years earlier than those from non-manual

Figure 10.2. Proportions of manual and non-manual groups with kin by age, Omnibus Survey, 1999



Source: Analysis of 1999 Omnibus Survey module on kin and kin contact.

groups (Figure 10.2). Eighty percent of those aged 20 still had at least one grandparent alive suggesting that this is a potential resource now available to most children throughout their childhood.

Using two broadly comparable surveys (the US HRS and the British RRPS) of people in late mid life (55–63) Henretta et al. (2001) found that in both Britain and the USA having a parent still alive in this age group was positively associated with income, good health and being more highly educated. This comparative work also illustrated the large effect the differing demographic history of Britain and the USA has had on the upward and downward kin links of those in late middle age, as shown in Table 10.2. The much higher baby boom fertility in the USA than in Britain, and lower mortality at older ages means that adults in late mid-life in the USA have potentially far greater responsibilities to children and parents than do their counterparts in Britain. Thirty-five per cent of 55–63 year old women in the USA had a living parent and a living child compared with only 19% of equivalent British women.

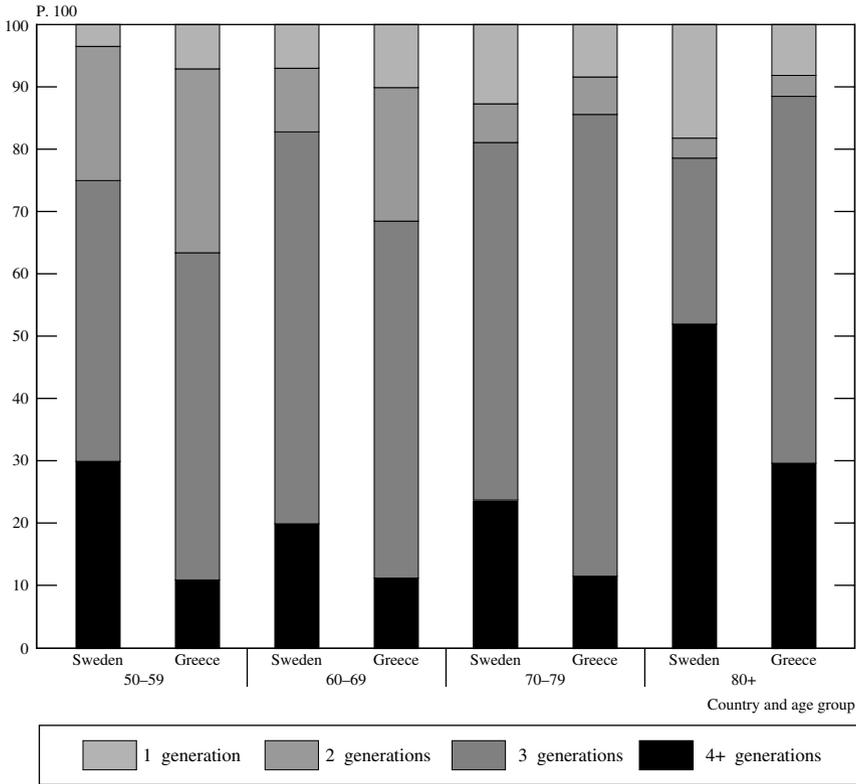
Most adults are members of families including at least three living generations, this proportion is lowest for those in their fifties where gains of grandchildren have not yet outweighed losses of parents (Grundy et al. 1999). Quite large minorities, particularly of very old people are members of families including at least four living generations, this is illustrated using the British data in Figure 10.3 which also shows the types of relationships involved and how they vary by age.

Table 10.2. Distribution of Women Aged 55–63 by Whether or Not They Had Surviving Parent(s)/Children, Britain 1988 and USA 1994

Women with:	Britain	USA
At least one child %	85.0	91.0
Mean no. of children	2.2	3.0
At least one living parent %	23.0	38.0
At least one child and at least one surviving parent %	19.0	35.0
At least one child, no surviving parent %	65.0	57.0
No children, at least one surviving parent %	4.0	3.0
No children, no surviving parent %	12.0	6.0
Number of cases	1096.0	3535.0

Source: Analysis of British RRPS and US HRS.

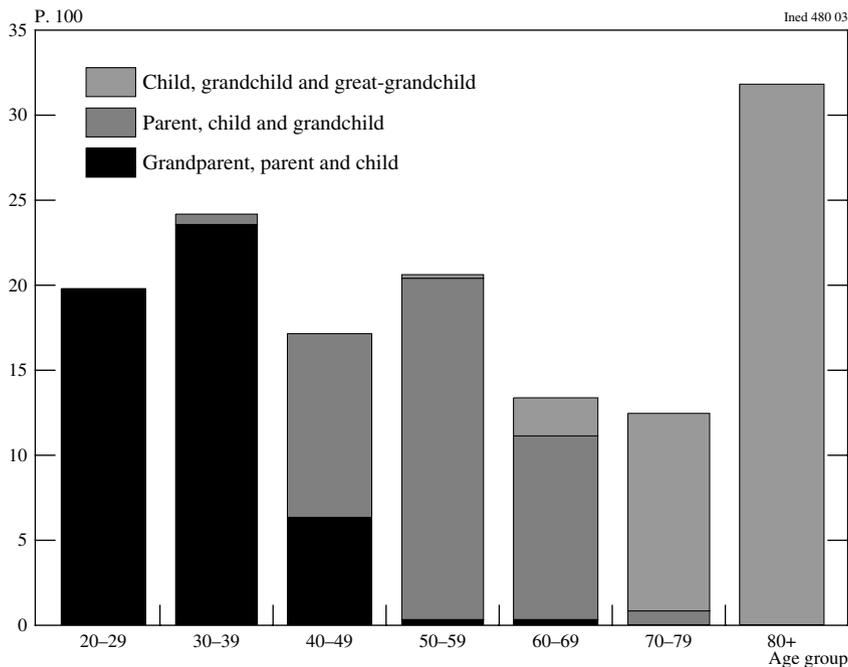
Figure 10.3. Percentage of persons in four generation families by age and type of relatives, Britain 1999



Source: Analysis of 1999 Omnibus Survey module on kin and kin contact in Grundy et al. (1999).

More recently similar data have been collected for a range of European countries included in the Survey of Health and Retirement in Europe (SHARE). These also show both the expected high prevalence of membership in multigenerational families in older age groups and wide variations between countries, reflecting different historical and contemporary demographic parameters. Figure 10.4 illustrates this for older women in Sweden and in Greece. In Sweden, with a long history of low mortality and currently higher levels of fertility than Greece, the proportion of older women in four generation families is higher, especially in the oldest groups.

Figure 10.4. Distribution of women (%) aged 50 and over by number of living generations in their families, Sweden and Greece, 2004



Source: Analysis of SHARE data (2004)

These results illustrate that membership of multigenerational families is the norm for adults in industrialised societies. Continuing decreases in mortality at older ages would suggest further increases in the proportions of mid and later life adults who still have a parent alive, although in the longer term the effect of mortality reduction is likely to be offset to some extent by later childbearing.

10.4 CONTACT AND EXCHANGES OF SUPPORT

The falls in co-residence discussed in the first section of this chapter have been interpreted by some as indicating a decline in family solidarity and support (European Commission 1995). However the provision of support of various kinds does not require co-residence, except in extreme circumstances, and results from a wide range of studies suggest that intergenerational support and contact is high, although less is known about trends over time

(Sundström 1994; Silverstein and Bengtson 1997; Bonvalet and Maison 1999). This support, as noted already, is often from older to younger generations although reciprocity is an important influence (Kunemund and Rein 1999; Grundy 2005). Table 10.3, for example, based on analyses of the British RRPS and the US HRS, shows that high proportions of mothers in late middle age provide help to their children with domestic tasks and childcare and a lower proportion help financially. British women appear to more likely to provide practical help and US mothers more likely to help with money.

Further analysis of the British study, which included a baseline round conducted in 1988 and a follow up in 1994, showed that the majority of mothers also received help from a child. Receipt of help was associated with social class and with disability. Among women aged 65–69 in 1988, for example, 27% of disability-free women from non-manual social classes (class was assigned on the basis of occupational history) were helped by a child compared with 50% of disability-free manual women. Receiving help from a child in the second round of the survey, when respondents were aged 60–75, was positively associated with close proximity of a child, with providing help to a child, and with older age, having a disability (and increased disability between survey rounds) suggesting that adult children respond to the increased needs of parents as they age.

The strong reciprocal element in intergenerational exchanges was also clearly evident in the results of our 1999 survey. The module included questions on ‘help you have provided regularly... over the past 12 months’. Respondents were asked about help provided to, and received from, mothers, fathers, eldest children, eldest siblings and eldest grandchildren with giving lifts; shopping; providing or cooking meals; looking after children; giving or lending money;

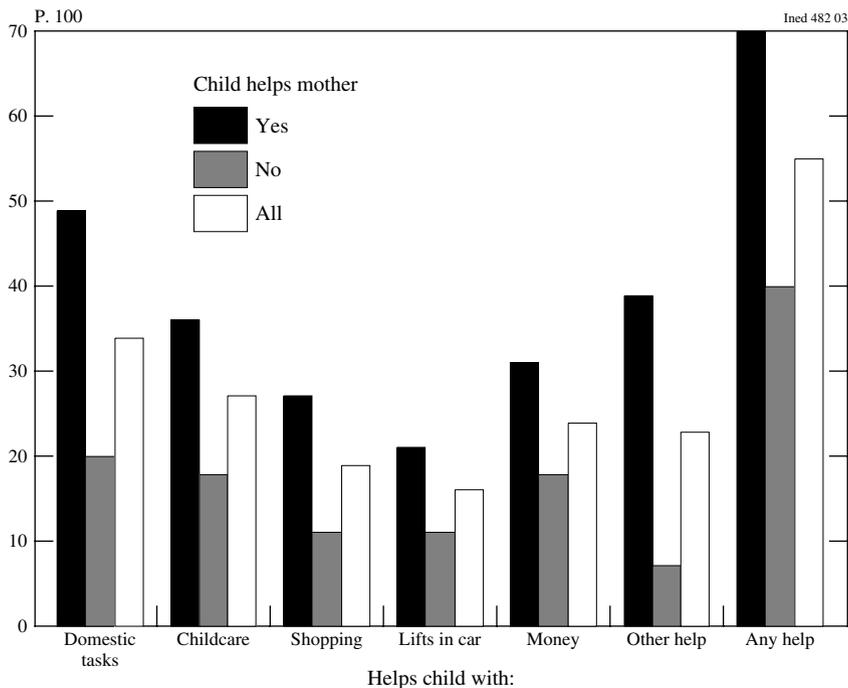
Table 10.3. Women Aged 55–63 (%) Who Provided Regular Help to Adult Children, Britain 1988, USA 1992

% Providing	All Women		Women with at least One Child					
			Married		Unmarried*		All	
	GB	USA	GB	USA	GB	USA	GB	USA
Help with grand children	30	38	36	47	37	35	36	43
Help with chores	38	24	46	28	42	23	45	26
Help with money	15	31	19	39	17	26	18	35

*Never-married, widowed, divorced or separated.

Source: Analysis of British RRPS and US HRS.

Figure 10.5. Percentage of mothers aged 50 and over providing help to their eldest child by whether their eldest child helped them, Britain 1999

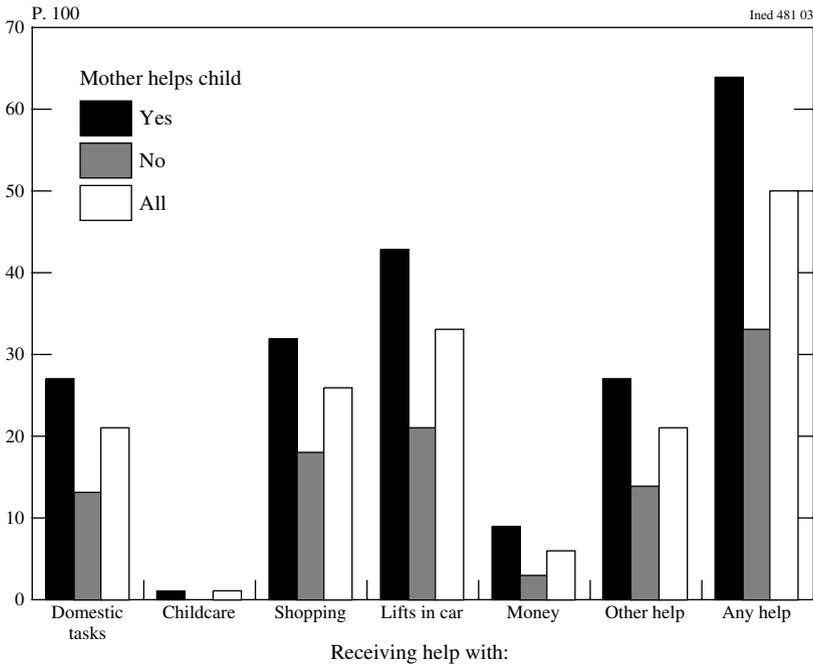


washing, ironing or cleaning; paperwork; and decorating, gardening or house repairs (these were the same questions included in the RRPS). As shown in Figures 10.5 and 10.6, among parents aged 50 and over those providing regular help to their eldest child were more likely than others to receive help, while recipients of help were more likely to be providers of help. Levels of provision and receipt of help were high.

10.5 PARTNERSHIP STATUS AND HISTORY AND CONTACT BETWEEN ADULT CHILDREN AND PARENTS

Although these findings, and results from other studies, show high levels of interaction between adults of different generations, concerns have been raised that these may be jeopardised by the increasing complexity of family relationships and increased family disruption (Goldscheider 1994). Studies from the United States and the elsewhere suggest that divorced parents, particularly

Figure 10.6. Percentage of mothers aged 50 and over receiving help from eldest child by whether they provided help to their eldest child, Britain 1999



Source: Analysis of 1999 Omnibus Survey module on kin and kin contact.

divorced fathers, have less contact with their adult children than parents of other marital statuses (Lye et al. 1995). One study, however, has shown that adult daughters' proximity to mothers is positively associated with the mother being divorced (Rogerson et al. 1997). Two factors may underlie these associations. On the one hand unmarried parents may be perceived to have greater needs for support and social exchange with their adult children (and more time to initiate and maintain exchanges). On the other adult children may have weaker or less positive bonds with parents, perhaps particularly fathers, if there is a history of marital conflict between parents and/or absence/repartnering of the parent. The effects of an adult child's partnership characteristics on their relationship with their parents are also likely to be variable. Divorce may precipitate a return to the parental home and divorced children have higher rates of co-residence with their parents than married children (Ward et al. 1996; Grundy 2000). However, although divorced children's heightened support needs may in these cases lead to

closer ties with parents, in other cases parental disapproval of marital disruption and other 'non standard' family patterns, such as cohabitation could weaken ties, especially where the parents' and child's history and values diverge.

In Table 10.4 we examine variations in contact between adults aged 22–54 and their parents according to partnership status of respondents and their mothers/fathers (only those with a mother/father alive are included). Overall, weekly contact with mothers appeared more usual if the respondent had a 'non standard' partnership history (experience of divorce, remarriage after divorce or current cohabitation) but less so if the mother's partnership history was disrupted. Weekly or more frequent contact with fathers was much less common where the father's partnership history was non-standard. Multivariate analysis showed that children with disrupted partnership histories whose mother's partnership history was also disrupted appear to have a lower odds of contact compared with dyads neither of whom have experienced partnership disruption, but this difference was only statistically significant at the 10% level. Results for models of contact with fathers showed a stronger association between contact and partnership histories. Results of analyses of differences in the provision of help by adults aged 22–54 to their parents gave similar results. Provision of help to mothers was positively associated with the respondent having a child under 16, with older age of mother and very strongly with receipt of help from mother and with proximity. When proximity was not controlled for, education was also significant with those in the lowest educational group being twice as likely as those in the highest to provide regular help.

Help provided to fathers was more strongly associated with father's partnership history, as shown in Table 10.5. Odds of providing help to a father were 40% or more lower where the father's partnership history (but not the respondent's) was disrupted and also lower where both had disrupted partnership histories.

These analyses show that contact and exchanges of support between adults, including older adults, of different generations is usual. In general lower education is associated with more contact/provision of help (and this cannot be wholly explained by differences in proximity). Contact/help exchanges with fathers are reduced if the father has had a disrupted partnership history; this is consistent with other studies in which other indicators of support, including emotional closeness, have also been examined (Bonvalet and Maison 1999). Silverstein and Bengtson (1997) for example report that adults have weaker links with fathers who have been widowed, as well as those who have been divorced, a factor we have also found was associated with contact (Grundy and Shelton 2001).

Table 10.4. Percentage of Respondent Who Saw Their Mother/Father at least Weekly by Partnership Characteristics, Britain 1999

	22-34		35-44		45-54		22-54	
	M	F	M	F	M	F	M	F
Contact with Mother								
Respondent never married	49.0	45.8	23.7	45.5	66.7	37.5	47.0	45.4
Respondent in first marriage	48.4	54.5	44.9	52.7	58.5	46.5	48.7	56.9
Respondent 'non-standard' partnership history	51.9	72.1	56.5	54.1	55.1	44.6	54.1	68.1
Mother 'non-standard' partnership history	47.7	52.7	42.0	42.9	37.5	60.8	43.9	51.0
Both 'non-standard' partnership history	52.1	50.7	25.8	64.0	70.0	48.0	44.9	60.0
Neither 'non-standard' partnership history	53.1	56.2	45.8	51.5	47.5	59.8	48.9	55.8
All	51.7	57.8	45.4	51.4	48.2	56.7	48.8	55.1
Contact with Father								
Respondent never married	41.9	45.7	18.8	29.4	75.0	70.0	40.6	44.2
Respondent in first marriage	50.7	48.2	46.5	45.4	26.3	53.6	46.6	48.0
Respondent 'non-standard' partnership history	56.0	77.0	46.2	54.1	51.5	35.3	52.3	62.0
Father 'non-standard' partnership history	31.0	29.9	18.5	28.2	11.1	31.0	24.0	29.0
Both 'non-standard' partnership history	36.4	18.3	54.1	-	-	40.0	36.5	12.3
Neither 'non-standard' partnership history	50.2	54.4	53.4	47.8	32.4	61.7	47.9	52.9
All	45.9	49.2	45.1	45.4	31.9	51.0	43.2	48.1

'Non-standard' includes cohabiting, separated, divorced, remarried and, for parents, never married

Source: Analysis of 1999 Omnibus Survey module on kin and kin contact.

Table 10.5. Results from Logistic Regression Analyses of Provision of Regular Help to Father by Adults Aged 22–54, Britain 1999

	Model 1				Model 2			
	Odds Ratio	P Value	Confidence Interval		Odds Ratio	P Value	Confidence Interval	
Parent of child < 16	1.78	0.000	1.35	2.36	1.65	0.000	1.25	2.17
Household has at least one car	0.67	0.042	0.45	0.99	0.59	0.007	0.41	0.87
Father's age	1.03	0.000	1.02	1.04	1.03	0.000	1.02	1.04
Receives help from father	3.62	0.000	2.70	4.85	4.35	0.000	3.29	5.76
Low education	1.47	0.028	1.04	2.07	2.01	0.000	1.46	2.78
Medium education	1.14	0.478	0.79	1.64	1.41	0.052	1.00	1.99
Father non standard partnership history	0.57	0.004	0.38	0.83	0.52	0.001	0.36	0.75
Respondent non standard partnership history	0.79	0.204	0.55	1.13	0.82	0.264	0.58	1.16
Both non standard partnership history	0.57	0.038	0.34	0.97	0.57	0.039	0.33	0.97
Lives within half an hour of father	1.59	0.000	1.37	1.84				
Number of obs			1187				1187	
Log likelihood			-701.43				-723.50	
Pseudo R2			0.148				0.121	

Reference categories: No dependent child under 16; no car; high education; does not receive help from father; neither father nor respondent non standard marital history; lives beyond half an hour of father.

Source: Analysis of 1999 Omnibus Survey module on kin and kin contact.

As noted in the introduction, there are concerns that intergenerational exchanges of support and help may be declining. We have been able to examine one aspect of this using data from three nationally representative British data sets, our 1999 data and two round of the British Social Attitudes Survey conducted in 1986 and 1995 to analyse trends and differentials in contact between adult children aged 22–54 and their non co-resident mothers and fathers (Grundy and Shelton 2001). The results showed that in all years having at least weekly contact is positively associated with being female and with lower levels of

education and negatively associated with age, number of siblings and being a tenant in the privately rented sector. Daughters had more contact with mothers than with fathers and children were less likely to see their fathers at least weekly if their mother was no longer alive, indicating a strong gender dimension to intergenerational contact. These associations were observed whether or not proximity, which was very strongly associated with contact, was controlled for in the analysis. Odds of at least weekly contact with living parents were significantly lower in 1995 than in 1986, but there was no significant difference between 1999 and 1986, and so no clear indication of a trend towards reduced contact.

10.6 DISCUSSION

Rapid and recent changes in the living arrangements of elderly people, increases in divorce, remarriage, cohabitation and childbearing outside marriage in combination with substantial increases in the numbers and proportions of very old people have aroused serious concerns about intergenerational relationships in an ageing world. These concerns are not new, obituaries for the family have frequently been published but on further enquiry found to be premature (Scott 1997). How different is the situation today and how may it change in the future?

Increases in the proportion of older people in the population imply more grandparents and elderly parents relative to adult children and grandchildren. As we have seen membership of multigenerational family groups is now the norm and grandparenthood may precede orphanhood. However, current generations of elderly people come from cohorts in which marriage rates were high, fertility if not high, higher than it is now (or was in some populations in the 1930s) and in which divorce rates were lower than they are now. They are therefore relatively well provided with younger and same generation relatives, through blood or marriage. If fertility remains or reaches the very low levels now seen in Southern Europe and Japan, and if celibacy (never-marrying) and divorce remain or reach high levels then future cohorts will include larger proportions with no children (and no directly descended grandchildren) and no current spouse. Patterns of later childbearing repeated over generations will also by the middle of the century offset the implications of falling mortality and lead to a slight reduction again in the proportions with living older generation relatives (Murphy and Grundy 2003). Traditionally childless unpartnered individuals have been more likely than their married peers with children to provide care to elderly disabled relatives, but also less likely to receive such care themselves and more likely to enter an institution. It should be noted too that lower fertility also reduces the supply of siblings, nieces and nephews who in some societies have been the main supporters of

never-married childless elderly people. In this chapter we have only considered relationships between parents and children, further work on the roles of more distant dyads (aunts/nieces) is also needed.

The findings presented and discussed in this chapter show that currently intergenerational links are strong and that, as has often been noted, reciprocity is a key feature of relationships between adults of different generations. Those who give help also receive it, often as part of everyday exchange. Increasing frailty may undermine such reciprocal relationships which is probably why relationships with family members prove more resilient in the face of advanced disability than relationships with friends (Willmott 1987). Longitudinal studies of the social networks of older people have shown that although new relationships are made and maintained, on average the size of networks diminishes with advanced age and family members become more predominant in them (Bowling et al. 1995).

As in other studies we have found that men who had experienced divorce had weaker links with children than other men, and this is a group which is growing rapidly in many industrialised countries. It is also worth noting the lower levels of contact and mutual help associated with higher levels of education. Again this is not a new finding, but one that has attracted rather less attention than the implications of changing partnership histories (possibly because of the values held by social policy commentators). One implication is that as levels of education in the population rise then close family links may weaken. Viewed more positively, choices to cultivate relationships outside the circle of close family may become more available, moreover models of contact levels in the next twenty or thirty which incorporate changes in levels of divorce and education show quite modest effects (Tomassini et al. 2004b).

One question we need to consider is whether it matters if the proportion of people with available close relatives with whom they have strong relationships declines or, in the words of Daatland (1990) 'What are families for?' If intergenerational family support becomes less available for some, either because of demographic or socio-economic change, can other supports be substituted for family ones? Daatland (1990, 1996) has suggested that elderly people may prefer to receive professional rather than family help while still counting on families for emotional support. Possibly changes in technology will improve the help that can be provided to elderly people with health impairments and enable further postponement of serious disability. Needs for emotional support and companionship will of course remain, but perhaps these are functions that same generation friends and more distant relatives, rather than only close kin, can provide. However, if professionals are to be called upon to provide personal care for the minority of older people who have serious functional limitations, labour supply problems may be an issue as the numbers in younger age groups decline relative to those in older ones. Changes in the education and aspirations

of women may compound this effect as more women opt for full time career jobs rather than part time and often poorly paid carer ones. Shifts from unpaid to paid support may also require an increase in formal intergenerational exchanges mediated by tax systems. All these considerations would suggest that, although both opportunities for intergenerational exchanges within the family and actual exchanges of support are currently strong, the maintenance of these at the same level in the longer-term future may be less certain.

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CHAPTER 11

FAMILY SOLIDARITIES AT THE BEGINNING OF RETIREMENT IN FRANCE

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During the last decade, a large volume of research has demonstrated the importance of the relations between generations and the changing ways in which they are expressed at different ages, in old age especially. In terms of the exchange of services, it appears that young retirees are creditors whereas the very elderly are debtors, and often receive fewer visits (Attias-Donfut, 1995; Blanpain, 1992; David and Pan Ke Shon, 1999).

These results, obtained from period data, certainly reflect an age effect: as the younger generations are more individualistic, one might expect that the probability of receiving visits in old age would be higher for persons from the older generations; though in fact the opposite is observed.

The cohort survey, “Passages de la vie active à la retraite” (“Transitions from working life to retirement”) will allow us to define more precisely this effect of advancing age on solidarity behaviours: we will analyse a cohort in order to describe changes in family relations at the beginning of retirement, in terms of contacts as well as of exchanges of services. We will also look at the role played by kinship transformations in these changes.

The objective of the survey, initially conducted in France between 1980 and 1984 among a representative sample of private-sector workers, was to assess the radical changes in individual lives brought about by retirement (Paillat (dir.) et al., 1989). A total of 1,500 individuals, all born in 1922, were interviewed at the ages of 59, 60 and 62. Although this moment is a crucial one for each working person, the subsequent period also deserves attention. In 1997¹, 940 of these people (representing 80% of the surviving population) were therefore questioned again² (Delbès, Gaymu, 2003).

Many family events had occurred during the previous 13 years, some linked to mortality (death of relatives and especially of the spouse), and others to fertility (transition to grandparenthood, increase in the number of grandchildren and birth of great-grandchildren).

Do such events give rise to changes in family solidarities? Is the family mobilized to help newly-bereaved members get over the loss of a husband or wife? Do these relations change as the bereavement becomes more distant in time? More generally, what are the consequences of termination of marriage (divorce or widowhood) on the relations established with relatives?

Moreover, does the birth of grandchildren or great-grandchildren change sociability and mutual aid within the family? Are the latter affected by age at grandparenthood?

Lastly, in general, what impact do state of health and social status have on the expression of these solidarities?

Based on the answers to these questions and on the likely future characteristics of families (increase in the number of divorces, later arrival of children, older age at widowhood, more frequent survival of grandparents, etc.) we will try to project how solidarities during old age will be expressed in the future.

11.1 INDIVIDUALS AND THEIR SOCIO-ECONOMIC CONTEXT: CHANGES IN 15 YEARS

These relations with relatives depend upon the characteristics of individuals (size of kinship, income, health status, etc.) and upon the context in which they find themselves. Changes in family context, health status and income are undoubtedly the most decisive. We will describe them briefly.

11.1.1 Family Events

Although at age 59, almost all of the men live with a partner, only half the women are in this case: more than a quarter of them are already widows, an extremely rare occurrence for the former (2%). Divorce, not frequent in these cohorts, only concerns a small fraction of respondents (3% of men and 8% of women), lastly 3% of the men and 13% of the women are single³. Contrary to widely held opinion, stopping work does not represent a threat for the very great majority of couples: between the ages of 62 and 75, divorces remain very rare (1%). New unions are just as rare and only the death of the partner modifies marital status: at 75 almost half of the women are widows and 11% of the men are widowers. As a logical consequence of this, the number of single-person households has increased rapidly: at age 75, 64% of women and 14% of men live alone; 13 years earlier they were only 38% and 4% respectively.

Death does not only affect the person who, in these cohorts, was the companion of a whole lifetime, it also affects the direct ascendants. At 59, 29%

of the persons interviewed still had a father, a mother or both parents living (34% of married persons had at least one of their parents-in-law still living); the proportion had fallen to 20% three years later (23% with a parent-in-law still living). At 75, the question was no longer asked, these grandparents being centenarian or almost centenarian.

Not only has the family lost its older members but it has also lost some collateral members. Close to 30% of the persons interviewed had lost a brother or a sister between the ages of 59 and 75. In addition, more than 3% of both men and women had lost a child and 1.5% a grandchild: undoubtedly, this is one of the most dramatic events that can occur at this already vulnerable time of life, and all future plans must be adjusted as a consequence.

In all, between 62 and 75 years of age, 64% of respondents had lost at least one relative other than their partner.

However, although the family loses its older members, other shoots take root: at 59, 82% of parents⁴ are grandparents and at 75, 93% of them are. The number of grandchildren varies; 12% have only one grandchild, 16% have two, 13% have three and... the family with the largest number has 33 grandchildren.

Moreover, many parents have become great-grandparents: though quite exceptional at age 59, one father in five and one mother in three is a great-grandparent at age 75⁵. This new generation is not yet very numerous: 43% of these families with at least 4 generations only have one great-grandchild, 23% have two and 34% have three or more.

11.1.2 Changes in the State of Health

With advancing age, the respondents' health status deteriorated noticeably. All the indicators pointed in the same direction: perceived health, presence of chronic disorders or illnesses, and the discomfort caused by these, and the consumption of medicine. Overall, men and women follow the same pattern, age having less impact on persons in higher-level occupations.

Despite this negative trend, 4 respondents in 10 claim to be in good or very good health and independent: only 3% are very dependent.

11.1.3 Changes in Income

Longitudinal observation between the ages of 59 and 62 revealed a smaller than expected decline (less than 20%) in individual resources and, by extension, in household income after retirement. During the following 13 years, this decline continued, totalling 16% on average. Although, unsurprisingly, the income of respondents who were still working at age 62 or who had lost their

partner was substantially reduced, even those whose environment did not change were affected due to the increase in social security contributions. Thus, for example, couples where both partners had already retired at 62 experienced a 6% reduction in income.

However, pensioners have a tempered perception of their reduced financial circumstances: among those who experience a reduction in income, very few perceive it as such. Not yet affected by serious health problems but already living a quieter home life, their aspirations in terms of consumption are doubtless more limited.

11.2 CONTACTS

On the eve of their retirement, many respondents said they wanted to use their extra leisure time to see more of their families, especially when they had many children. Although such projects were partly realized, reactivation of family ties only lasts a certain time. With advancing age family contacts become less frequent⁶: at 62 the number of visits per month is 15.5, but at 75, it is only 12.8, below the level observed at 59.

At all ages, the family size plays a major role in the frequency of contacts. At age 75, for childless persons, the number of monthly contacts is 5.4, for parents without grandchildren it is 7.9 and for grandparents it is 14.5. For parents – the majority of cases (85%) – family sociability is built around children and grandchildren, and having many descendents increases the frequency of contacts. These results are found in many surveys: “Parental ties are essentially an extension of the nuclear family” (Crenner, 1998). Contacts become more infrequent for direct collaterals, and even more so for more distant relatives. Respondents without descendents have more contacts with their brothers and sisters and other family members, though far fewer contacts with relatives overall (see Table 11.1).

This decline in contacts with advancing age would appear, at first sight, to be contrary to the wishes expressed by the respondents before they retired. To what extent is it due to the transformation of the family (death of the parents and certain collaterals, entry into adolescence or adulthood of grandchildren and termination of marriage) or to the deterioration of health? Are different social categories equal before such a decline?

11.2.1 The Effect of the Termination of Marriage

Each partner has a role in maintaining family sociability. Do these relations, built around the couple, suffer when the couple breaks up because of widowhood or divorce?

Table 11.1. Changes in Family Contacts According to Family Environment and Kinship Type (Number of Contacts per Month)

	Men			Women			Total		
	Age 62	Age 75	Numbers	Age 62	Age 75	Numbers	Age 62	Age 75	Numbers
Parents whose family has not changed between the ages of 62 and 75									
children	5.9	5.1	6.2	6.2	5.9	6.0	6.0	5.4	5.4
grandchildren	4.7	3.5	4.7	4.7	3.4	4.7	4.7	3.5	3.5
others	4.8	2.8	3.9	3.9	2.7	4.4	4.4	2.8	2.8
total	15.4	11.4	185.0	14.8	12.0	128.0	15.2	11.6	313.0
Parents whose family has grown between the ages of 62 and 75									
children	7.0	6.6	8.1	8.1	6.5	7.4	7.4	6.6	6.6
grandchildren	5.7	5.7	6.6	6.6	5.4	6.0	6.0	5.6	5.6
others	4.7	3.7	5.4	5.4	3.9	4.9	4.9	3.8	3.8
total	17.4	16.0	293.0	20.1	15.8	158.0	18.3	15.9	451.0
Total parents									
children	6.5	5.9	7.2	7.2	6.2	6.8	6.8	6.0	6.0
grandchildren	5.2	4.7	5.8	5.8	4.4	5.4	5.4	4.6	4.6
others	4.9	3.6	4.7	4.7	3.4	4.8	4.8	3.5	3.5
total	16.6	14.2	502.0	17.7	14.0	294.0	17.0	14.1	796.0

(Continued)

Table 11.1. (Continued)

	Men			Women			Total		
	Age 62	Age 75	Numbers	Age 62	Age 75	Numbers	Age 62	Age 75	Numbers
Parents already grandparents at 62									
children	6.8	6.0		7.5	6.5		7.1	6.2	
grandchildren	6.3	5.0		6.6	4.8		6.4	4.9	
others	4.8	3.7		4.9	3.6		4.8	3.7	
total	17.9	14.7	418.0	19.0	14.9	257.0	18.3	14.8	675.0
Parents who became grandparents between the ages of 62 and 75									
children	-	-		-	-		6.1	5.5	
grandchildren	-	-		-	-			5.0	
others	-	-		-	-		5.2	2.6	
total	-	-	43.0	-	-	17.0	11.3	13.1	60.0
Parents without grandchildren									
children	4.3	4.5		4.5	4.8		4.4	4.6	
others	5.5	4.1		3.6	1.9		4.8	3.2	
total	9.8	8.6	36.0	8.1	6.7	23.0	9.1	7.9	59.0
Respondents without children									
total	6.1	5.3	51.0	7.3	5.5	90.0	6.9	5.4	141.0

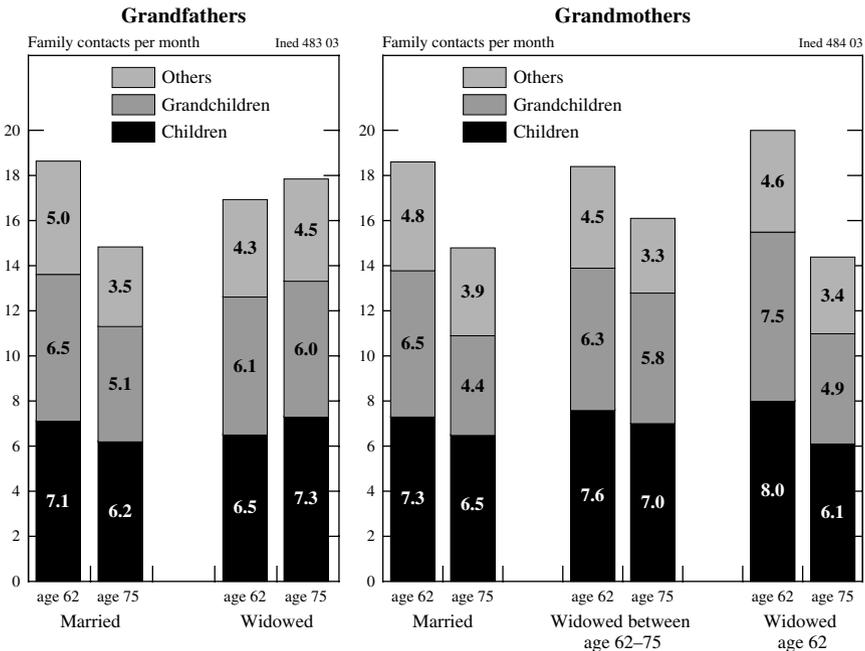
<i>Respondents having lost a relative</i>									
children	6.2	5.5							
grandchildren	4.9	4.2							
others	6.1	3.6							
total	17.2	13.3	366.0	17.4	12.8	224.0	17.3	13.1	590.0
<i>Respondents who have not lost a relative</i>									
children	5.7	5.6							
grandchildren	4.6	4.5							
others	2.5	3.5							
total	12.8	13.6	174.0	12.1	10.9	145.0	12.5	12.3	319.0
<i>Total respondents</i>									
children	5.9	5.4							
grandchildren	4.8	4.3							
others	5.0	3.6							
total	15.7	13.3	553.0	15.3	12.0	384.0	15.5	12.8	937.0

11.2.1.1 *Widowhood*

- Between the ages of 62 and 75, family sociability was better preserved among respondents who had become widowed than among those who still lived with a partner⁷ thanks to the specific desire on the part of the wider family to help these recently isolated individuals overcome their bereavement: among widows, ties became stronger and, contrary to almost all other pensioners, widowers benefited from renewed contacts. At age 75, among grandparents for example, 17.8 family visits per month were counted among widowers and 16.1 among widows compared with 14.8 among married individuals of both sexes.

Widowers see their children and grandchildren more (see Figure 1). For the children, the differences according to marital status are greater for men due to the traditional distribution of roles. After the death of their partner, men from these cohorts find it difficult to cope with everyday life so their descendents rally round to offer a helping hand.

Figure 11.1. Evolution Between Age 62 and 75 of Family Contacts Among Grandfathers and Grandmothers According to Their Marital Status



On the contrary, concerning the grandchildren, the greatest differences are between widows and married women. Because they have more time available than married women and are still in relatively good health, widows devote a lot of attention to their grandchildren, who their children are happy to place in their care as a way of bringing them out of their solitude.

Lastly, the effect of widowhood on relations with other family members differs according to gender: it stimulates contacts for men whereas it decreases them for women. This marital status, rare among men, gives rise to special attention on the part of their entourage.

- Women having lost their partner before age 62⁸ experience a greater decline in the number of contacts than the others, though they benefited at 62 from strong family mobilization because of their recent widowhood (20.1 visits compared with 18.6 for married women). With time, their solitude is gradually taken for granted: at age 75, married women and widows have the same number of visits (approximately 14.5).

But shouldn't the decline in exchanges following the death of their husband have reduced contacts to a greater extent than among couples? Isn't the similarity of situations evidence of the descendants' desire to ease the solitude of their widowed mother?

11.2.1.2 Divorce

Although, between the ages of 62 and 75, changes in family relations of divorced and married people are comparable, at 75, divorced people⁹ have far fewer contacts with their families than married people (10 visits compared with 13.5). There is nothing surprising in this, the children having to share their time between the two parents.

However, divorce has radically different consequences on the frequency of family visits for men and for women. The situation of divorced women is quite similar to that of married women. Divorced men have far fewer contacts with their family than their married counterparts however, and see their family hardly more frequently than single men. It is true that the children and grandchildren are at the heart of family relations. In these cohorts, women practically always had custody of the children. The men only saw them occasionally, and sometimes not at all (Festy, Valetas, 1987). So it comes as no surprise that in old age men rarely see their children (3.3 visits compared with 6.2 among women)¹⁰ and even more rarely their grandchildren (1.8 and 3.8 respectively)¹¹.

11.2.2 The Effect of Kinship Changes

Between the ages of 62 and 75, contacts are less frequent for all types of family relationships, whatever the family configurations. The only exceptions

are the respondents who became grandparents between those two ages (see Table 11.1).

- Grandparents aged 62 see their grandchildren on average 6.4 times per month and those aged 75 see them only 4.9 times per month. Rather than a consequence of the grandparents' ageing, this should be seen as the effect of the ageing of the grandchildren, who are more interested in spending time with their friends than with their grandparents. Whether aged 62 or 75, approximately one quarter¹² of grandparents with grandchildren aged over 12 see them at least twice a week, and this proportion rises to approximately 40%¹³ when they have young grandchildren. In general, the birth of a grandchild has a positive effect on family life and curbs the decline in contacts.
- With time, respondents' contacts with children who themselves have children decline slightly¹⁴, whereas childless children continue to see their parents as often. With the increased independence of the grandchildren, contacts linked to requests for childminding or services become rarer and, since most respondents are still in good health, few children feel the need to increase their presence or to provide help. Maybe in the future the children will rally round again as did their own parents at the beginning of their retirement for their grandparents¹⁵.
- Contacts with other family members decline even further, due essentially to the contraction of the kinship network. This is because when no deaths have occurred in the period, ties with other relatives are revived (2.7 visits at 62 compared with 3.5 at 75), with the latter certainly seeking likewise to compensate for the fact that they see their children less. On the other hand, when there has been a death in the family – parents, parents-in-law, brothers or sisters – contacts unsurprisingly become more infrequent: 6.4 contacts on average at 62 compared with 3.8 at 75. The very high figure for the number of contacts at 62 is linked to the strong demand for contacts, help and services from very elderly parents¹⁶. Their death explains the reason for the strong decline in visits in this group, which drop back to the average level at age 75.

11.2.3 The Effect of Health Status

The state of health perceived at the time of the survey – and its evolution over the previous 13 years – does not seem to influence changes in the frequency of family contacts among men. It is true that organizing social contacts with the

family is generally left to women (Héran, 1988). Among women, the number of visits declines less when they are in good health or when their health has improved.

At age 75, being in good health stimulates family relations for women and reduces them for men. Women in good physical shape cope easily with the fatigue involved in receiving family relatives, whereas men seem to turn to other interests. Moreover, and paradoxically it seems, having a partner in good health tends to somewhat restrain family contacts: couples in this situation are more mobile and apparently more interested in other types of leisure activity. In fact, family life and leisure activities are interlinked: cultural activities are undertaken at the expense of family life, and the absence of physical or manual activities is often associated with a quiet social life¹⁷.

11.2.4 The Effect of Social Status

At age 75, the higher the social category, the lower the degree of involvement in the family (persons in higher-level occupations see their family 11.4 times a month, blue-collar workers see theirs 13.8 times a month, see Table 11.2).

For men, widowhood, more frequent at these ages among blue-collar workers, and their poorer state of health are two of the factors behind the greater mobilization on the part of their children: it is because the children keep up the same frequency of visits between ages 62 and 75 that male blue-collar workers maintain their family relations at a higher level than other categories of men. For women, since poor health reduces family contacts, and families do not rally round widows more than married women, these factors cannot explain the better position of female blue-collar workers and the greater stability in their family contacts as they advance in age. Might these differences represent different norms of conviviality, today and at these ages, by socio-occupational category¹⁸?

Because at the top of the social hierarchy people respond more to the appeals of the consumer society (going away for the weekend, for example), might not the traditional rituals of family gatherings be more fundamentally and more easily called into question (the family Sunday lunch, for example)? This tendency is certainly supported by the fact that persons in higher-level occupations have fewer children¹⁹, and children who also tend to live further away. Moreover, in the favoured classes, the infrequency of these episodic reunions might be offset by more frequent phone calls. In fact, this is not the case, since these different forms of sociability go together: "The more people see each other, the more they call each other, the telephone being used to prepare a meeting or talk about it afterwards" (Crenner, 1998).

Table 11.2. Pattern of Contacts With Different Members of the Kinship Group According to Social Status

	Men						Women					
	Age 62			Age 75			Age 62			Age 75		
	Higher-level	White-collar	Blue-collar									
All grandparents from age 62												
Children	6.8	7.1	6.7	5.6	5.8	6.3	6.8	7.3	7.9	5.2	7.1	6.6
Grandchildren	6.1	6	6.4	4.3	5.6	5.2	5.8	6.4	7.2	4.2	4.9	5
Others	4.9	5.4	4.6	3.9	3	3.9	5.3	4.8	4.5	2.9	3.3	3.9
Total	17.8	18.5	17.7	13.8	14.4	15.4	17.9	18.5	19.6	12.3	15.3	15.5
Number	151	51	202				43	88	118			
%	0.73	0.84	0.79				0.59	0.66	0.75			
All respondents												
Children	6	6.6	5.6	5	5.3	5.7	4	5.6	6.2	3.2	5	5.2
Grandchildren	4.4	5	4.9	3.7	4.9	4.6	3.4	4.1	5.2	2.5	3.3	3.8
Others	5	5.3	4.9	3.5	2.7	3.8	5.7	5.5	4.9	3.4	3.7	4.1
Total	15.4	16.9	15.4	12.2	12.9	14.1	13.1	15.2	16.3	9.1	12	13.1
Number	207	61	256				73	133	157			

The link between social status and the intensity of family relations is not really clear. For some (Pitrou, 1978), the favoured classes see less of their family, for others (Coenen-Huther et al., 1994), behaviours are the same everywhere. Our survey leads us to conclude that the relation between the social background and family contacts varies according to age. Although no significant difference is apparent on the eve of retirement, at 75, family ties are looser at the top of the social hierarchy.

The follow-up of the 1922 cohort from age 62 to 75 confirms the hypothesis that relations dwindle with advancing age, or at least at the beginning of old age: the number of monthly contacts with a relative declines from 15.5 to less than 13, below the level observed at age 59. More than the withdrawal of respondents due to ageing and failing health, it is kinship changes that are the underlying aspect here: the death of ascendants and the passage into adolescence, and even adulthood, of the grandchildren are the two main reasons for the declining intensity of family life. A notable exception to this tendency is men who become widowers: they have more contacts with their relatives at 75 than at 62. On the contrary, relations between divorced men and their families are looser and, to a lesser degree, contacts are less frequent for men in higher-level occupations.

The exchange of services is another illustration of the ties that unite the different family members.

11.3 SERVICES RENDERED TO THE CHILDREN

In line with the wishes expressed prior to retirement, between the ages of 59 and 62, parents increase the services they render to their children (the only exception to this trend is care of grandchildren which remains stable because of their transition from childhood to adolescence). But with advancing age the trend is reversed: the number of respondents who provide no help to their children doubles between the ages of 62 and 75 (from 9% to more than 18%, see Table 11.3). Likewise, the most frequent services are rendered from then on by only around 4 respondents in 10, compared with 5 previously (see Table 11.4). Everything linked to spending time with the children and grandchildren declines sharply. One area excluded from this decline is financial help: it more than doubles (undoubtedly a consequence of the economic crisis mainly affecting the under 40s) and features at the top of the list of services rendered. This is closely followed by services linked to family conviviality: looking after the children during holidays, occasional minding of grandchildren or great-grandchildren during term-time or holidays. Other services, of a material nature, concern one or two respondents in ten, except for odd jobs among men (30%) and knitting or sewing among women

(42%). Moreover, services are not rendered at the expense of others; on the contrary, they increase the probability of providing another type of assistance.

To what extent are these general changes in trends accentuated or reduced by changes in family and marital environment, by health status or social position?

11.3.1 The Effect of the Family Environment

As seen previously for contacts, having a large family and young grandchildren stimulates the exchange of services.

- The age of the grandparents has little influence on the fact of looking after (for a day or for holidays) the grandchildren without their parents. Whether aged 75 or 62, grandparents mind their grandchildren almost as frequently when the latter are under 12 (73 and 80% care for them occasionally²⁰). However, when all grandchildren are adolescents, relations become markedly more distant, with only 39% of grandparents looking after them (48% at age 62). As for the great-grandchildren, visibly they are more seldom given into the care of their great-grandparents (34%). The grandparents, though often still active, certainly aspire to performing this role. These behaviours explain why only 14% of the grandparents of young grandchildren never help their children compared with 21% when all the grandchildren are older (see Table 11.3).
- Rendering no services to children concerns the same fraction of pensioners at age 62, whether they had brought up one child or more. However, the more children the respondents have, the less they cease to help them between the ages of 62 and 75²¹. At age 75, the parents of large families spend much more time, day-to-day, with their children and grandchildren, with no difference regarding all other types of services. More than an effect of the number of descendants, this should be seen as a consequence of the higher probability of having a young grandchild: when a person has had several children, the births of grandchildren, who are greater in number, are consequently more spread-out in time.
- Another event has an impact on the intensity of help: the divorce of a child (experienced by 17% of respondents). This situation encourages parents to continue to provide help²², and at age 75 only 12% (compared with more than 18%) of respondents from this group did not render any services to their children.

Table 11.3. Change Between the Ages of 62 and 75 in the Proportion of Respondents Who Do Not Render or Receive any Services According to Different Socio-demographic Criteria

	No Services Rendered to the Children				No services Rendered by the Children			
	Men		Women		Men		Women	
	Age 62	Age 75	Age 62	Age 75	Age 62	Age 75	Age 62	Age 75
Total	8.7	18.3	8.0	18.6	33.3	26.4	24.0	16.0
Changes in marital status between ages 62 and 75								
Still married	8.2	16.1*	5.4	16.7	32.8	26.6*	29.3	23.4*
Widowed	9.1	29.2	8.6	16.7	34.5	17.3	22.2	10.2
Become widowed	4.6	30.8	9.7	22.6	34.1	14.3	27.4	10.5
Still widowed	27.3	22.2	7.8	12.9	36.3	30.0	18.7	10.0
Still divorced	15.4	30.8*	11.1	30.8	44.4	50.0	17.6	16.2
Divorce of a child								
Yes		9.3		14.0		24.4		18.0
No		18.7		17.7		27.1		14.5
Number of children								
One	10.7	16.5	8.9	25.6	33.0	38.8	21.1	15.6
Two	6.9	14.4	6.9	16.8	35.1	28.2	30.7	19.8
Three or more	8.4	17.3	7.8	9.7	28.9	22.7	26.5	12.6
Age of grandchildren								
Under 12.0	6.6	13.3	5.6	13.9	31.1	25.3	23.2	15.8
12+	7.4	22.2	15.6	20.3	33.3	28.1	21.9	14.8

(Continued)

Table 11.4 (Continued)

	No Services Rendered to the Children				No services Rendered by the Children			
	Men		Women		Men		Women	
	Age 62	Age 75	Age 62	Age 75	Age 62	Age 75	Age 62	Age 75
Socio-occupational category								
Higher-level occ.	6.5	12.6*	2.1	9.1	41.7	33.2*	25.5	24.4
White-collar workers	10.5	13.0	9.7	18.8	27.1	23.6	21.9	15.4
Blue-collar workers	9.8	25.1	8.4	22.6	27.6	21.2	23.1	12.9
Health status at age 75								
Good, very good	7.1	15.2	7.8	13.3	34.4	34.9*	22.8	20.2*
Average	10.8	18.5	8.5	21.1	31.0	19.9	25.0	14.4
Bad	6.8	29.1	7.0	22.0	39.0	23.2	23.3	10.9

* Significant χ^2 , calculated only at 75

Table 11.4. Exchanges Between Children and Parents by Age and Material Status

	Services Rendered by Children						Services Rendered by Parents					
	Married			Widowed			Married			Widowed		
	Age 62	Age 75	Age 62	Age 62	Age 75	Age 62	Age 75	Age 62	Age 75	Age 62	Age 75	
Offer you a holiday	9.2 15.8	12.1 6.3	9.1 5.0	11.6 20.3	Take care of grandchildren during holidays	45.3 47.4	38.8 33.0	43.2 50.0	20.0 20.0			
Provide temporary accommodation	8.7 12.6	20.1 18.3	9.1 10.0	25.6 31.7	Receive them during holidays	47.9	43.8	52.3	32.6			
Do your Shopping	22.4 14.7	24.5 24.2	22.7 18.3	32.6 36.7	Sometimes care for a grandchild	48.4	45.3	36.7	25.0			
Carry out administrative tasks for you	7.8 3.2	17.7 14.7	4.6 15.0	39.5 45.0	Do odd jobs or gardening for them	51.2 47.4	41.9 36.6	50.0 50.0	30.2 32.2			
Do your housework	26.2 12.6	27.9 28.4	20.5 30.0	48.8 53.3	Do knitting or sewing for them	43.9 13.7	33.9 20.2	45.5 6.7	30.2 6.8			

(Continued)

Table 11.4 (Continued)

	Services Rendered by Children				Services Rendered by Parents			
	Married		Widowed		Married		Widowed	
	Age 62	Age 75	Age 62	Age 75	Age 62	Age 75	Age 62	Age 75
Drive you somewhere	12.5	37.7	13.6	51.2	9.7	19.1	11.4	25.6
Care for you when you are ill	14.7	42.1	21.7	71.7	9.5	14.0	8.3	13.3
Go out with you	17.0	27.5	13.6	48.8	19.6	43.2	20.5	41.9
	20.0	31.9	16.7	56.7	14.7	33.7	16.7	31.7
	9.9	40.4	4.6	55.8	5.4	10.1	11.4	9.3
	20.0	38.3	16.7	56.7	14.7	8.6	16.7	6.9
Men, women								

Do the shopping and/or administrative tasks
 Help them financially
 Help them with the housework

11.3.2 The Effect of Termination of Marriage

Generally speaking, help should be stimulated by the fact of living with a partner. Each partner frees the other of certain tasks, thereby providing him or her with more time available to render services to the children²³.

- The impact of living with a partner is much stronger among men: at age 75, almost twice as many widowers as married men do not render any services to their children, whereas nothing distinguishes widowed women from married women. This is due to the essential role played by women in domestic areas. In addition, since men often have trouble coping with their own day-to-day life, how can they be expected to help their children?
- Consequently, it is the children of men who have become widowed between the ages of 62 and 75 who lose out most in terms of services received (5% of these fathers mentioned no services at age 62, and 31% at age 75), while having or not having a mother who has become widowed makes no difference in this respect.
- The high proportion of divorced men who render no services to their children (31%) is an illustration of the distance separating them, a distance noted earlier in terms of number of contacts. There are as many divorced men as widowers who do not help their children, though they should be able to deal more easily with everyday life, the marriage termination having occurred much earlier in their lives. The low involvement of women (31% likewise never help their descendants) is more surprising, divorce having had little negative impact on the number of contacts. Should this be seen as a consequence of greater economic insecurity?

To a much greater extent than married men, widowers (and even more so divorced men²⁴) do not look after their children or grandchildren during holidays. This is essentially where the difference lies (see Table 11.4).

11.3.3 The Effect of Health Status

Among respondents aged 75 claiming to be in poor health, twice as many do not render any services to their children as among those in good health (among men, for example, 29% compared with 15% for those in good health). In fact, curiously, it is not so much the state of health in itself that plays a role but the social status to which it is correlated, since all other things being equal²⁵, nothing distinguishes those who are in poor health from the others. As the range of services suggested is wide, a certain number of them, such as lending offering

accommodation, providing financial help or knitting, can be rendered even when in poor health.

Only for more physically demanding services (odd jobs, gardening, caring for grandchildren) is health status a discriminating factor.

11.3.4 The Effect of Social Status

Persons in higher-level occupations provide more support for their children and, between the ages of 62 and 75, only around half as many have stopped giving help. Thanks to their higher standard of living, they contribute much more often to improving the economic situation of their descendents, either directly by helping them financially (51% of persons in higher-level occupations compared with 35% of blue-collar workers) or by providing them with accommodation (12 compared with 5%). They also receive them more often during holidays (54 compared with 31%) and more often take care of their grandchildren. The fact that they are more often married, have grandchildren at an earlier age on average and enjoy a better state of health contributes to the increased help. But by eliminating these structural effects (all other things being equal²⁶), the favourable position of persons in higher-level occupations subsists, reflecting solidarity behaviours that differ between social categories. Being in a higher-level occupation favours support to children in all areas except manual activities, the only area in which being a blue-collar worker is not a handicap.

11.4 HELP RECEIVED BY THE PARENTS

From age 62, parents receive more help from their children. Thirteen years later, the effect of ageing among the respondents is even more apparent: one third of the men and a quarter of the women received no support at age 62, while at age 75 the proportions are only 26 and 16% respectively. The children are more present in all areas. In some areas, the frequency of support has doubled (care in the case of illness), for others it has been multiplied by three (temporary accommodation, administrative tasks and transport) or even more (outings). The only exception is having holidays provided by the children, with a slight decline, among women.

At age 75, very few parents (3%) receive financial assistance. These results are already well known (Attias-Donfut, 1997): currently, in France, monetary transfers are from parents to children. Help with practical tasks (housework, shopping or administrative tasks) is much more common and concerns approximately one-third of respondents, doubtless reflecting the onset of disabilities. Children are called upon even more frequently in the case of illness (close to 4 respondents in 10), though this concerns occasional assistance

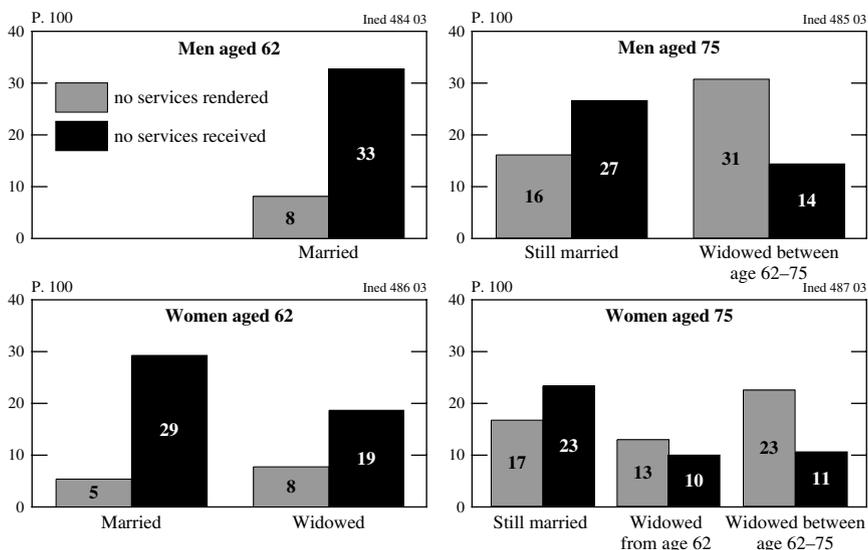
and not regular help. The shorter the time spent living together, the more the respondents share their free time with their children: although only 14% are given holidays and approximately 25% receive temporary accommodation, approximately half benefit from outings. Being driven, for leisure activities or shopping, is the service most often rendered, especially for women (60% compared with 40% for men). Among these cohorts, few women can drive, so they become dependent on their children when they are widowed²⁷. Moreover, poorer physical health doubtless makes driving more difficult.

Do these general changes depend on the living environment?

11.4.1 The Effect of the Family Environment

Calling on the help of the children is more frequent among large families and this is valid for almost all the services rendered (according to the type of help, all other things being equal, the multiplier of the likelihood of receiving help ranges between 1.5 and 1.8). This observation is not surprising, since the larger the number of children, the greater the likelihood of having a child living nearby. Moreover, within this wider family context, individual availabilities add together and children can replace each other if necessary.

Figure 11.2. Proportion of Respondents Who Render No Services to Their Children and Receive None from Them, by Age and Marital Status



11.4.2 The Effect of the Termination of Marriage

- Confronted with the emotional vacuum left by the death of the partner and with the distress of having to perform domestic tasks alone, parents receive more attention from their children: at all ages, widows and widowers receive more help than parents with a surviving spouse. Moreover, although children help their parents more as they get older, recently widowed parents benefit more than all others from increased filial solidarity. At age 62, these pensioners, future widows and widowers, are no different from those who subsequently remain married. At age 75, after the death of their partner, only half as many do not to receive any help (11% compared with 23% among women, for example). Widowed mothers from age 62 enjoy sustained attention from their children (fewer than 19% received no assistance), which continues over time, since at age 75 these widows are indistinguishable from those who have been widowed more recently (see graph below).

This observation is valid, apart from very rare exceptions, whatever the type of help received (see Table 11.4).

- As previously for contacts, divorce has radically different repercussions for men and for women: children show slightly less concern for their mother in the case of divorce than of widowhood, though they do attempt to alleviate their mothers' distress since divorced women receive more help than married women (16% receive no support compared with 23% of married women). The situation is entirely different for divorced men who, at age 75, in almost one case in two, cannot count on their children for help. The limited contacts between these fathers and their children during childhood is not the only reason for this. This unfavourable position for fathers continues even when the parents' separation occurred after the children had grown up (Aquilino, 1994).

11.4.3 The Effect of Health Status

Parents reporting bad health are much more often helped by their children: only 23% of these fathers and 11% of these mothers receive no support at age 75, compared with 35% and 20% respectively²⁸ among persons in good health. Among the latter, the proportion is practically the same as 13 years earlier: when the parents grow old in good health, the children do not intervene to any greater extent in their daily lives.

Some of the services concern assistance made necessary by the onset of disabilities and which are rendered much more often in the case of bad health. For parents in poor health for example, the proportion of children who help them with the housework or the shopping is almost twice as high as for parents in good health. This need explains why respondents aged 75 in bad health are much more often helped, and why between the ages of 62 and 75, help increases much more for them.

11.4.4 The Effect of Social Status

Persons in higher-level occupations call on their children for help much less often than blue-collar workers. At age 75 for example, only 13% of female blue-collar workers receive no help from their children compared with 24% of women in higher-level occupations. Note that at the top of the social scale people are more often married and in good health, factors which favour independence. However, the higher degree of mobilization among children of blue-collar workers is maintained, eliminating the effects of differences in marital or health status. Indeed, in case of need, it is easier for persons in higher-level occupations with comfortable incomes to make use of professional services, though this may also reflect a greater desire for independence. Curiously, although persons in higher-level occupations and blue-collar workers receive similar levels of help with domestic tasks, social status is a highly discriminating factor for services involving getting about (shopping, administrative tasks and being driven in a car).

The study confirms the importance of mutual aid within the family. At age 75, only 8% of men and 4% of women are excluded from all exchanges; conversely 65% of the former and 71% of the latter take part in mutual-aid networks.

Although at age 62 there are far fewer respondents receiving services than rendering them, at 75 the balance is clearly restored. Among women, the balance of services exchanged is even reversed in their favour: 19% provide no help to their children and only 16% receive none.

Some privileged women are not in this situation and at age 75 help more often than they are helped. These are married women, women in higher-level occupations and women in good health; situations which also often concur. Conversely, the balance is particularly negative among women in poor health or widowed: they are twice as likely to receive assistance as to give it. This ratio even increases to three times among women who have been widowed for more than 5 years.

Only disadvantaged men – blue-collar workers in bad health or widowed – receive help more often than they give it to their children and thus resemble all categories of women.

Notable also is the difference in sociability according to social status: people meet up more frequently among blue-collar workers where more services are received from children than from parents. Behind these differences, which are undoubtedly the expression of specific norms, the difference in biological age has an influence: blue-collar workers more quickly reach a stage of old age in which the need for help is greater.

11.5 CONCLUSION

This analysis confirms the existence of strong links between parents and their adult children, ties that are not affected by the advancing age of the parents nor by the amount of time elapsed since they lived together. Admittedly there is a slight spacing of visits but, at the same time, children render a growing number of services to their parents. They express this support to an even greater degree when their father or mother has just been widowed through an increased number of visits and services. As bereavement becomes a more distant memory, the frequency of visits becomes similar to that of children who still have both their parents, though they continue to provide more support in the everyday life of the lone father or mother. The children react quite differently in the case of a voluntary termination of the marriage: although the situation of divorced mothers differs little from that of married mothers, men are particularly neglected.

In recent decades, because of declining mortality at all ages, widowhood has been occurring later and later. In time, this positive phenomenon of the early years of retirement experienced more often as a couple will be countered by the increase in the number of divorces²⁹. This growing marital isolation due to divorce should reduce the intensity of exchanges between generations: divorced parents – especially fathers – providing and receiving less help. The fact that parents are becoming grandparents at a later age³⁰ and that the number of large families is declining should further accentuate this trend. However, the trend towards improved health at any given age, which may legitimately be expected to continue, will help to offset this weakening of ties: it will reduce parents' needs and make it easier for them to support to their children.

However, in the next 15 years, at older ages, people will continue at any given age to be more often married, as the delay in expected widowhood will more than offset the progression in the number of divorces, which are still rare among these cohorts (young pensioners today). Couples today are better able to deal with daily domestic tasks because of the sharing and specialization of roles. Moreover, we know that in the case of dependence, the spouse is the first provider of help, thus making it possible to delay, and even to avoid institutionalisation. At any given age, demand for help from the children should

therefore decline even more since the octogenarians of tomorrow will be in better health than those of today.

There will be many more elderly people in future. However, if dependency prevalence rates continue to decline at the same rate as in the 90s, the number of “potential helpers” per elderly dependent person is expected to remain stable up to 2020. On the other hand, according to more pessimistic hypotheses concerning the longer-term dependency trends (with the baby-boomers reaching advanced ages), the weight of the very elderly will be shouldered by a smaller proportion of individuals, who will therefore have a heavier load to bear (Bontout et al., 2002).

At present, there is strong social consensus that children have a moral obligation to help their parents and evidence supports the fact that they fulfil this duty of solidarity (Breuil-Genier, 1998), women being the almost exclusive providers of this help to elderly parents. Will the women of tomorrow³¹, living in more egalitarian partner relationships, having established their identity in areas other than the family role and more actively engaged in leisure activities etc., accept the constraints imposed by the dependency of their parents and parents-in-law?

The increase in divorce rates among the children is another negative factor, since it is a known fact that divorced persons (especially men) provide less assistance.

Moreover, as individuals grow older, they require more support to remain in their own home. Though a real political will to assist the elderly has emerged in recent decades, is there not a risk that this collective solidarity may gradually be eroded in the face of massive welfare costs? If that were the case, the living conditions of the oldest old would change considerably.

NOTES

1. Research conducted with the financial support of CNAV and ARRCO.
2. In general, non-respondents did not introduce a significant bias since they do not differ greatly from the rest of the population. However, it should be noted that men in higher-level occupations, in good health or married, responded slightly more often.

Between the two last surveys, 24.4% of the men and 11.4% of the women died, representing proportions slightly lower than those expected on the basis of general mortality trends. But the respondents were drawn from the database of the French general pension fund (CNAV - Caisse National d' Assurance Vieillesse) and it is known that, at any given age, working individuals are on average in better health than the others.
3. Due to the sample composition, all the women work: in these two marital situations they are therefore both over-represented (in 1997, in the total population, only 4% were divorced and 7% were single at age 75) and much more numerous than the men.
4. 69% of the respondents.

5. The difference is due to the fact that women have their children earlier than men.
6. A decline in frequency observed from age 59 for those whose occupational status had not changed.
7. Result corroborated by an analysis, all other things being equal.
8. We cannot study the effect of time on the family relations of widowed men given the small number of men in this situation in their early 60s.
9. Given the small number of respondents who had divorced during the period, changes in family relations during the period following divorce could not be analysed.
10. Another way of presenting things: 42% of divorced men compared with only 17% of women see one of their children less than once a month.
11. Cooney and Uhlenberg (1990) showed this high emotional cost of divorce for men who see their children less often and find it harder to solicit them for support if needed. The three-generation survey (Attias-Donfut) also clearly demonstrated among men in their fifties, the negative role of divorce and its differential impact according to gender: "In the pivotal generation, divorced mothers and fathers alike have fewer contacts with their children than married mothers or fathers, difference in marital status, however, plays less of a role among the women than among the men".
12. More precisely 24% at 75 and 29% at 62.
13. More precisely 38.8% at 75 and 41.7% at 62.
14. This attitude being more frequent because, in geographical terms, more of them have moved further away (16%) than closer (9%).
15. Between the ages of 59 and 62, the increase in respondents' family contacts was essentially due to the increase in contacts with their parents and, to a slightly lesser degree, with the parents-in-law.
16. When the deceased relative is an ascendant, contacts decrease from 7.1 at age 62 to 3.7 at age 75, in the other cases they fall from 3.8 to 3.6.
17. Result of an analysis, all other things being equal.
18. The analysis, all other things being equal, comes close to the level of significance, indicating that being in a higher-level occupation leads to a lesser degree of involvement in the family.
19. This corresponds to the backward j-curve of fertility: persons in higher-level occupations have 2.4 children on average, white-collar employees 2.2 and manual workers 2.9.
20. The slight difference between the ages of 62 and 75 is due mainly to the behaviour of blue-collar workers.
21. These results are confirmed by an analysis, all other things being equal.
22. All other things being equal, respondents who had stopped helping their children were twice as few.
23. Note that the solidarity behaviour of respondents living with a partner is somewhat overestimated in our survey, some having mentioned services rendered by their partner. For example, many married men say they do knitting.
24. The lower involvement of widowers and divorced men is confirmed by an analysis in which all other things are equal.

25. Sex, SOC, marital status, health status, partner's health status, perceived changes in standard of living and degree of satisfaction concerning their children.
26. Sex, SOC, marital status, health status, partner's health status, perceived changes in standard of living, degree of satisfaction concerning their children, number of children, age of grandchildren and divorce of a child.
27. Result confirmed by logistic regression.
28. This result is confirmed by an analysis, all other things being equal. Calling on the help of one's children is half as frequent among people in good health as among those whose state of health is fair, and the level of services relating to domestic tasks is especially low.
29. In the 1999 census, the proportion of divorcees at the time of retirement was 5%. This percentage should have doubled in 2005 and tripled by 2015. Even if widowhood continues to decrease at the same pace, there will be an increase in coming years in the number of situations of marital isolation at the beginning of retirement.
30. Though, contrary to what one might expect, the impact of this factor is minor.
31. In future, women are expected to be less available because of their increased labour force participation. But the onset of problems associated with very elderly parents will certainly be postponed. When finally confronted with this problem, a large proportion of these women will have already stopped working.

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PART IV

REDISTRIBUTION AND INTERGENERATIONAL
EQUITY

CHAPTER 12

PENSIONS AND INCOME REDISTRIBUTION IN A COMPARATIVE PERSPECTIVE: EVIDENCE FROM THE LUXEMBOURG INCOME STUDY

CHRISTINA BEHRENDT

12.1 INTRODUCTION

Recent discussions about the future of the social contract often focused on the intergenerational relationship in the context of a rapidly ageing population and a growing burden of pension expenditure. Concerns that intergenerational equity will be strained by growing pension expenditure in the coming years have spurred far-reaching pension reforms in many countries¹, and this topic is still high on the political agenda in many countries. The distribution of financial resources between economically active and pensioner generations remains a pressing problem, although gloomy scenarios of a fierce conflict between generations, sometimes even described as a ‘war’, (e.g. Thompson, 1989, 1991; Schüller 1995) have not materialised so far. While more recent studies rather emphasise the balanced nature of intergenerational relations (e.g. Attias-Donfut 1995; Künemund/Rein 1999; Phillipson 1996; Walker 1996) and the persistently high public support for pension schemes (e.g. Svallfors 1997; Bonoli 2000), it is nevertheless worthwhile to investigate the income sources of elderly people and their variation across countries.

As systems of institutionalised redistribution between generations, public pension systems play a major role in securing the living standard of the elderly. Indeed, the lion’s share of retirement income of the elderly originates from public pension schemes in most countries. What is often neglected, however, is the role of alternative sources of retirement income from other private or public sources. In the first place, supplementary pensions play an important role for income maintenance in old age, often in the form of occupational pensions both in the private and the public sector (cf. Rein 1996; Rein/Wadensjö 1998; Rein/Behrendt 2004). In some countries, these schemes

are mandatory by law or by collective agreements. Many pensioners also benefit from income from capital, including some forms of saving plans. In addition, pensioners with low incomes draw part of their income from public transfer schemes other than pensions, such as housing allowances or social assistance schemes for example.

The following analysis takes stock of the income sources and income levels of the elderly in a comparative perspective on the basis of the data of the Luxembourg Income Study. Special focus is put on the role of public and supplementary pensions for income maintenance in old age. After introducing the data and methods used, the redistributive impact of pension schemes is discussed in a comparative perspective. The main emphasis is put on evaluating the impact of public and supplementary pensions on pensioners' economic welfare. Starting with empirical data on the main sources of income of elderly households and the relative weight of public and supplementary pensions in their household budgets, the relative level of pensions compared to national living standards is assessed. The results of these analyses are then linked to the relative income position of elderly households in relation to the overall standard of living in their country. Shifting the analytic focus to the lower ranks of the income scale, the next section is concerned with the proportion of the elderly population who do not reach a decent standard of living. A short summary concludes this paper.

12.2 DATA AND METHODS

The empirical results presented in this paper are based on the data of the Luxembourg Income Study (LIS). This collection of national income surveys offers a rich source of information on the income composition of private households in a comparative perspective (cf. Atkinson et al. 1995; Smeeding 2000).² Fifteen countries of the industrialised world could be included in this study: Australia, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Luxembourg, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom and the United States. Data refer to the mid-1990s.

The unit of analysis of this study are households, not individuals, assuming that incomes are pooled and shared equally among the members.³ In order to balance higher needs and economies of scale of larger households, incomes are adjusted for household size by the "modified OECD equivalence scale" that attaches a weight of 1.0 to the head of household, 0.5 for other adults, and 0.3 for children living in the household (cf. Buhmann et al. 1988).⁴

For the analysis of the role of pensions in the economic welfare of elderly households, this paper assesses the income components of elderly households and compares their income position to the overall standard of living in the society. As this study is mainly concerned with the redistributive effects of

pensions, elderly households are defined as households whose household head is at least 65 years old.⁵ This age limit makes sure that the broad majority of elderly households are covered by this definition, even though retirement ages may be lower in some countries. This definition excludes households with younger heads, even if they receive some part of their household income from public or supplementary pensions. This may be the case for multi-generation families whose household head is not older than 65 years, but as their incomes are only partly determined by pensions, they are outside the scope of this paper.

As in most studies based on income surveys, the classification of income sources is not unambiguous. The definition of public and supplementary pensions follows the classification given in the Luxembourg Income Study. Whereas public pensions denote social retirement schemes, supplementary pensions include pensions with some involvement of employers, both in the private and the public sector. Non-cash income and the value of owner-occupied housing could not be included in this study, although they often play an important role for the living standards of the elderly.⁶

12.3 THE ROLE OF PUBLIC AND SUPPLEMENTARY PENSION FOR INCOME MAINTENANCE IN OLD AGE

Income maintenance in old age can take various forms and varies strongly across countries and household types. Nevertheless, a common feature is that most households do not rely on a single source, but combine incomes from different sources, among which pensions of course play a prominent role (cf. e.g. Rein/Turner 1999; Whiteford/Kennedy 1995).

Countries have chosen different strategies of income maintenance in old age (cf. Rein 1996; Rein/Wadensjö 1998). Some countries, such as Denmark, Finland, Switzerland and the Netherlands, combine a public basic pension with a mandatory supplementary pension, usually with some involvement of the employer. While contributions to a supplementary pensions are compulsory by law in Finland and Switzerland, collective agreements guarantee a de-facto obligation for the majority of the workforce in Denmark and the Netherlands. In other countries, including Belgium, Canada, France, Germany, Italy, Norway, Sweden and the United States, public pension schemes play a larger role and provide an earnings-related pension for the majority of the population, either in a unitary system or complementing a basic pension. With the exception of Norway and Sweden where there is a de-facto mandatory occupational pension for most employees, supplementary provision for old age is voluntary in these countries, yet often subsidised by tax credits and the like. Recent research has shown that the overall redistributive effects of pension arrangements is not determined by the mix between public and supplementary pension income as such, but is dependent

on the institutional design of these schemes, such as the question of whether supplementary pensions are mandatory or voluntary (cf. Behrendt 2000).

This short description cannot of course reflect the complexity of pension schemes, but it can serve as a broad classification.⁷ Keeping this in mind, the following sections will evaluate the income sources of elderly households and their relative income position.

12.3.1 Sources of Income in Old Age

Pensions make up a large share of the income of the elderly, but their importance varies across countries (cf. OECD 2001; Rein/Behrendt 2004). The income position of the elderly is strongly dependent on the receipt of pensions, as pensions work as an institutionalised mechanism of redistribution of income over time, and between the young and the old. By this token, pensions – especially public pensions – are often considered as institutionalised expressions of income distribution between generations.

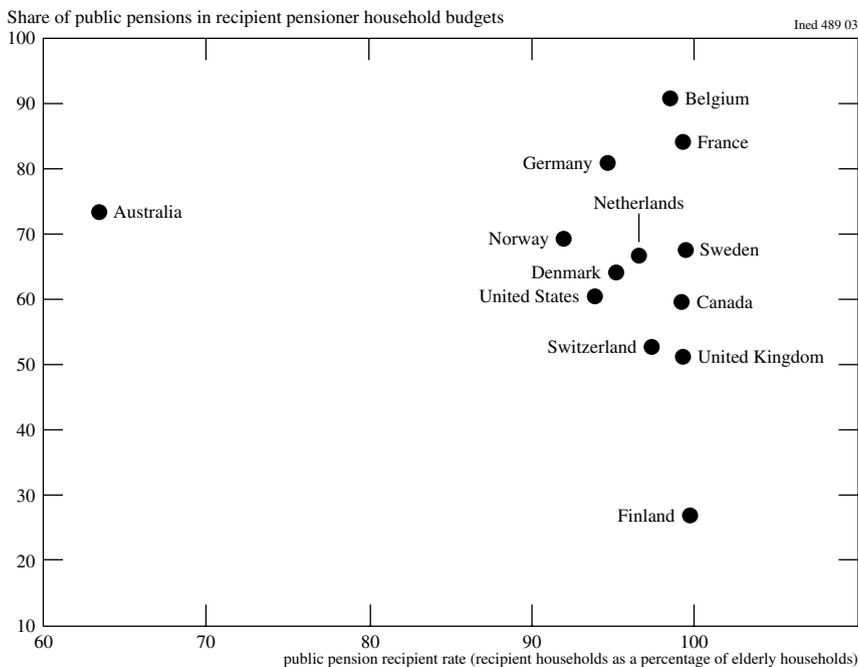
Figure 12.1 shows the relative weight of public pensions in the household budgets of the elderly.

Generally, public pensions are received by the largest majority of the population, more than 90% in all countries but Australia. In the latter, public pensions are means-tested, and only some two thirds of pensioner households receive these benefits, but public pensions account for almost three quarters of total household income.

With the exception of Finland, public pensions generally account for more than half of total household income. Public pensions play a very dominant role in Belgium, France and Germany, where elderly households receive more than four fifths of their total household income from public pensions. In Australia, beneficiaries receive almost three quarters of their total income from public pensions. A slightly smaller percentage, between 60% and 70% of total household income, stems from public pensions in Norway, Sweden, Denmark, the Netherlands, Canada and the United States. In Switzerland and the United Kingdom, public pensions contribute slightly more than half of household income.

The Finnish public pension scheme stands out with a surprisingly small contribution to the household budgets of the elderly. On average, elderly households only draw one quarter of their total income from a public pension. The Finnish pension system relies on a system of universal basic pension, complemented by a legislated occupational pension scheme that is classified as private pension scheme in LIS, as the financial responsibility lies with private bodies, not with the government (cf. Kangas/Palme 1989, 1996; Jäntti et al. 1996). Nevertheless, the government plays a strong role in regulating these private pensions and guaranteeing an adequate level of security for the insured.

Figure 12.1. Share of Public Pensions in Household Budgets (Recipient Rate and Average Share of Public Pensions in Recipient Pensioner Household Budgets)

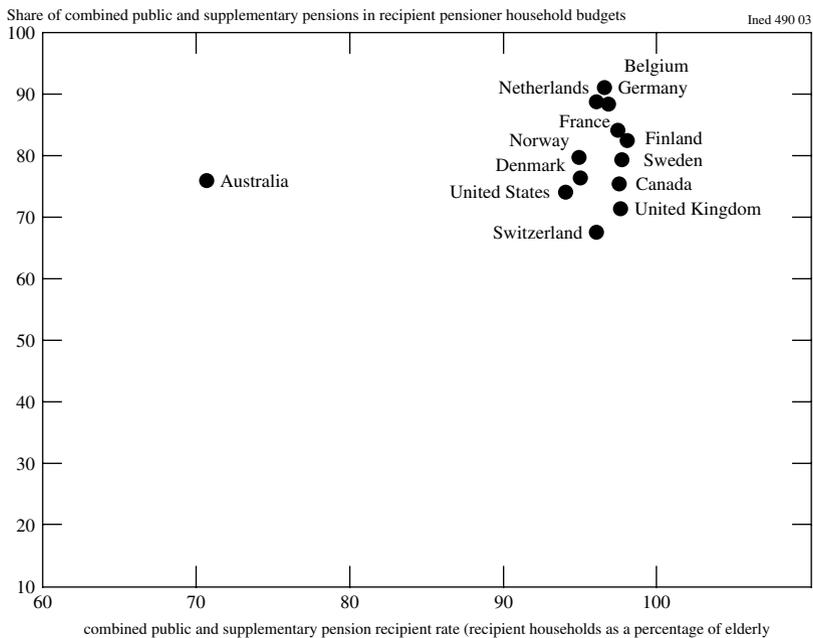


Source: LIS; own calculations. Italy and Luxembourg could not be considered because no data on gross incomes are available in LIS.

This mix of public and private responsibilities is no Finnish peculiarity, but is also found in many other countries. Retirement income draws not only on public sources, but also to a large degree on supplementary pensions that are often provided by the private sector (cf. Rein/Rainwater 1987; Rein/Wadensjö 1997).

The combined effects of public and supplementary pensions are shown in Figure 12.2. All countries cluster very close together with the exception of Australia. In most other countries, more than 95% of elderly households benefit from a pension, and income from pensions make up more than 70% of their total household income on average. Interestingly, the striking uniformity of the combined effects of public and private pensions suggest that most countries have chosen similar strategies to divide their national income between the elderly and younger generations, in spite of strong differences in public-private mix and the institutional design of their pension schemes (cf. Behrendt 2000).

Figure 12.2. Combined Share of Public and Private Pensions in Household Budgets (Recipient Rate and Average Share of Combined Public and Supplementary Pensions in Recipient Pensioner Household Budgets)



Source: LIS; own calculations. Italy and Luxembourg could not be considered because no data on gross incomes are available in LIS.

12.3.2 Relative Levels of Pensions

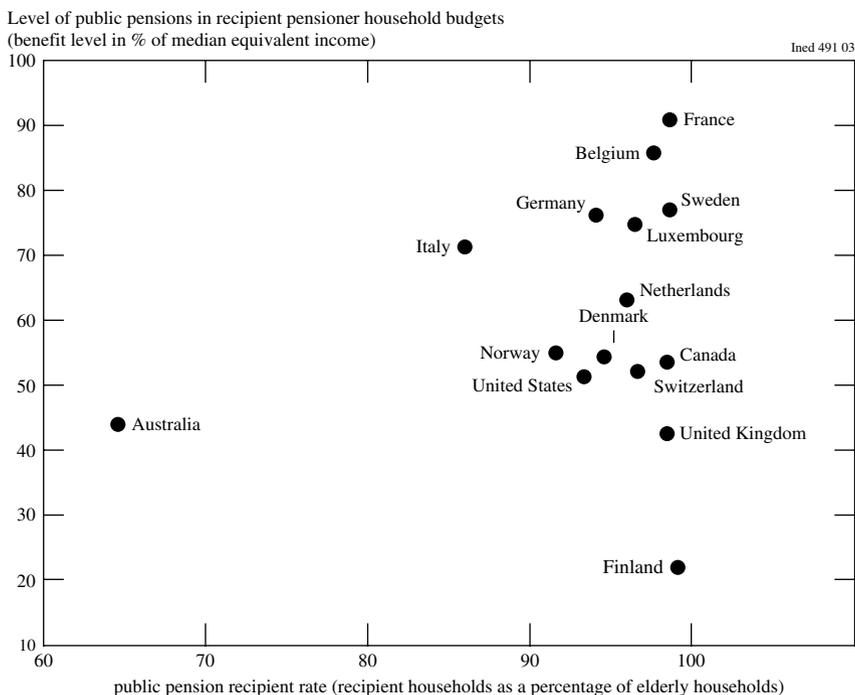
For the assessment of the relative standard of living of elderly households, it is important to not only know the relative weight of pensions in the pensioners’ household budgets, but also to estimate the level of those pensions. In order to make the level of pensions comparable across countries, the following analysis relates the level of pensions to national median equivalent disposable income. The use of median national income as a yardstick for the level of benefits allows to account for cross-national differences in the standard of living. Borrowed from comparative poverty research, this yardstick can also be used to evaluate the adequacy of pension income, keeping in mind that 50% of national median equivalent income is commonly applied as poverty line in international comparisons.

In order to account for different household sizes, both pension income and disposable incomes are adjusted by the “modified OECD equivalence scale”,

using a weight of 1.0 for the head of household, 0.5 for each additional adult and 0.3 for each child living in the household. As in Section “Sources of Income in Old Age”, we first consider public pensions alone, comparing their average level to the national living standard (see Figure 12.3), and then turn to the combined effects of public and supplementary pensions (Figure 12.4).

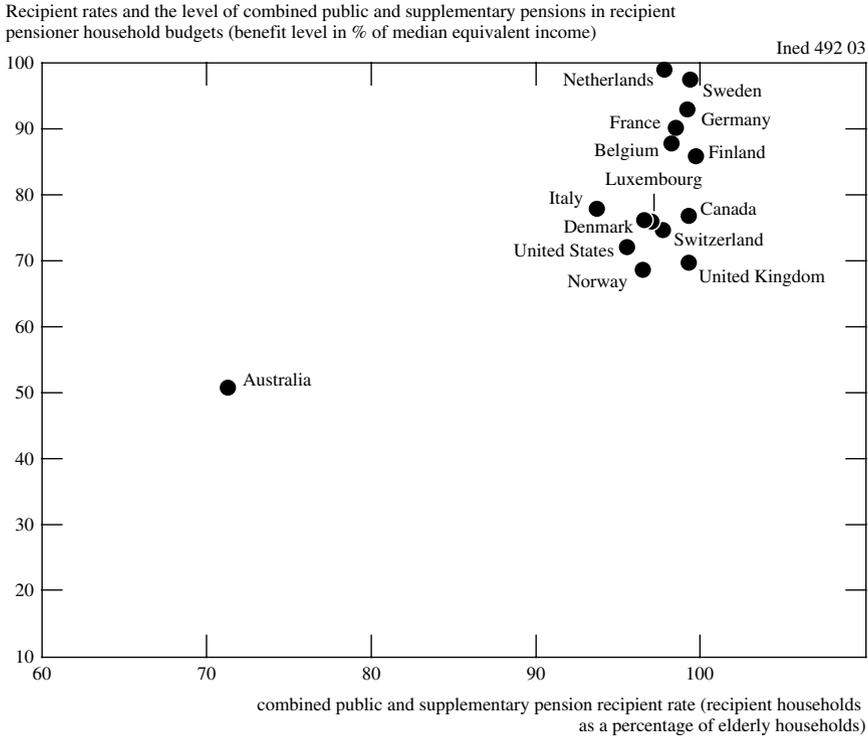
The levels of public pensions scatter more widely than the pensions’ share in the household budgets of pensioner households. Compared to the overall standard of living, public pension incomes leave elderly households best off in France, Belgium, Sweden, Germany and Luxembourg and Italy with some 70–90% of median equivalent income. The Dutch public pension scheme provides for an income level of 64% of median equivalent income on average. With some distance to these countries, a second cluster of countries provides a lower level of public pensions, yet with the average pension level still above the

Figure 12.3. Level of Public Pensions Relative to National Living Standards (Recipient Rate and Average Level of Public Pensions in Percent of Median Equivalent Income)



Source: LIS; own calculations.

Figure 12.4. Combined Level of Public and Supplementary Pensions (Recipient Rate and Average Share of Combined Public and Supplementary Pensions in recipient Pensioner Household Budgets)



Source: LIS; own calculations.

Source: LIS; own calculations.

poverty line of 50% of median equivalent income. Denmark, Norway, Canada, Switzerland and the United States belong to this group. In contrast, average public pension levels in Finland and the United Kingdom are not sufficient to bring households out of poverty. Average benefit levels of the means-tested pension in Australia are also below the poverty line, but it is not clear whether this can be explained by low nominal benefit levels, or by the fact that better-off households have their means-tested pension reduced.

Figure 12.4 takes a more comprehensive look on total pension income and considers the combination of public and supplementary pensions.

If both public and supplementary pension incomes are considered, the relative income position of elderly households markedly improves in countries

with sizeable supplementary pensions. With the exception of Australia, average pension levels in all countries are higher than two thirds of median equivalent income. Two clusters of countries can be identified. A first cluster of countries with moderately high pensions of 65–80% of median equivalent income includes Canada, Denmark, Italy, Luxembourg, Norway, Switzerland, the United Kingdom and the United States, whereas a second cluster of higher pensions in the range of 85–100% is made up by the Netherlands, Sweden, France, Germany, Belgium and Finland. In contrast, the inclusion of supplementary pension income for Australia does not markedly boost average pension income: average total pension income only increases to just above 50% of median equivalent income, so elderly households appear to have problems in reaching an adequate standard of living if they cannot rely on other sources of income. However, Australia's outlier position can again be related by some peculiarities of its income maintenance policy in old age. Supplementary pension schemes and savings plans are traditionally paid out as a lump sum amount at the time of retirement that is usually subsequently re-invested, often in real estate.⁸ Owner-occupied housing plays a large role in Australian income maintenance in old age, so decent living standards can be secured on lower levels of current incomes than for people in rented housing.⁹

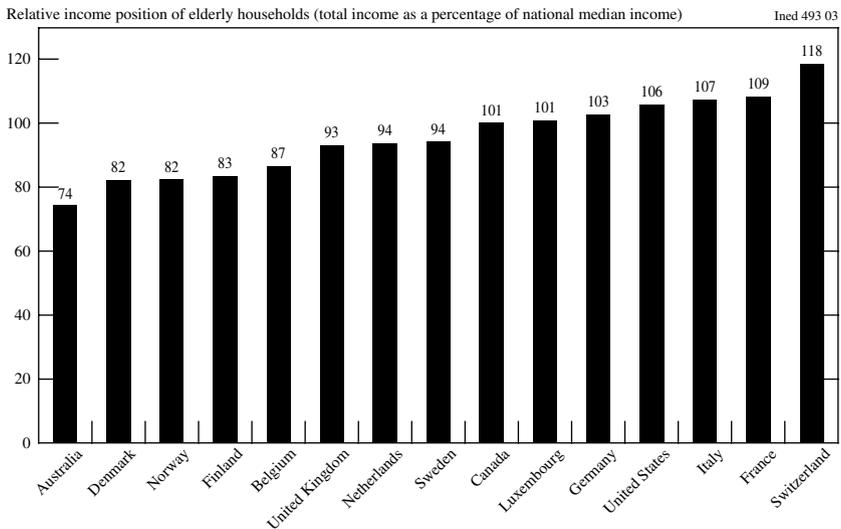
12.4 RELATIVE INCOME POSITION OF THE ELDERLY

Given these similarities and differences in pension income, how do the total incomes of the elderly compare to the overall income level in their society? How are national incomes divided between the elderly and economically active generations? Do the elderly enjoy a better or worse income position compared to the overall standard of living in their society?

The following analysis evaluates the total income of elderly households, including all other sources of current income, such as income from capital and other market income, all types of social security transfers and private transfers. Figure 12.5 shows the relative income position of elderly households compared to the median equivalent income in each country.¹⁰

The relative income standard of elderly households varies strongly across countries. Relative to median equivalent income, the elderly are best off in Switzerland with 118% of median income, followed by France, Italy, the United States, Germany, Luxembourg and Canada. In all other countries, average equivalent incomes of elderly households remain behind the overall income level in their society. Elderly households in Sweden, the Netherlands and the United Kingdom find themselves at some 6–7 percentage points below the national median, while the gap widens to 13–17 percentage points in Belgium, Finland,

Figure 12.5. Level of Total Income of Pensioner Households (Recipient Rate for Any Pension Income and Average Level of Income in Percent of Median Equivalent Income)



Source: LIS; own calculations, Incomes are adjusted for household size (modified OECD scale).

Norway and Denmark. Australia offers the lowest relative income level, with elderly households on average living at a level of only three quarters of national median equivalent income.¹¹

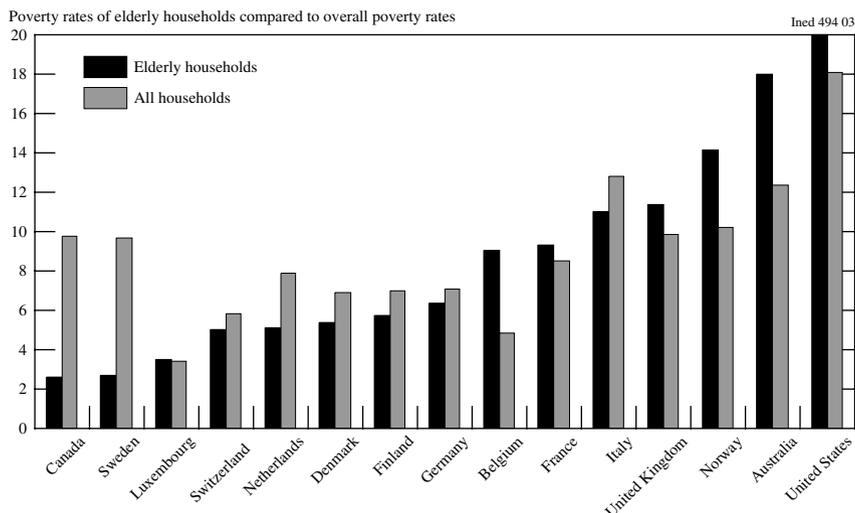
It is remarkable that the level of public and supplementary pensions is only loosely connected to the relative income position for total income. Countries with a high level of pensions find themselves both in the upper (France, Germany) and the lower (Finland, Belgium) ranks of Figure 12.5, and vice versa, countries with a lower pension level are found both among countries with an above-average income position of the elderly (Switzerland, Italy, United States) and at the other end of the scale (Australia, Denmark, Norway). This again highlights that income sources other than pensions play an important role in determining the income positions of elderly households. It would have been interesting to see which income sources can account for these variations, and how the prevalence of these sources varies according to the socio-demographic characteristics of elderly households. However, this would have gone far beyond the scope of this chapter.

12.5 LOW INCOME IN OLD AGE

Although the average net incomes of elderly households do not fall far behind the overall income level in most countries, a sizeable proportion of the elderly are poor. Although the traditional connection of old age and a high risk of poverty has largely melted away with the emergence of modern pension schemes, older persons still face considerable poverty risks in many countries, notably older women (Hedström/Ringen 1990; Hauser 1999a). Figure 12.6 shows poverty rates for elderly households and compares them to overall poverty rates in each country.

Figure 12.6 demonstrates that poverty risks of the elderly strongly vary across countries, and that there is no general pattern of higher or lower poverty risks of the elderly when compared to the total population. In eight out of these 15 countries, the elderly enjoy a lower poverty risk compared to the overall poverty risk in society. This is the case in Canada, Sweden, Switzerland, the Netherlands, Denmark, Finland, Germany and Italy. In contrast, the elderly run an over-proportionate risk of being poor in Belgium, France, the United Kingdom, Norway, Australia and the United States.

Figure 12.6. Poverty Rates of the Elderly Compared to Overall Poverty Rates



Source: LIS; own calculations, Incomes are adjusted for household size (modified OECD scale).

Households are considered as poor if their equivalent income is less than 50% of national median equivalent income.

Australia, and the United States. Only in Luxembourg, poverty rates of the elderly are equal to the overall poverty level.

Poverty rates are lowest in Canada and Sweden with less than 3% of the population, followed by Luxembourg, Switzerland, the Netherlands, Denmark, Finland and Germany in the range of 3–6% of elderly households. At the other end of the scale, we find the United States and Australia with close to one in five households being poor. A middle group with poverty rates between 9% and 14% comprises Belgium, France, Italy, the United Kingdom and Norway.

If we compare this assessment to the level of pension income presented in Figure 12.4 above, there seems to be some loose connection with the average level of pensions. The four countries with the lowest levels of pensions – Australia, Norway, the United Kingdom and the United States – turn out to be the countries with the highest poverty rates among the elderly. In contrast, a high average level of pension does not guarantee low poverty rates. The countries with the highest average pension levels – the Netherlands, Sweden, France, Germany, Belgium and Finland – do not cluster close together. Among these countries, only Sweden, and to some degree also the Netherlands, reach a low poverty risk for the elderly, but so do Canada and Luxembourg with markedly lower average pension levels. Germany and Finland rather belong to a group of countries with medium poverty rates, while France even comes close to the high-poverty countries.

It does not come as a surprise that those countries with low old age poverty rates have in common a basic pension that provides some universal minimum income guarantee to the elderly (cf. Hauser 1999b; Kohl 1993). In contrast, some of the countries with relatively high pension levels but high poverty rates lack a special basic safety net for the elderly outside the general social assistance scheme. This is particularly relevant for providing an adequate income in old age for people with interrupted employment histories, many of whom are women (cf. Kohl 1993; Siegenthaler 1996; Stapf 1997; Ginn et al. 2001).

12.6 CONCLUSION

The rich empirical material provided in the Luxembourg Income Study has allowed illustrating cross-national differences and similarities in the income position of the elderly. Elderly households draw their incomes from a variety of sources. Public pensions of course play an important role in the household budgets of the elderly, but only account for a part of the total income. In a number of countries, supplementary pensions provide a sizeable contribution to household income. In addition other sources of income, both from public and private sources, are very important for income maintenance in old age.

There are substantial cross-national variations in the composition of household income of the elderly that can be related to differences in the institutional design of pension schemes. However, these variations are not as large as one could have expected. If the combination of public and supplementary pension incomes are considered, national policies appear to follow similar strategies of income maintenance for the elderly.

Nevertheless, there is substantial inequality in pension incomes within countries that is not reflected in the averages used in this study. To a large extent, pension incomes reflect employment histories, and by that token, inequalities during working life. This tends to be the case, to a limited extent, for employment-based public pension schemes, but even more so for private pensions. More research would be needed in order to investigate into intra-country variations by socio-demographic characteristics of elderly households. This would shed more light on disparities in the economic welfare of the elderly, and the effects of pension schemes.

12.7 APPENDIX

Table A-1. Construction of LIS Datasets

Country	Year	Source	Sample Size (Households)	
			Total	Elderly
Australia	1994	Australian Income and Housing Survey	6,746	1,364
Belgium	1992	Belgian Household Panel Study (Socio-economische panelstudie van Belgische huishoudens, CSB-panel)	3,736	827
Canada	1994	Survey of Consumer Finances	36,251	7,656
Denmark	1992	Income Tax Survey	12,439	3,098
Finland	1995	Income Distribution Survey	9,084	1,307
Germany	1994	German Socio-economic Panel (Sozio-ökonomisches Panel, GSOEP)	5,926	1,113
Italy	1995	The Bank of Italy Survey (Indagine Campionaria sui Bilanci Delle Famiglie)	8,035	2,341
Luxembourg	1994	The Luxembourg Social Economic Panel Study "Liewen zu Letzebuerg"	1,792	383

(Continued)

Table A-1. (Continued)

Country	Year	Source	Sample Size (Households)	
			Total	Elderly
Netherlands	1994	Socio-Economic Panel (SEP)	5,072	1,033
Norway	1995	Income and Property Distribution Survey (Inntekts- og Formuesundersokelsen)	9,914	2,667
Sweden	1995	Income Distribution Survey (Inkomstfördelningsunder- sokningen)	15,911	4,482
Switzerland	1992	National Poverty Survey (Nationale Armutsstudie)	6,052	1,873
United Kingdom	1995	The Family Expenditure Survey	6,560	1,770
United States	1994	March Current Population Survey	59,481	12,633

Source: LIS documentation

NOTES

1. For a broad and concise overview on pension reforms worldwide, cf. e.g. Schwarz/Demirguç-Kunt (1999).
2. The LIS data referring to the United Kingdom is subject to Crown Copyright; has been made available by the Office for National Statistics through the ESRC Data Archive; and has been used by permission. Neither the Office for National Statistics nor the ESRC Data Archive bear any responsibility for the analysis or the interpretation of the data reported here. This disclaimer also applies to all following charts and tables.
3. For a critical discussion of this assumption cf. Findlay/Wright (1996); Pahl (1989).
4. For a more extensive methodological discussion pertaining to household surveys, cf. Behrendt (2002: 53–88).
5. For couples, LIS considers the husband as the household head.
6. A more detailed discussion of the quality and the limitations of the data is found in Atkinson et al. 1995.
7. A more detailed description of pension schemes in these countries can be found for example in the contributions in Gruber/Wise (1999); Reynaud et al. (1996); VDR (1999); Bonoli/Shinkawa (2005).
8. In addition, at the time of observation, the mandatory supplementary pension scheme (superannuation) was not mature enough to offer a sizeable income source for many households, but its effects will be greater in the future (cf. Bateman/Piggott 1997).
9. Cf. Ritakallio (1999) for a detailed discussion of this issue.

10. Incomes are adjusted for household size with the “modified OECD” equivalence scale that uses a weight of 1.0 for the head of household, 0.5 for other adults, and 0.3 for children.
11. It is not clear to what degree the high rate of owner-occupied housing among the elderly enhances their standard of living to a higher level than reflected in these data (see Footnote 9).

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CHAPTER 13

SOCIAL SPENDING: RECENT CHANGES AND CONDITIONS FOR ITS LONG-TERM VIABILITY

HERVÉ GAUTHIER

13.1 INTRODUCTION

Given the foreseeable increase in demographic ageing, it is alleged by some that the current system of public solidarity is not equitable for future generations, who may be unable to benefit from a system as generous and well-articulated as the one which exists today. They argue that current social spending should be reduced to avoid imposing an excessive burden on future generations, especially since debt is a perpetual sword of Damocles, whose effects may be multiplied by a rise in interest rates or an economic recession. Do recent sociodemographic changes make the pursuit of equity easier or more difficult in a context of long-term population ageing?

Though equity is an inspiring principle and objective, it is not easy to define. Should public transfers and services remain constant whatever the cost? Or should costs remain constant, even if this entails reducing public transfers and services as a consequence? Nor is the principle of equity easy to apply. Cyclical aspects (economic, social, public finance) combine their effects with those of major structural change (demographic, social, economic) and sometimes make it difficult to establish an overall perspective. What has been the impact of changes in social spending since the beginning of the 1990s? Have the budgetary difficulties encountered by governments and the ensuing spending cuts substantially modified transfers between generations? And have the recent changes in social spending by age produced winner and loser generations?

This article examines the changes in spending over recent decades. We see how different age groups were affected by increases and decreases in monetary transfers and services between 1991 and 2003, a period of public

spending cuts. To determine the impact of recent variations, it is useful not only to analyze each spending program, but also to see how these variations fit into the long-term pattern. Lastly, we ask ourselves what key conditions must be satisfied in order to maintain the current system of collective solidarity.

13.2 SOCIAL SPENDING IN 2003

The spending of eight major government sectors was used to calculate the per capita costs of welfare programs by age. The profile obtained concerns all ages between 0 and 90 and takes account of federal and provincial programs in the sectors of education, family support (allowances, childcare services and tax measures), welfare benefits, employment assistance, unemployment insurance, occupational health and safety (including the Québec Pension Plan disability benefits program), healthcare and social services, and public pensions. It covers social spending in the broadest sense, financed by both federal and provincial authorities, and by both general funds and specific contributions.

In 2003, a total of CAD 59.0 billion was spent on all programs included in the present analysis. Social spending represents 23.4% of Québec's gross domestic product (GDP). This amount is distributed between the three major age groups as follows: CAD 17.3 billion for young people under 20, CAD 21.3 billion for adults between 20 and 64 and CAD 20.4 billion for seniors aged 65 and above. Figure 13.1 illustrates the amount received by each five-year age group. Public programs benefit all groups in society and their coverage extends well beyond the categories generally defined as demographic dependents, i.e., children and seniors. Clearly, the total amounts involved for each major age group reflect the demographic weight of each group, but also the mean per capita expenditure in each group. To analyze intergenerational equity, we will focus on this second aspect, namely the amount received by each member of a generation or group of generations.

The situation of per capita spending by major age group in 2003 is shown in Table 13.1. The situations encountered in the different phases of life vary substantially with respect to the general average of CAD 7,877 per person. A senior (aged 65 or above) receives 2.0 times more than a young person (under 20) and 4.5 times more than an adult of working age. Taking account of a very broad range of government programs, including social insurance, assistance measures and services in kind for the elderly, CAD 9,938 are spent by the two levels of government for a young person, CAD 4,488 for a person aged 20–64, and CAD 20,367 for a senior. These spending levels are high, but how do they compare with the situation in years gone by?

Spending for each program was broken down by age. In some cases – the programs of the Québec Pension Plan for example – very complete administrative data are available: number of beneficiaries of old-age and disability pensions, average benefit by age. Data for medical services are also very detailed: number and cost of medical services by age. These are exceptional situations.

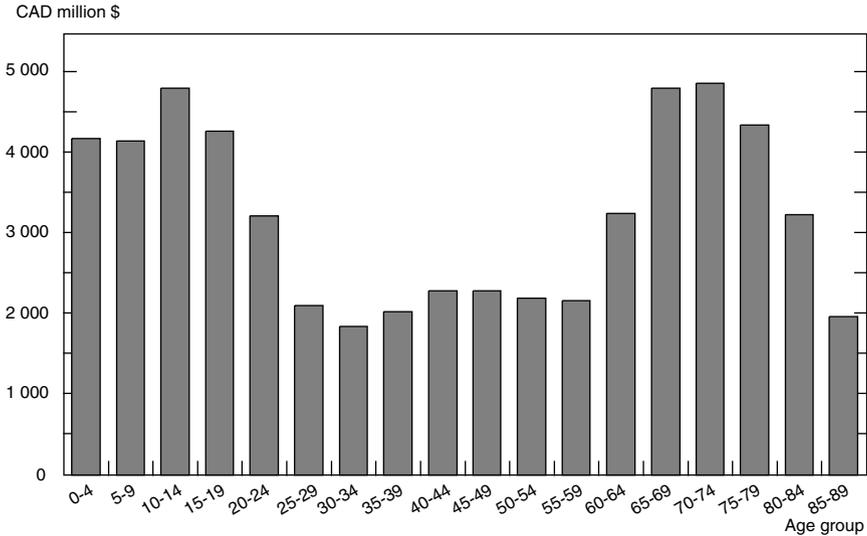
With regard to education, accurate estimates were obtained for operating expenses per child or per student by level (Ministry of Education). For universal programs, such as family allowances and old-age pensions, average per capita spending was determined on the basis of fixed amounts paid out each month. Family allowances, as well as parental and maternity allowances, were posted in the children's accounts.

In many cases however, spending by age is not known and the best available indicator of resource usage by age must be identified. Most often, the breakdown of beneficiaries of a program or of a similar indicator was used as a basis for estimating spending by age. For unemployment insurance and employment assistance, for example, we used the breakdown by age of beneficiaries or the number of weeks of benefits paid to beneficiaries to obtain total benefits by age. The total for each age group was then divided by the population of that age group to obtain the average per capita spending by age. For occupational health and safety, the total amount of benefits and medical assistance was broken down by age using a different indicator for each profile year: population in employment, number of days of benefit payment, occupational injury files or occupational injury and occupational illness files.

For healthcare and social services, in sectors other than medical services for which information is available, a variety of measurements were used to estimate average per capita spending by age. For 1961 and 1971, estimates were based on a breakdown of beneficiaries or on the mean cost per day of hospitalization multiplied by the mean number of days spent in hospital by age. For 1991, 1998 and 2003, the profiles of spending on healthcare and social services calculated by Madeleine Rochon (1994 and unpublished data) were used, after adjustment of the population and total spending. M. Rochon determined per capita public spending on healthcare and social services by age and sex for each sector of activity. She used indicators of resource intensity, such as the number of days of presence by age or the percentage of persons served by age.

For welfare benefits from 1961 to 1971 (program limited to the population aged 0–65) and the guaranteed income supplement (for persons aged 65 and over), in the absence of pertinent data, the mean spending for the admissible population was used for each age group.

Figure 13.1. Social Spending by Age in CAD Million, Québec, 2003



13.3 CHANGES IN PER CAPITA SOCIAL SPENDING BETWEEN 1961 AND 2003¹

To allow historical comparison, spending from 1961 to 1998 was converted into 2003 Canadian dollars. For the years 1991 and 1998, monetary benefits paid out under various social security programs were converted to 2003 dollars using the estimated consumer price index for Québec, and for the years 1961 and 1971, using an estimate based on the index for Montreal, adjusted to take account of the difference between Québec and Montreal observed in 1980. Education and health spending were converted into constant dollars using the price index of government goods and services for the whole of Canada before 1981, since no indices exist for Québec before that year, and with the Québec indices for subsequent years. We will start by examining the most recent period, from 1991 to 2003.

13.3.1 The Period 1991–2003

It is claimed by some that the recession of 1990–1991 and the combined pressure of interest payments on the accumulated debt and budgetary rebalancing severely undermined the system of social solidarity set in place during the three previous decades. But the data in Table 13.1 give a very different

Table 13.1. *Per Capita Social Spending by Major Age Group, in Constant Canadian Dollars (2003), Québec, 1961–2003*

	1961	1971	1991 ¹	1961–1971	1971–1991	1961–1991
	2003\$			% Variation		
0–19 years old	1 774	3 822	7 456	115.4	95.1	320.3
20–64 years old	908	2 194	4 784	141.6	118.0	426.9
65 and over	3 342	9 395	18 346	181.1	95.3	449.0
Total	1 434	3 331	6 990	132.3	109.8	387.4
	1991	1998	2003	1991–1998	1998–2003	1991–2003
	2003\$			% Variation		
0–19 years old	8 475	8 641	9 938	2.0	15.0	17.3
20–64 years old	4 784	4 362	4 488	–8.8	2.9	–6.2
65 and over	18 346	19 108	20 367	4.2	6.6	11.0
Total	7 258	7 273	7 877	0.2	8.3	8.5

¹ Without tax deductions and tax credits to the family.

Source: Estimate based on various government reports.

picture. Generally speaking, between 1991 and 2003, per capita spending for total population did indeed increase by 8.5%. However, without a shift in the age structure over this period, the increase would have been slightly smaller. Let us consider what happened in the two periods since 1991 which reveals a very different picture. Indeed, if we neutralize the demographic effect by applying the spending profile by age of 1998 to the population of 1991, mean spending comes to CAD 7,134 per person. The ratio between this figure and the estimated mean amount for 1991 (CAD 7,258) reflects the reduction in the profile of social spending by age over the period, i.e., a decrease of 1.7%.

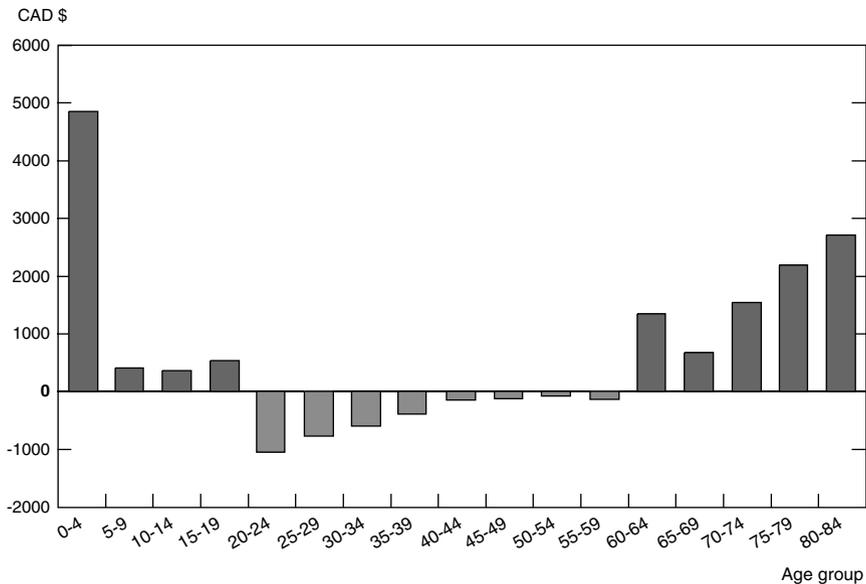
The same kind of calculation for the period 1998–2003 gives a mean spending of CAD 7,756 for 1998 (the 2003 profile applied to the 1998 population). Thus the change of the profile between 1998 and 2003 is responsible for a 6.6% increase in social spending per capita. Altogether, in the period 1991–2003 the profile by itself has caused a 4.9% increase in per capita social spending. It leaves 3.6% for the effect of the ageing of the population, which is not negligible at all, for a total per capita increase of 8.5%. Therefore, it cannot be said that the system has been seriously weakened, let alone dismantled as some feared in the 1990s. There have been numerous demands for a radical reduction in the role of the State, though these demands have not been met.

The variation in per capita social spending between 1991 and 2003 is nevertheless very different from one age group to another, and this indicator provides an initial means to assess the equity of spending. For the adult group, spending fell substantially (-6.2%) between 1991 and 2003. For seniors, on the other hand, it rose by 11.0% and for young people under 20, it jumped by 17.3% (Table 13.1). To determine the implications of these differences, the changes need to be analyzed in more detail, by five-year age group, and in relation to changes in each field of government activity. All increases are not necessarily good and all decreases bad: they must be set against the objectives pursued by the program concerned.

Let us focus on the changes in per capita social spending by five-year age group between 1991 and 2003. Figure 13.2 shows that the population can be divided into three groups: the under-twenties, for whom mean public spending increased, the group aged between 20 and 59, for whom spending was lower, and the group aged 60 and over, who benefited from increased spending.

Table 13.2 shows the variation in per capita spending by category for certain age groups. For the 0–4 age group, the programs for the family improved substantially, especially with the creation and development of a full

Figure 13.2. Variation in Per Capita Social Spending by Age, Québec, 1991–2003



public childcare program, though partly also because some funds concerned were previously allocated under the welfare benefits program. Among the 20–24 age group, the decrease in unemployment insurance benefits (now called employment insurance) explains the negative balance by person and by age. A part of the reduction under this program can be attributed to an improved economic situation, though changes to the program and stricter entitlement criteria have also had a negative impact². The three groups aged over 60 in the table benefited from increased spending over the period. There were strong gains attributable mainly to retirement pensions. The per capita benefits paid out by the Québec Pension Plan continue to increase due to the rising numbers of beneficiaries in the 60–64 age group (earlier retirement) and because female generations who retired in that period had been more present on the labor market. The observed decrease in healthcare and social services for the 80–84 age group may be explained by a change in the method of estimating expenses by age for physical health³.

In constant dollars, social spending increased from CAD 51.3 to 53.3 billion between 1991 and 1998, a rise of 3.9%, and to 59.0 billion in 2003, a stronger rise of 10.8%. This resulted in an increase of 15.1% over the whole period which has to be set against the 6.1% increase in Québec's population and the population ageing that pushed up spending on the elderly. The weight of social spending in the economy fell from 28.0% in 1991 to 24.9% in 1998. It decreased further in 2003 to 23.4% of GDP, due to growth of the economy. But this decrease also marks a significant trend reversal, following a period of successive increases (see Gauthier 1999).

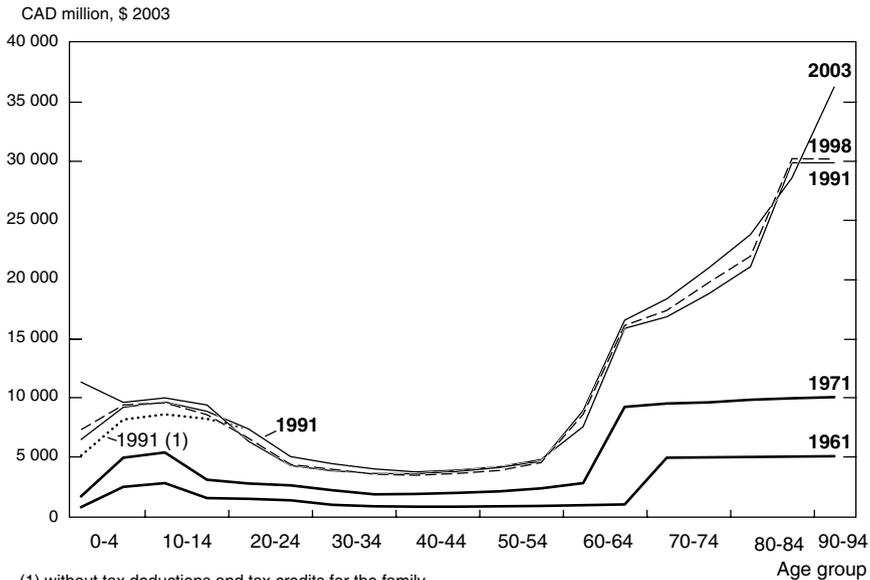
13.3.2 The Period 1961–1991

The per capita spending profile by age over the period 1991–1998, and even in the 1991–2003 period, contrasts with the situation observed in the three previous decades. Recent changes appear minimal compared with the progression in public programs observed over a longer period. Between 1961 and 1991, per capita spending was multiplied by 5.1, rising from CAD 1,434 to CAD 7,258 (2003 Canadian dollars, Table 13.1). This increase was made possible by the creation of new programs (Québec's participation in the federal hospitalization insurance program in 1961, and the health insurance program in 1970, creation of the Québec Pension Plan in 1967, for example), by the transformation of existing programs which became more generous (welfare benefits, unemployment insurance, old-age security for example). Changing behaviors also had a major impact: more time spent in school, earlier male retirement, more frequent use of medical and hospital services in particular. Moreover, economic conditions called for larger transfers within programs destined for the unemployed and the needy.

Table 13.2. Per Capita Social Spending by Category for Certain Age Groups, Québec, 1991 and 2003

	Age 0-4	Age 20-24	Age 40-44	Age 60-64	Age 70-74	Age 80-84
1991 (2003 CAD)						
Education	66	3495	267			
Family support (allowances and childcare)	4 159					
Welfare benefits	343	602	583	749	44	44
Employment assistance		40	44			
Unemployment insurance		1736	1104	580		
Occupational health and safety + disability		389	335	760	39	
Healthcare and social services	1 825	1011	1230	2691	5850	12105
Pensions			61	2698	10831	8872
Total	6 393	7273	3625	7478	16764	21022
2003						
Education	127	3 654	148			
Family support (allowances and childcare)	9 279					
Welfare benefits		428	539	829		
Employment assistance		223	168			

Figure 13.3. Profile of Social Spending by Age, Québec, 1961, 1971, 1991, 1991¹, 1998 et 2003 (2003\$)



¹ Without tax deductions and tax credits for the family.

Each age group benefited from the improvement in government programs. The over 65s benefited from the largest increase between 1961 and 1991, with per capita spending multiplied by 5.5. But the other major age groups also benefited, with per capita spending multiplied by 4.8 for young people and by 5.3 for adults.

Figure 13.3 clearly illustrates the changing role of the State over these three decades between 1961 and 1991 and the variation, actually very limited, between the 1991 and 2003 profiles (except for the large increase for the 0–4 age group). A few examples are sufficient to illustrate the changes that occurred between 1961 and 1991. For these comparisons, we use the 1991 profile calculated without the tax measures. The largest changes are observed in the transition age groups: 7.4 times more on average for children aged 0–4; 5.7 times more in early adulthood for the 15–19-year-olds; 9.0 times more in the 60–64 age group and 5.1 times for the 65+, ages marked by retirement for workers and, more generally, the onset of old age⁴. Cyclical fluctuations tend to mask the major structural changes that occurred in the past and that have never been reversed.

13.4 THE LONG-TERM VIABILITY OF COLLECTIVE SOLIDARITY BETWEEN GENERATIONS

The system of social solidarity as defined today involves major fund transfers between generations. The fact that transfers are more substantial towards certain groups – the old and the young – is not inequitable in itself. Needs vary over the life cycle. It is the continuity of public solidarity that really matters. Individuals need to know that they will enjoy the same advantages throughout their life, that what they have given to others they will themselves receive in return.

Public solidarity involves applying principles of reciprocity, but reciprocity between different generations. When two individuals sign a contract, this contract is binding for both of them. Each will receive from the other; each will give to the other. The same applies to society in general, but in the case of public solidarity, the contract is moral and binds different generations. Public solidarity has an intertemporal dimension: it concerns “rights acquired by current generations to receive a share of the future national income in the form of pension and healthcare benefits” (A. Masson, 1995, p. 316).

At a time of major economic, social and demographic change, it is not always easy to respect a moral contract of this kind. From one year to the next, the needs associated with different welfare programs evolve in line with the economic cycle: the unemployment rate fluctuates constantly, as does the number of persons in financial difficulty. Behaviors change and generate new needs: the school attendance rate increases, the number of low-income single-parent families rises, and families need more childcare services.

Another difficulty associated with public solidarity arises from the very long duration of the moral contract. Between the moment when a young worker starts contributing to programs for the elderly and the time when this same person, now elderly himself, starts receiving benefits such as an old-age pension, healthcare benefits or long-term residential care, a period of four, five or even six decades has elapsed! So there is a risk inherent to social solidarity, and this risk cannot and will not be accepted without a relation of trust. Individuals must be in a position to believe that the system is durable and that it will not be modified along the way. So social solidarity is dependant upon structural changes that occur over a long period, such as the increase in productivity⁵ or the changing age structure which modifies the relative weights of different co-existing age groups: demographic ageing will drain an ever larger share of public resources in years to come.

By its very nature, the financing mechanism of social solidarity programs is dependent upon economic cycles and structural change. Only a small share of solidarity funds is set aside to establish reserves. These reserves will be built up over the coming years by the Québec Pension Plan through a progressive increase in contribution rates up to 9.9% in 2003. The program of

the Occupational Health and Safety Commission also relies on a certain degree of funding to honor future commitments. All other transfers, both benefits in kind or cash benefits, are based on the pay-as-you-go principle, with the funds spent during the year obtained through taxes and charges levied in the same year.

So the system is highly sensitive to a key demographic factor, the population age structure. Foreseeable demographic ageing will affect spending, notably on education, healthcare, social services and pensions. The choice of the indicator for measuring the impact of demographic ageing on social spending is of key importance. If we choose a structural indicator based on demographic structure (the demographic dependence ratio and the economic dependence ratio for example), the effect of ageing is direct: the weight of seniors increases sharply (Gauthier, 1997, pp. 209–210). If we use an indicator of the burden of social spending based on the working population, here again the effect is significant, since the working population is taken from the central age group, mostly aged 20–59, whose proportion is decreasing slightly in the population as a whole, and above all, because social spending is directly influenced by the growing proportion of seniors (Gauthier, 1997, pp. 211–212). But if we use a tax burden indicator which takes account of the contribution to government revenue of all contributors, the picture is less discouraging since old people, whose proportion is increasing, also pay taxes. By providing more and more income for governments, seniors are no longer simply a burden, as is the case for the two previous indicators, but contribute to solving the problem (Rochon, 1999).

So the viability of public solidarity must be viewed in the light of three key criteria: demographics, labor and finance.

13.4.1 Demographics

To apply the principle of solidarity, which extends from current to future generations, it is clear that society cannot survive without children. Children are a vital cog in the wheel of public solidarity; they are the fundraisers of tomorrow. Upon reaching adulthood, they will replace the generations retiring from working life and add their strength to the generations who are still on the labor market and still economically active. If a society does not produce enough children, an alternative option is to resort to immigration. This option remains open so long as other populations continue to have children elsewhere.

To ensure the presence of future generations there are two possible solutions: to maintain an adequate birth rate or to rely on immigration. A society that counts on immigration to offset low fertility will have a slightly older age structure than one with higher fertility, though the difference is minimal. In Québec, for example, a fertility rate of 1.6 children per woman, accompanied by compensatory immigration (around 60,000 people per year) would give rise over

the long term (in 2051) to a proportion of seniors aged 65 and over of 25.6%, compared with a proportion that would reach 25.8% if the fertility rate were to rise to 2.1 children per woman with zero net migration. In both cases, life expectancy rises to 81.8 years for men and 87.5 years for women. The difference is negligible and the effects of demographic ageing are certainly non-significant with respect to other factors. So both options – increased fertility and more immigration – are theoretically possible.

But what does the demographic situation tell us? Fertility in Québec is close to 1.5 children per woman. It has remained below the replacement threshold since 1970 and below 1.8 since 1972. The fertility of generations at age 40 does not reach 1.65 for the generations of the 1960s. There is a deficit of over 20% for the replacement of generations (data taken from Duchesne, 2005, pp. 271–272), i.e., successive generations will decrease in number by around one fifth, unless immigration makes up the difference. But here too, the picture is no more reassuring, although there has been some improvement in recent years. In the last ten years, the total net immigration to Québec totaled 15,234 people on average (Duchesne, 2005, p. 303), which is not enough to compensate the actual low fertility. So here is a situation which does not bode well for the future, simply by virtue of the current demographic structure. Can the population decline over a long period without giving rise to major problems which, in turn affect the social security system? There is little discussion of this question at present, though it is easy to imagine the impacts of a shrinking population in terms of diseconomies of scale, changes in land occupancy, economic needs that cannot be fulfilled for lack of suitable production capacities, etc. Let's take a closer look at the situation of labor, a major component of the production system.

13.4.2 Labor

Society needs workers. Even new information technologies, which often improve productivity, rely upon large numbers of workers. Children need teachers, seniors need doctors, nurses and carers and, more generally, people to provide them with food, transport and housing. What do recent and upcoming developments tell us about supply on the labor market?

Over the last few decades, the decrease in economic activity among men was more than offset by an increase among women, leaving a surplus which added to the natural increase in the working age population. In recent years, the number of economically active women has started rising again after being hit by the recession of the early 1990s. The labor force participation rates among men aged over 55 appear to have ended their downward trend, and have even picked up slightly among the 60–64 age groups, whose participation rate rose from 37.5% to 47.4% between 1996 and 2005. The rates for women

are increasing at all ages (Institut de la statistique du Québec, 2005: p. 36). However, these changes in participation rates are far from sufficient to make up for the imminent decline in the working age population. According to the most recent demographic projections of the Institut de la Statistique du Québec, the population aged 20–59, currently standing at 4.4 million, will decrease by 0.8 million, i.e., 18%, between 2006 and 2051. For a constant participation rate, the size of the working population will follow the same path as that of the overall population aged 20–59, to which most economically active people belong. This means that between 2006 and 2021, the active population would fall by 4.4% with constant rates by age and sex. This is not enormous and can be offset by higher participation rates or immigration, or by a combination of both. But the downward trend will not stop there. It will very quickly become impossible to raise the participation rate any further. And in any case, there are many uncertainties regarding the best way to raise the participation rate (notably through delayed retirement), as pointed out by D. Blanchet in this book. The only option will be to substantially raise the number of immigrants or to reduce the numbers leaving Québec (international emigrants have totaled an estimated 7,800 per year since 1995 and the interprovincial balance is $-9,300$).

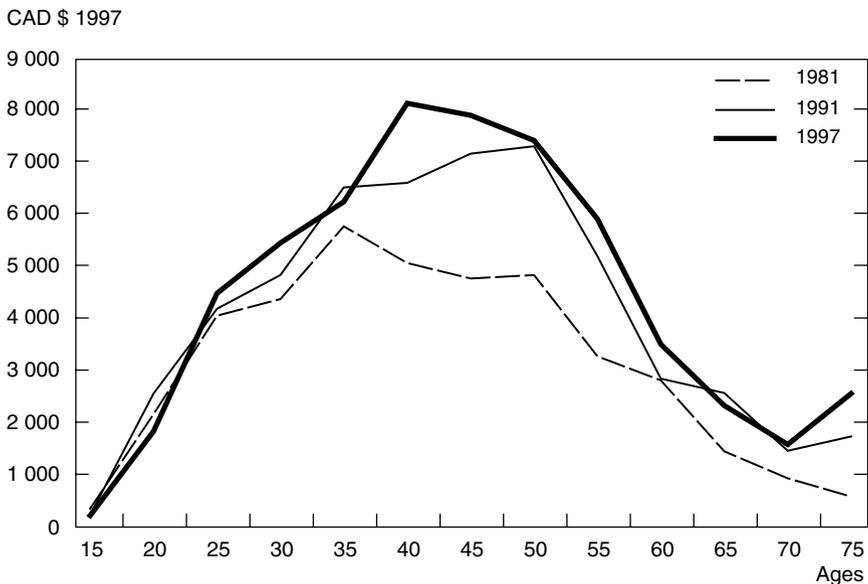
How will the system of social solidarity absorb such a change? Does it not present a threat that is equal to or even greater than that of demographic ageing? The problem of the size of the working population is different from that of ageing. Indeed, on the basis of current demographic assumptions, the age structure will reach a more or less stable state after several decades, while the working population will continue to shrink so long as the demographic factors have not been rebalanced, either by an increase in fertility or in immigration. Of course, the unemployed, welfare recipients and early retirees constitute a reserve of additional workers. The participation rates by age and sex are lower in Québec than in Ontario, and could certainly be raised, though this will not be sufficient over the long term to reverse the decrease due to the natural downward curve in the working age population. And will we have enough workers for all sectors and professions? Ongoing projects may call for large numbers of workers over a fairly short time span. For example, it was stated recently that the development of childcare services has demanded thousands of additional workers in the field in the last years. Will we be capable of finding such large numbers of workers for new projects once the working population starts to decline?

13.4.3 Finance

The financial situation is less worrisome. For at least two reasons linked to the variation in taxation over time and by age, and for another reason linked to the funding of the Québec Pension Plan.

First, let us examine the variations in personal taxation between 1981 and 1997, as revealed by the survey on consumer finances. We observe a substantial rise, with the average per capita tax for the total population in 1997 exceeding the corresponding tax in 1981 by CAD 1,558 (in 1997 dollars), whereas average per capita transfers for the total population rose by CAD 1,164 over the same period. Moreover, Figure 13.4 shows the sharp rise in average tax by age over this period. Not all the rise in personal taxation can be attributed to the increase in needs in 1997 compared with 1981. Instead of creating deficits, governments have now achieved balanced budgets or even budget surpluses. They must also pay interest on the heavy debt accumulated in the past. So tax payers are now saddled with an extra tax burden due to a budget imbalance in previous years. Is this extra burden equivalent to the one that might be generated in the future by demographic ageing? This calls for careful calculation. Because if a part of the debt is reimbursed over time thanks to government surpluses, the reduction in interest payments will release government revenues that could be devoted to absorbing the effect of ageing on public spending. Room for maneuver will be created thanks to absorption of the debt, in part at least. The variation in taxation over time during the period 1981–1997, like the variation in social

Figure 13.4. Mean Per Capita Tax by Age, Both Sexes, Québec, 1981, 1991 and 1997



spending over the period 1961–2003, also illustrate the difficulty of predicting how these values will evolve in the coming decades. Programs are modified in response to policy changes, new needs and new demands from different social groups, and governments do not escape the need for restraint in public spending.

The second argument relating to tax is based quite simply on the fact that old people also pay taxes to fill the government coffers. As their number increases, their total tax contribution will increase likewise. The problem of the extra financial burden generated by demographic ageing could be partly resolved by old people themselves, through their tax contribution. Figure 13.5 shows the variation in personal tax levied by the provincial government by age. It comprises more age groups among the elderly population than the previous graph and does not suffer from the problem of an inadequate sample size among seniors. We can see that people aged 65 and over, though practically absent from the labor market, make a significant tax contribution. Moreover, on the basis of the trend observed between 1990 and 1998, it would appear that their average contribution is increasing thanks to an improvement in their income which further raises their tax contribution. Moreover, the fact that the generations who will be retiring in the coming years have contributed more substantially to private pension plans that will not be taxed until used as income is another positive factor for public finances.

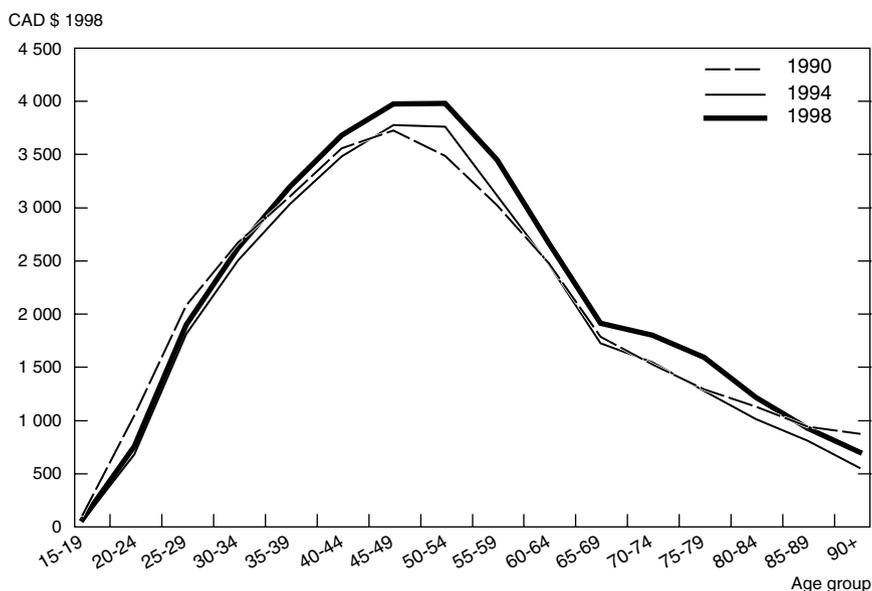
There is another reason for reassurance regarding the effects of demographic ageing. A major step was taken when the contribution rate to the Québec Pension Plan (and in parallel to the Canada Pension Plan) was increased. From 6.0% in 1997, the rate was increased to 9.9% in 2003. Thanks to the funds accrued, which will increase in value, it should not be necessary to raise the contribution rate significantly when the baby-boom generations reach retirement age: in the absence of measures to promote pension funding, the rate would have risen to 13% in 2023. Funding makes each generation pay for the transfers it will receive later on. It is a mode of financing which prevents large generations from becoming a heavy burden for smaller ones. The principle of equity is thus respected. In relation to residential care homes the idea of old-age insurance likewise based on a certain degree of funding has also been tabled.

Despite the undeniable advantages of funding, even partial, to avoid the additional burden generated by population ageing, the use of this approach to finance programs closely linked to demographic ageing has its limits. We must rely on assumptions regarding demographic change (in the latest actuarial forecast used to fix the Pension Plan contribution rate, the assumption of long-term fertility is 1.8 children per woman, 20% higher than the current level) and on economic change (it is assumed that participation rates will increase, among

workers aged 55 and above especially), and we must live with the possibility that programs will change over the coming decades (the Québec Pension Plan has been changed several times since its creation in 1967). And let's not forget that this solution must be applied over several decades before its beneficial effects are finally felt.

So although worries are less acute regarding the future financing of social solidarity, there is still cause for concern. For example, we do not know how much of the debt will be refunded. Moreover, governments may take measures to improve existing programs or to launch new ones, and public financing is not immune to the effects of recession. The Québec government, for example, has made major changes in the childcare services in recent years and created the Prescription Drug Insurance Plan in 1997. Financing may also be threatened by unfavorable changes in the other two conditions. Indeed, as regards the two other conditions for maintaining social solidarity – population and labor – fears are still unassuaged. Indeed, they are confirmed by the most recent trends in fertility and net immigration.

Figure 13.5. Taxes and Contributions of Individuals, Government of Québec, 1990, 1994 and 1998, Per Capita Average, Both Sexes (CAD 1998)



13.5 CONCLUSION

My conclusion will be in two parts, concerning firstly the conditions required to maintain social solidarity and secondly, the need to accept a certain variation in the burden attributable to social solidarity.

13.5.1 The Conditions for Maintaining Social Solidarity

In financial terms, the system of social solidarity set in place in Canada and Québec in the 1960s does not appear to be threatened to the extent that might be imagined at first sight. However, financing alone is not sufficient to guarantee the durability of the system. To ensure its survival in the face of demographic, social and economic change, the system of social solidarity also relies on the positive development of its two other bases, which are closely interlinked and which form the human resources of society: the demographic base and the productive base. We cannot be entirely reassured by the fact that the financing aspect is less worrisome than a few years back. Behind financing we need men and women, we need workers to transfer knowledge, to produce the goods and services required by the population as a whole. Even the fructification of sums set aside for the elderly or saved by individuals for their old age calls for continuity of the population and of production capabilities.

The speed with which the authorities have rebalanced public finances, at least as regards, not debt⁶, but the annual budgetary accounts (zero deficit and budget surplus within a few years), along with the ongoing increase in the contribution rate to the Québec Pension Plan, tend to overshadow the other conditions that are essential for maintaining public solidarity. Changes in the age structure are very gradual and cannot be reversed as quickly as government budgets. The demographic structure takes decades to change and we still do not know all the implications of this change. Neither do we understand all the possible effects of a decline in total population or in the working population over the long term. In this respect, we should adopt a more cautious approach than is currently the case. D. Birnbacher, a German philosopher who has examined the ethics of the future, notably with regard to the environment, proposes a rule which goes beyond mere preservation. He talks about “positive foresight” with respect to the future (1994, p. 204):

each individual should act in such a way that the other members of the group to which he feels he belongs as a living member in the present time can live in a universe that will not be poorer but richer in material, intellectual, natural and cultural resources than the world in which he himself lives.

According to this principle, should a population not strive to maintain viable demographic conditions – i.e., a non-declining population – over the long term?

13.5.2 Variations in the Burdens of Social Solidarity and Equity

At the same time, we should not allow the principle of equity in the social contract to bind us too rigidly. According to the first principle of intergenerational equity proposed by Wolfson et al. (1998, p. 120), “one generation, when it becomes old and frail, should not expect to be treated any better by its children than it treated its parents’ generation in their old age.” If the populations of the 1960s and 70s had followed this principle, they would not have set up the system of social solidarity that exists today.

Again according to the principle of intergenerational equity proposed by Wolfson et al. (1998, p. 120), “the public pension and health care services expected by the current working age population when it is old should not be any larger, relative to the size of the economy, than the transfers it is financing for the current elderly.” In other words, the sequence of transfers should not increase from one generation to the next. If we wanted to apply this principle to the question of demographic ageing and its impact on social spending, we would have to reject out of hand all spending increases that could be attributed to this factor. Likewise, we would also have to reject any extra expenses arising, for example, out of new miracle drugs whose use would push up healthcare spending.

The profile of social spending examined in the first half of this article includes programs other than healthcare programs and those destined for the elderly. When we examine social solidarity from a broad enough viewpoint, we must accept variations in the burden of social spending. These variations may have several different sources. For example, economic difficulties may increase transfers under employment insurance or employment assistance programs. Conversely, an improvement in economic conditions will bring a reduction in transfers under employment insurance and welfare assistance programs. In this case, a decrease in transfers is clearly not seen as a violation of equity. Likewise, if an increase in the income of old people results in a reduction in total benefits paid out by the federal old-age security program⁷, this cannot be construed as an inequity. An increase in the school population pushes up education spending, as does the creation of public childcare services for children of an ever younger age. The adoption of pronatalist measures in the form of state aids will be a tempting option for the future, even if it entails an increase in transfers towards young people. Social solidarity must remain open to new ideas.

NOTES

1. The profiles for 1961 to 1998 differ slightly from those published previously (Gauthier, 1997, 1999, 2004). Apart from the fact that the amounts are in 2003 Canadian dollars, certain adjustments have been made to take account of modifications to population figures, to the price indices of goods and government services and to certain data made available by certain departments or agencies. Program coverage has been slightly broadened by adding the field of employment assistance and by including spending on medical assistance and rehabilitation in the field of occupational health and safety. In addition, a weighting of 0.4 (instead of 1) has been attributed to children for welfare benefits spending (in 1998, this problem does not arise since benefits to children come under family allowances rather than welfare benefits). As regards 1991, 1998 and 2003 profiles, tax measures in the form of tax credits or tax deductions are taken into account, but were excluded in the previous publication (1991–1998 profiles). This is because at the end of the 1990s certain tax measures for the family were transformed and given in cash transfers or direct services. The 1991 profile is also calculated without the tax credits and tax deductions in order to make it comparable with the 1961 and 1971 profiles.
2. See on this topic the three reports published by the Employment Insurance Commission (1997, 1998 and 1999). In its 1998 report, the Commission estimated, for the whole of Canada, that between 1995–1996 and 1997–1998, half of the CAD 2 billion decrease in benefits paid out (–16%) could be attributed to improvements in labor market conditions, and the other half to employment insurance reforms (p. 78). A further half billion dollars of savings in 1997–1998 were attributed to tighter measures for detecting fraud and abuse. In addition, agreements have been concluded with the Québec government for certain federal employment insurance programs, which are now included under the “employment assistance” heading.
3. Certain healthcare expenses may have been overestimated in 1991 for the 0–4 age group and for seniors (verbal communication by Madeleine Rochon).
4. We cannot compare the 65+ age group by five-year interval, because it is often an open-ended group in the calculations of the 1961 and 1971 profiles.
5. We do not address the role of productivity here. Let us simply say that any increase in productivity accompanied by a comparable increase in social transfers or government services has no impact on the relative burden of social spending in the economy and does not modify the effect of demographic ageing. This burden would nevertheless be lighter in a growth economy. The demographic problem would be easier to resolve if there was a difference between the real growth rate of the economy or by worker and the growth rate of benefits by inhabitant and by age (Gauthier, 1997, p. 216).
6. Debt as a percentage of GDP has nevertheless decreased, not because the amount of debt has fallen (it has remained practically unchanged), but because economic growth has increased GDP.
7. Federal program of income supplements, in addition to the basic pension, for low-income seniors.

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CHAPTER 14

PENSIONS, PRIVILEGE AND POVERTY: ANOTHER “TAKE” ON INTERGENERATIONAL EQUITY

SUSAN A. MCDANIEL

“Predominant opinions are generally the opinions of the generation that is vanishing.”

Benjamin Disraeli

Attention, both policy and scholarly, to the economic aspects of population aging, often seen as constraints, and implications for the social contract and intergenerational equity, has grown into a preoccupation. Much, if not most, of the attention has been focussed on transfers, particularly public transfers, among broadly defined age groups within the borders of a particular country. There is much presumption in seeing population aging in terms of economic constraint, or in seeing it as dusting the social contract with dire implications.

In this paper, it is argued that the social contract among generations may be inherently unequal, leading not to generational strife, as is so predominantly voiced, but instead, to social solidarity and perhaps to economic sustainability. It is further argued that the social contract among generations is larger than public transfers in a system bounded by a nation state. The example called upon for analysis of empirical trends and generational relations is Canada. This is not because of any compelling exemplary qualities of this country in this respect, although of course, it has its share. It is simply that it is the country best known to the author and for which excellent data are readily available.

Probing some of the presumptions in seeing population aging as posing economic restraints, with implications, mostly defined as negative, for the social contract and intergenerational equity seems an apt beginning point. For the sake of brevity, these will be confined to six of the more perplexing presumptions:

1. That population aging is costly and a drag on the economy, thus creating a sense of inequity amongst the middle and the young who are thought to pay the costs.
2. That generational equity is summed by the evaluation of pay-in/pay-out ratios to public coffers of birth cohorts in any given nation state.

3. That there is a concordance of demographic and economic changes and interests.
4. That generational interests are individual, disregarding the social realities that we live vast portions of our lives in groups of people, families, whose members are, by definition, of different generations.
5. That there is a constancy of economic participation among demographic age groups.
6. And perhaps most perplexing, that there is a predictability and an evenness to the generational social contract across time, gender and socio-economic changes.

14.1 EXPLORING THE SIX PRESUMPTIONS WITH CANADA AS EXAMPLE

“‘Generational equity’ is a topic that has gradually risen higher and higher on the agenda of governments at all levels,” argues Corak in opening the first of two volumes on the topic from Statistics Canada (Corak, 1998a:v; see also Corak, 1998b). Generational equity (sometimes referred to as intergenerational equity), Corak continues, is “. . . a topic that touches many Canadians directly: young and old, parents and grandparents.”

In what follows, the presumptions noted above about the economic constraints of population aging and the presumed intergenerational inequity correlates are unpacked and more closely examined relying on Canada as an example. In contemplating longer-term correlates of population aging, it might be prudent to keep in mind an overarching presumption, one that hangs above but may not illuminate public debate, the presumption that prediction is possible and reliable. The journalist, Jeffrey Simpson (1998: A28) captures this well: “. . . we in the prediction business are often in error but never in doubt.”

14.1.1 That Population Aging is Costly and a Drag on the Economy, Thus Creating a Sense of Inequity Amongst the Middle and Young Who Are Thought to Pay the Costs

Curiously, Canada’s overall “dependency” ratios (ratios of older (typically 65+) to those of working ages (typically 18–64), and younger (0–17) to working age groups) have never been lower than they are now, as shown in Table 14.1. The balance of old and young in the overall ratios has shifted, of course, with declining birthrates and increased life expectancies. Concern about dependency of older generations on younger, however, has peaked at the very moment in Canada when overall “dependency” is at a historical low. Of course,

Table 14.1. Youth, Old Age and Total Dependency Ratios Canada from 1971 and Projected to 2031 (Low Growth Scenario)

	Youth Dependency Ratio (0–17/18–64)	Old Age Dependency Ratio (65+/18–64)	Total Dependency Ratio (0–17, 65+/18–64)
1971	63.4	14.4	77.8
1981	45.2	15.6	60.8
1991	37.1	21.6	58.7
2001	30.9	24.4	55.2
2011	25.3	27.4	52.7
2021	25.2	37.8	63.0
2031	25.0	51.6	76.6

Low growth scenario is based on an assumption of 1.4 children per woman in 1996.

Source: McDaniel, S. A. *Canada's Aging Population*, p. 113. Toronto: Butterworths, 1986. Based on Statistics Canada, *Population Projections for Canada, Provinces and Territories, 1984–2006*. 1984. Ottawa: Statistics Canada. Cata. No. 91–520, Table 18, p. 35.

when the number of children declines in a population, it tends to be presumed that investment in each child will increase. And an increase in the numbers of older people in a population does not necessarily imply a decrease in spending by those people. But, of course, demographic dependency ratios do not speak to differential spending in populations but only the presumption of dependency by age group (see McDaniel, 2003b). Key is that societies typically see funds spent on youth as an investment for the future, while funds spent on older people ensure the period of non-active life in terms of economic contributions (Canada, Policy Research Initiative, 2005). It is in this sense that population aging is seen as costly and a drag on the economy.

The hypothesis that loss of Canada's youthful self-image may be as, or more, important, than evidence provided by analysis of "dependency" ratios appears to have some support. Dependency ratios, it must be kept in mind, are not measures of actual dependency at all. They are demographic proxies only, necessitating extreme caution in policy application, unless actual dependencies of people or groups are assessed by age (Gee, 2000b; Foot, 1989).

Shifts in overall dependency ratio, from young to old, has caused fear that "... the aging population will exert increasing pressure on the working-age population to support its needs, tilting the intergenerational equity balance towards older Canadians" (Moore and Rosenberg, 1997:10). Indeed, the growing political power of seniors has resulted in reduced *poverty among the older population at the cost of increasing poverty among children and young people* (Baker and Gunderson, 2006; Dooley, 1994). This is borne out in family income

Table 14.2. Family Income in Canada 1970–1995 Lowest Decile* Only

%	1970	1995	2003
Single parents	25	40	38.4F/12.6M
Older Families	27	6	1.7 marr/6.2 other seniors

*Family income groups are divided into 10 equal groups. This is the lowest of the ten income groups.

Source: Rashid, Abdul. "Family Income: Twenty-Five Years of Stability and Change," *Perspectives on Labour and Income* 11(1):9–15 (Abridged), 1999; Sauve, Roger. "The Current State of Canadian Family Finances," Vanier Institute of the Family, <http://www.ivf famille.ca/library/cft/state05.html#Wow> Retrieved 11 February 2006.

trends over three decades, from 1970 to 2003, as shown in Table 14.2. Looking only at the lowest decile (10%) of family income over the 33-year period, single parents who are differentially younger have increased among the poorest, while older families in the poorest 10% of the population, have sharply declined. Canadian seniors have moved from having among the highest poverty rates in the country, to having the lowest, a success story among OECD countries (Baker and Gunderson, 2006).

Canadian policy has tilted, to some degree, as we have seen, in favour of public transfers to seniors, a political economy argument. This political shift, however, does not mean that aging populations *per se* are costly. It is that policy entitlements tend to be configured to benefit elders. Policy seems to have seized on demographic aging as a force in policy reformulation, a justification for reducing redistributive transfers more to younger people than to older, a tendency begun in the mid-1980s, but accelerated in the 1990s (Canada, Policy Research Initiative, 2005; McDaniel, 1986; 1987; 2000; 2003a). The self-image of Canada as safe, caring, and having a social safety net superior to that in the United States, may have led to a need for justification, additional to fiscal responsibility, for sharply cutting social programs of support other than entitlements such as public pensions (Gee, 2000b; McDaniel, 2000; 2003b). Population aging becomes policy paradigm (McDaniel, 1987). The script of "voodoo demographics," a term coined by American economist James Schulz (1988) to describe demographic alarmist scenes of pensioners and sick elders taxing delivery systems, writes our future. It is not evidence-based, but emotionally and politically compelling, apocalyptic demography as Gee (2000b) terms it.

Generational equity, however, has been a hotter button issue (Greedy Geezers/Grannies) in the United States than in Canada. (Cook et al., 1994). Indeed, explicit attention to potential intergenerational conflicts was only raised

in Canada in the mid-1990s (Gee and McDaniel, 1994), as noted by Moore and Rosenberg (1997:10). Clark (1993:151) draws a crucial contrast between the American and Canadian approaches to population aging:

the highly individualistic nature of the United States promotes an apocalyptic view of the nature of population aging: conflict between individuals and age groups against a backdrop of shrinking social resources is seen as nearly inevitable. . . Empirical data are presented in such a way as to reinforce this construction, and assumptions about the proper primacy of the traditional familial model and the secondary responsibility of the government in addressing social problems are unquestioned. . .

In Canada, by contrast, aging tends to be a more social issue, with the government response embodying collectivist principles set forth in such policies as universal health insurance. Greater reliance on social solutions defuses the apocalyptic aura of aging. . . The definition and solution to the 'aging problem' is perceived within this collectivistic framework, undercutting the social polarization and the 'zero sum' thinking common south of the border.

There is sentiment in these generalized comparisons but also analytical and policy possibilities on which we might build.

Denton and Spencer (2000:2) in examining the demographic situation in Canada now and into the future, conclude with some sanguineness that, "... demographic effects by themselves are likely to cause government expenditures (all categories, all levels of government combined) to increase by no more than the rate of growth of the population, and by less than the rate of growth of the gross national product." A similar conclusion was reached in research done for the Policy Trends Initiative on population aging, summarized by Cheal (2000) and in research by McDaniel (2003b).

14.1.2 That Generational Equity is Summed by the Evaluation of Pay-In/Pay-Out Ratios to Public Coffers of Birth Cohorts in any Given Nation State

In a country such as Canada, this presumption echoes with a particular hollowness perhaps, as we shall soon consider. The many critiques of generational accounting (GA), for example, have pointed to the narrowness of this interpretation of intergenerational equity, to the complexities even of public transfers, to the substantial *within* cohort differences in benefits and payments of transfers (see Wolfson et al., 1998), of focus only on the demand side, and of the limits of demographic determinism (see Corak 1998a; 1998b, for example, as well as Ginn and Arber, 2000a; McDaniel 1997a; 1998; 2003a; Stone, Rosenthal and Connidis, 1998). Of course, in focusing on GA here, we are in no way implying that this approach reflects the entirety of economic thought on the issue

of generations or age groups, others of which are well represented in this volume. GA, indeed, could be more accurately described as an actuarial conception of public transfers.

Recently, there has been an expansion of the analytical frame to include the supply side of the transfers ratios. Denton and Spencer (2000), for example, note several important previously overlooked factors in this regard. Population aging may, they argue, put pressure on some public transfers but it reduces the stress on others such as public education and employment programs. These cannot, of course, be isolated from other correlates of population aging. Also, the impact of population change on the productive capacity of the population may be overestimated. The economic effects of population aging may be best expressed in terms of *productive potential* of the economy, measured by national income, GNP, GDP and not in actual dollars. Slow growth in population and labour force may occur, and high rates of aggregate savings among baby boom cohorts along with modest productivity (which may or may not be exogenous to demographic change).

Generational Accounting approaches, of the sort that focus on public pay-ins and pay-outs by cohorts, may be even more inadequate as an indicator of generational equity in Canada for two important reasons. First, Canada is a land of immigrants. With declining birthrates and a larger proportion of annual population growth due to immigration, traditional GA approaches may become increasingly inappropriate. Immigrants did not previously pay into any Canadian public scheme, pension or otherwise, yet they anticipate, correctly, collecting pensions on retirement.

Second, there is in Canada rapidly changing labour force participation and work/career patterns, including the expansion in contingent work, involving less opportunity to contribute at full levels to public pension schemes, the growth in "own account" work, the transitory nature of work, and particularly the massive trend toward early retirement in the 1990s, often involuntary, of men in their 50s and early 60s (Osberg, 1993). The latter has been called the constrained labour supply behaviour of older populations (Osberg, 1993) because retirement occurs as a consequence of not finding, or keeping, suitable employment (Baker and Benjamin, 1999; Feldstein, 1974). However, this trend is now reversing in Canada with a growth in older Canadians working (Baker and Gunderson, 2006). The result of all of these changes in work and labour market participation in Canada over the recent decade, has been an overall decline in the potential pool of contributions to public pensions but also, at the same time, potential increases in the productive capacity of the Canadian population, measured by standard economic theory (Morissette and Drolet, 1999). Both have important implications for assessing pay-in/pay-out ratios as an indicator of intergenerational equity. This is consistent with analyses in Quebec by Gauthier (1997; 1999; 2000).

Retirement and the growing proportion of the life course spent in retirement may be seen then as an inventive social arrangement for dealing with problems of unemployment or an older labour force, or as extending the period during which people collect pensions (Canada, Policy Research Initiative, 2005).

14.1.3 That There Is a Concordance of Demographic and Economic Changes and Interests

Economics has largely assumed an exogenous relationship between the economic and the demographic. The exception, peculiarly, is the presumption that demographic aging lies behind demands on public purses.

Looking first at shifting risks, entitlements and responsibilities over time, we examine each of the six major cohorts of the twentieth century, relying on Canada as an example (McDaniel 1997b). We can see the major economic and social circumstances each cohort experienced at age 25 and at age 65, chosen as exemplary years for entry into motherhood/adulthood and grandmotherhood/old age, and can speculate (or know) how each might relate to other generations of women. For each of the six cohorts at age 25, a formative year in women's life courses, as seen in Table 14.3, the average economic growth rate that year, average unemployment, basic family/demographic contexts, major social policy changes, and importantly, major women's movement changes. In the interest of space, we will focus here on only three of the six major cohorts, the Pre-1926 cohort (born 1916–1926), the first wave Baby Boom cohort (born 1946–1956), and the post-Baby Boom cohort (born 1966–1975).¹ The Pre-1926 cohort at age 25 in 1941–1951 experienced the war years, followed by very high economic growth, very low unemployment, low divorce rates, a family wage, low female labour force participation, small cohort with little competition for jobs, the beginning of social programs such as Unemployment Insurance and Family Allowances, and the precedent of women working in all sectors during the war years. By contrast, the Baby Boom cohort who were 25 in 1971–1980, experienced a similar very high rate of economic growth, but a much higher rate of unemployment, high divorce rates, the end of the family wage, higher female labour force participation, very large cohort with strong competition for jobs, and in policy the beginning of questioning of welfare state programs such as pensions, gender equity legislation and the start of women's studies programs. The Royal Commission on the Status of Women, begun in 1970, marked a turning point in public acknowledgement of women's changing roles. The post Baby Boom cohort, reaching age 25 in 1990–2000, is experiencing very low rates of economic growth, unemployment rates that hover around 10%, rapidly growing family insecurity, actual drops in family income levels, a medium-sized cohort, more women breadwinners, deep cuts to social programs,

Table 14.3. A Tale of the Major Six Cohorts of the Twentieth Century at Age 25 in Canada

Six Cohorts	Average Annual Growth	Average Unemployment	Family/Demog Context	Social Policy	Women's Movement Changes
Pre 1926 born 1916–1926 age 25, 1941–1951 (age 65, 1981–1991)	4.68	< 2.0	Divorce low Family Wage Low female l.f. Small cohort Parents of babyboomers	U.I. 1940 Family Allowance 1945	WWII: women working-all jobs 1941–45
Depression born 1926–1935 age 25, 1951–1960 (age 65, 1991–2000)	4.6	3.0	Divorce low Family wage More women l.f. V. small cohort Parents of late babyboomers	OAS 1951	Peak of Baby Boom, 1951–1960
Pre-Baby Boom born 1935–1946 age 25, 1960–1971 (age 65, 2000–2011)	5.47	4.5	Divorce growing Family wage disappearing Rapid > in female l.f. Sl. larger cohort Parents of baby bust	CAP 1966 CHA 1966 CPP/QPP 1965 GIS 1967	Royal Comm on Women, 1970 Second wave Women's Move't
Baby Boom 1st Wave Born 1946–1955 Age 25, 1971–1980 (age 65, 2011–2020)	4.9	7.5	Divorce high Family wage gone High female l.f. V. large cohort Parents of baby bust	Beg. of "Great Pension Debat"	Women's studies Gender scholars Equity legis.

Baby Boom 2nd Wave Born 1955–1965 Age 25, 1980–1990 (age 65, 2020–2030)	2.9	9.7	Divorce high Multiple family members work Largest cohort Insecurity increasing	Beg. of public questioning/cuts	Gender equality in Charter of Rights, 1981 Beg. of equity retrenchment
Post Baby Boom Born 1965–1975 Age 25, 1990–2000 (age 65, 2030–2040)	1.96	10.8	Family insecurity high Family income < Medium cohort More women breadwinners	Deep cuts to social programs	Stronger equity retrenchment

Note 1: U.I.=Unemployment Insurance; Family Allowance=post-war payments to mothers to contribute to childrearing expenses; OAS=Old Age Security, universal pensions; CAP=Canada Assistance Plan, a guarantee of social assistance provision, when needed, across all provinces; CHA=Canada Health Act, government-insured health care; CPP/QPP=Canada/Quebec Pension Plan, earnings-based public pension; GIS=Guaranteed Income Supplement, a supplemental means-tested pension for those with lower incomes; “Great Pension Debate”=public debate in Canada about pension reform, particularly private vs. public pensions.

Note 2: Unemployment rates are averaged over the period during which each cohort is age 25; Growth rates are averaged annual change, based on 1981 dollars for the years prior to 1981.

and strong retrenchment in gender equity policies. The contexts of opportunities for these three cohorts of women are profoundly different and when placed in intergenerational relations contexts, far from linearly progressive for women's opportunities. Post-Baby Boomers, for example, although benefiting from the legacies of previous generations of women in struggling for rights and job equity, are finding jobs difficult to find and family formation/dissolution economically challenging. With the options of social programs lessening, those women of this cohort who can, are relying on older generations as supports (see Mitchell and Gee, 1996, for example). The support is provision of a social safety net, enabled by the capacity of older generations, mothers and grandmothers, to help out with shared housing (refilled nests), cash transfers, tuition assistance, childcare or emergency aid. Generations prior to this one, although experiencing ever-increasing mobility in relation to their mothers, a phenomenon which has become part of post-war expectations, could not rely on previous generations for exactly the reason that they had less.

So, there is a relation of demographic cohort change to economic circumstances of their times. This is not news. However, the relationship is less that the demographic cohort is determining of economic circumstances but that the economic circumstances, particularly those at crucial formative life course stages, are shaping of the demographic cohorts' life chances, and importantly, capacities to connect with and contribute to other cohorts and the overall public good.

14.1.4 That Individual Interests Are Generational, Disregarding the Social Realities That We Live Vast Portions of Our Lives in Groups of People, Families, Whose Members Are of Different Generations

This is a particularly perplexing presumption, possible only in an abstract universe where individuals are perceived as free-floating, making choices only in their own individual self-interest. That this seldom occurs in real lives and real societies, is well known to all who live in families and in communities (Laslett, 2000; Maxwell, 1996). Generational relations, between younger and older age groups, no matter what their birth cohorts or the historical period of observation, are at the heart of societal continuity and cohesion.

Intergenerational transfers are the essence of societal reproduction, continuity, interaction and exchange. Without intergenerational transfers, societies would cease to exist. (McDaniel, 1997a:2)

Intergenerational transfers and exchanges, therefore, are not a welfare state pact but an innate and abiding part of the continuity of the social fabric, indeed of human civilization.

Generation, in this sense, organizes our social worlds as profoundly as gender, class or ethnicity (McDaniel, 2004). Recent innovations from sociologies of childhood have illuminated how generational systems, relations of ruling, may govern our lives but have remained invisible in sociology (Alanen, 1994). Generation, as a social construct may be even more socially timeless than gender, class or ethnicity. Yet it embodies the paradox of being, of necessity, constantly in flux. As McMullin (2000:513) points out, “The separation of gender and age relations leads either to the conclusion that age is of considerably less significance than other dimensions of inequality such as gender, class, race, and ethnicity, or that it stands apart from the rest as a separate basis of inequality.” Neither conclusion seems justifiable. Nor does the separation of age relations from other dimensions of social power. Folbre (1994:55–56) suggests that there are parallels between the dimensions of age and gender in social import: “Like gender, age is a category based on social interpretations of a biological characteristic, a category with particularly important/ imperatives for the organization of social reproduction.” But age *per se* is not generation (Becker, 1990; Becker, 1992; McDaniel, 2004).

Generation then is, of necessity, not a category but a relation, a social relation (McDaniel, 2002; 2003a; 2004). As such, it may be an identity signifier but one that emerges from the relational, the societal playing out of a group with both responsibilities and benefits in relation to another group or set of individuals. This relational embeddedness of generations in each other and in society verges much more closely on “le contrat social” which takes us, to paraphrase Rousseau, from being “stupid and limited” in a “state of nature” into being fully human and social. The emergence of intergenerational transfers/exchanges and their continued existence is a happy historical moment and ongoing indicator of the existence of community. The constraints may be less economic than the way in which we conceptualize and frame the issue.

14.1.5 That There Is a Constancy of Economic Participation Among Demographic Age Groups

To prod this presumption, we consider the supply side of the intergenerational transfers ratio, the productivity side, with an added component of attention to the presumption of constancy of economic participation. The economic constraints of population aging arguments presume, whether explicit or not, that the contributory stages of life will be clear, corresponding roughly to labour force ages, and that retirement is leisure. In this twenty-first century, this is not the case in many (most) Western countries (Canada, Policy Research Initiative, 2005; McDaniel, 2004). It is never been the case among those in countries of the economic south.

14.1.6 And Perhaps Most Perplexing, That There Is a Predictability
and an Evenness to the Generational Social Contract Across Time,
Gender and Socio-economic Changes

It is here that the concepts of restructured privilege and poverty, the title of this paper, come into its fullness. Let us look more closely specifically at gender in relation to generation.

Women tend to live longer than men, on average, which makes their embeddedness in multiple generations more probable (McDaniel, 2001a; 2004; Sorensen, 1991). Women are socially structured, and make choices, to marry men older than they, typically by two or three years, but not uncommonly by more years, thus extending women's potential contact with earlier historical events for even longer periods than their own birth dates and life expectancies might suggest. It is stunning to note, for example, that in 1998 in the United States, there were three living widows of Civil War (which ended more than 130 years ago) soldiers² ("Family Relations," 1998:A24). Women, more often than men, are the kin-keepers who maintain contact with older and younger generations. And women are differentially called upon to care for both younger and older dependents in families and in society (Arber 2000; Ginn and Arber 2000a; 2000b; McDaniel 2002; 2003; 2004). In addition, women's experiences have been shaped dramatically and differentially by historical shifts and contingencies of gender change, thereby both individuating women's lives more and making them more connected with other generations, as the examples cited above all reveal.

Recent changes in welfare states and increasing globalization highlight crucial, and in some instances previously hidden, terrains of gendered generations and gendered intergenerational relations. Contemporary changes have been described as a "coup d'état in slow motion." Impositional claims are made that restructuring of societies (here the demise of welfare states and globalization are seen as part of the same socio-economic processes) and lives are simply necessitated by the global marketplace, that the changes are essentially gender and class neutral, and that they bring bright opportunities for future generations (McDaniel, 1999b). All of these claims relate directly to the conceptualization of gendered generational relations (McDaniel, 2004). This takes place on three planes. First, the contradictions of feminized caring come into sharp relief. As Bakker (1996:2) argues, "markets operate without recognizing that the unpaid work of reproduction and maintenance of human resources contributes to the realization of formal market relations." This work is largely done by women and increasingly, in an aging society, *for* women. Caring is seen, at best, as troublesome for the global economy (McDaniel, 1997b; 1999a) because it is perceived as a drag on so called economic progress: it is seen as "soft," unproductive, or minimally extra-economic. Caring, instead of being defined as

productive work in the new economies, has also come to be seen as a personality attribute of femininity, comprising the “good woman.”

With downsizing of welfare states, caring has become yet more privatized and feminized than previously, therefore more hidden in value both because it is home-based, and because it contributes increasingly to sustaining elders, differentially older women, who are thought not to contribute productively in the present or future (or in the past for that matter). Caring by women is thus undervalued, although it can have benefits in cementing social relations among generations, sharply countering the economic notion of competing generations (Keating et al., 2005).

The prolonged building up of obligations over a lifetime of familial exchanges is a reflection of sustained dependency upon others for help...the build-up of obligations for reciprocal giving based on dependency is a foundation of social cohesion...there is a tendency to incorrectly perceive that they create intergenerational inequities that social policy needs to try to reduce. (Stone, Rosenthal and Connidis, 1998:18)

Second, intergenerational issues among women emerge as a crucial, but largely overlooked, vector of global change in that women’s gains made in one generation are being eroded for subsequent generations of women. Not only is negative mobility apparent in several western countries for the first time in the post World War II period, but women’s opportunities have declined as well. This occurred first in developing countries with structural adjustment programs. O’Neill (1994: n.p.) summarizes:

the economic crisis... and the type of stabilization and adjustment measures taken in response to it, have halted and even reversed the progress in health, nutrition and education and incomes which women had enjoyed...during the previous three decades.

And third, most centrally for the thesis of this paper, there is a gendered generation dimension that cuts to the core of shifts in polity and citizenship rights for women and others who are/were disadvantaged. Galbraith (1996) describes this aspect succinctly as “democracy of the fortunate.” “The rich and well situated are now far more numerous and diverse than the erstwhile capitalist class,” argues Galbraith (1996:7) and, key for the purposes of this paper, the fortunate are increasingly the beneficiaries of entitlements by age, in this case corresponding to generation, and gender. Post-War male privilege has accumulated into pensions and investments on which contemporary political power rests. The profundity of this shift is noted by Quadragno (1998; 1999) in her findings about the multiple ways and the degree to which risks have shifted from the state to markets in the U.S., leaving vulnerable individuals and families without protections against the unexpected, and as importantly, without compensation, or even

acknowledgment, of structural absences in opportunities. The reality of these shifts in Canada is shown by Finnie (2000), McDaniel (1999b), Myles (2000), Myles and Picot (2000). Skocpol (1998), as well as Galbraith (1996:9–10), show compellingly how until the early decades of this century in the United States, rural agrarianism obviated the need for social security for older generations since as Galbraith (p. 10) puts it, “. . .for here, the next generation looked after the last.” The paradox is that the development of public pensions, intended to provide security for all in old age, has had the effect, together with recent social and economic shifts in social and employment policies, of consolidating power bases among men in older generations, to the exclusion of women and younger people, particularly disadvantaging younger women. Now, the discourses of neo-liberalism have atrophied the concept of the public and the public good, just at the moment when new generations of women might benefit, and marginalized those groups, including women, who are most likely to exist structurally outside the world of full-time paid work with full benefits, and are more likely to challenge social inequalities (Brodie, 1997). The contours of entitlements and responsibilities for women in various generations have altered.

14.2 TOWARD A WIDER INTERGENERATIONAL SOCIAL CONTRACT

The social contract means significantly more, at its philosophical origins, than the simple welfare state-sponsored bargain between generations to pay for future retirees’ pensions presumed by economic generational accountants. Rousseau (see Barker, 1947), in his immensely contradictory, brilliant treatise on “*le contrat social*,” suggests the following:

man ought to bless without ceasing the happy moment — which snatched from him forever the state of nature to which he was born, and turned a stupid and limited animal into an intelligent being and a man [sic]. (Rousseau, 1762, p. xxxi in Barker)

Rousseau continues to articulate three propositions of *Le Contrat Social*: 1) the state as a progressive force which lifts man gradually upward from his primitive condition; 2) the state as based on a rational reasonable will, a given fact of historical evolution; and 3) the state as based on the attainment of a general will directed to the attainment of the general good, the “common weal.”

So, in its essence, a Rousseavian social contract entails an uplifting of people from their base nature by a state premised on rational will, and crucially, concern for the public good. There is a transcendent collective good deriving from the social contract, to extrapolate from Rousseau. Although generation is not a primary focus of *Le Contrat Social*, the notion of the inter-generational creation and transmission of the civil society resulting from the

social contract, is implicitly clear and vital to Rousseau's concept. The social contract is the means by which humans escape the baseness of living in nature, and in so doing "themselves save by coming together in such a way that will enable them to withstand any resistance exerted on them from without" (Rousseau, 1947/1762:179). Perhaps no better image exists of what we are doing in parenting, protecting and launching the future generation.

In actuality, intergenerational inequity paradoxically was built into the initial state-sponsored bargain on public pensions. The deal struck was that retirees at the historical moment when the Canada/Quebec Pension Plan (C/QPP) came into effect, could receive a public pension without ever having paid into the plan, or having paid very little. For subsequent cohorts, this was not the case, of course. And for younger workers today, reforms to the C/QPP mean that contributions are increased substantially for their working lives relative to those made by their older colleagues in the work force, and many worry that, even then, the implied social contract may not benefit them on retirement.

In another sense as well, the "generational contract" of public transfers contains inbuilt generational inequities. The implicit social contract among generations is that each generation relies on the succeeding generations to continue to work, and, vitally, to continue to keep their part of the bargain by paying into the pension scheme. This entails the perpetuation of a kind of social cohesion by which older generations work to provide economic and social opportunities to younger, so that their own pensions might continue, all to the interest of the "common weal," in Rousseau's terms. Younger generations, for their part, implicitly agree to working to pay for older worker's pensions, and they also implicitly agree that public pensions are important to maintain. Without this sort of generational accord, the pay-as-you-go public pension scheme will not work, or work less well.

The usual script of intergenerational issues is written about the public realm and about *transfers only*, not social relations, interrelations or exchanges, (although at times this is what it is called), and about *public* transfers only. Elsewhere, a framework has been elaborated for capturing intergenerational interlinkages in wider social contexts (McDaniel, 2003). The justifications are good ones. Good data exist on public transfers; far less complete data exist on private transfers; and only sketchy and limited data on social relations and interrelations among generations. What data exist on social relations and private transfers come largely from small or regional surveys, case studies, or simulations, although Statistics Canada has made important contributions with national representative samples, notably the cycles of the General Social Survey on families, on aging, and on caregiving. Policy decisions most often take place in the realm of public transfers, among generations and among groups in society as part of redistribution of socio-economic resources. For the redistributive function of policy to

work effectively, analyses of intergenerational transfers must include the full range of transactions, including social transactions. So, conceptualization of the social contract ought to be expanded beyond public transfers by cohort.

There is a second dimension on which the social contract of the intergenerational ought to be expanded. Change is occurring in at least two dimensions simultaneously. The clock of biographical pacing is ticking, as is the clock of historical change, with interactions and intersections of the two. Individuals born at a specific time see their lives intersect with historical changes. Generation changes as we age but birth cohort remains the same. What is a function of birth cohort, what a function of period effects that cut across birth cohorts, and what a function of generational change over the life course, is difficult to ascertain. Generation *per se* is increasingly seen as a neglected feature of social stratification (McDaniel, 2001a; 2004; McMullin, 2000; Turner, 1998). As well as biography and history, there is the clock of social hetero- or homogeneity, increasing similarity or difference within cohorts and/or generations, which interacts with both history and biography, but in cross-hatching and at times contradictory ways. This is found to be the case for gendered generations (Krueger and Levy, 2001; McDaniel, 2001a; 2004). Analysing intergenerational equity and inequity in a historically changing society opens a means by which we can begin to detect and assess changes along several dimensions at the same time.

Still another dimension of interest is *the multiple and layered inter-linkages* among the various dimensions of intergenerational relations and transfers. Public intergenerational transfers may be connected with private transfers in ways as yet unknown (McDaniel, 1997a; Stone, Rosenthal and Connidis, 1998). The boundaries between private and public are being radically adjusted in Canada as well as in many other western countries. Both the domestic and the market itself are being privatized, the latter through deregulation, the former through diminishing state apparatus to provide supports for families or to promote gender and family equality with the growing demands on families to do more work that was previously public (Keating et al., 1999; McDaniel 2001b). The implications for intergenerational equity of these changes are massive and yet mostly unassessed, although some have begun to be explored (see, for example, Baldus and Krueger, 1999; Ginn and Arber 2000a; 2000b; McDaniel, 1999a; 2002).

A last dimension of an expanded social contract is the ongoing *tension between perceptions and realities of intergenerational issues*. This tension often veils infrastructural aspects of intergenerational transfers and exchanges that are not as visible, as well as unexpected directions of generational transfers. One example is the unfunded liability of Workers' Compensation which *de facto* transfers costs from present-day governments and employers to future workers (Gunderson and Hyatt, 1998). For workers injured on the job today and in long-term disability or rehabilitation, the Workers' Compensation has overspent,

transferring the costs and the interest on borrowed money to future workers. Other examples include the third party public health insurance in Canada which makes transfers from those in the middle to the young and the old. Canadian health care also serves an important redistributive function in transferring resources from well off to less well off (Mustard et al., 1998).

14.3 CONCLUSION

So, in conclusion, six central presumptions of the economic constraints on the social contract in terms of intergenerational transfers have been examined. Considerable, but contradictory and in places, underdeveloped evidence has been found that the economic constraints argument is, at best, overplayed. The time seems ripe for deeper theorizing and research along new directions which could lead, in the fullness of time, to bright new insights about the economics of population aging and intergenerational inter-relations and interconnectivities.

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NOTES

1. These cohorts are chosen in accordance with usual practice, but there is no established convention as to what birth dates define particular cohorts. In that sense, there is a certain arbitrariness to any selections.
2. One, age 89 in 1998 and living in Tennessee, married at 18 years old a husband 81 years old; the other two, both in their 90s (one in Colorado and one in Alabama) also married much older men.

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PART V

SOCIAL TIME

CHAPTER 15

TOWARD A 24-HOUR ECONOMY: IMPLICATIONS FOR THE TEMPORAL STRUCTURE AND FUNCTIONING OF FAMILY LIFE

HARRIET B. PRESSER

As we move into the twenty-first century, we are witnessing temporal changes in labor market demands at the macro level that are profoundly affecting the time we spend in paid employment outside the home and, consequently, the temporal nature and functioning of family life at the micro level. The “home-time” structure of family life, namely whether we are home alone or with other family members at various times of the day or night, is undergoing significant change. I am not referring here simply to the number of hours individuals and family members are employed outside the home, but to which hours they are employed. The twenty-first century, I contend, will experience even further movement toward a 24-hour economy, with increasing demands on employees to diversify their work hours and work evening and night shifts as well as weekends. This phenomenon will affect women as well as men, married as well as nonmarried, and those with children as well as those without. The seeds of this movement have already taken hold on a world-wide basis and, in my view, the trend is not likely to reverse.

This chapter, which draws upon work published in a book on the 24-hour economy, focuses on the United States (Presser, 2003). It is fortunate that national data are available for the U.S. on people’s work schedules as well as their total work hours. But, unfortunately, these data do not permit rigorous analyses of changes over time due to changes in the wording of questions over the years. Theoretically, however, a case can be made that there is an increasing demand for Americans to work late hours and weekends due to three interrelated factors: a changing economy, changing demography, and changing technology.

As I have argued elsewhere (Presser, 1989, 2000b), an important aspect of the changing economy is the growth of the service sector with its high prevalence of nonstandard work schedules relative to the goods-producing sector. In the 1960s, employees in manufacturing greatly exceeded those in service

industries; by 1995, the percentage was about twice as high in services as in manufacturing (Meisenheimer II, 1998). This growth in the service sector is linked with the growth of women's labor force in an interactive way. The service sector has a disproportionate number of traditionally female-type jobs, and thus growth in this sector reflects a growing demand for female employment. As more women become employed, they in turn contribute to the growth of the service sector. For example, the decline in full-time homemaking has generated an increase in family members eating out and purchasing services. Moreover, women's increasing daytime labor force participation has generated a demand for services during nondaytime hours and weekends.

Demographic factors have also contributed. The postponement of marriage in recent decades from a median age in the early to mid-twenties and the increasing proportion of Americans never marrying (U.S. Bureau of the Census, 1998: Tables 61 and 159) has, along with the rise in dual-earner households, increased the demand for recreation and entertainment. The aging of the population is also relevant, as this trend has increased the demand for medical services over a 24-hour day, seven days a week.

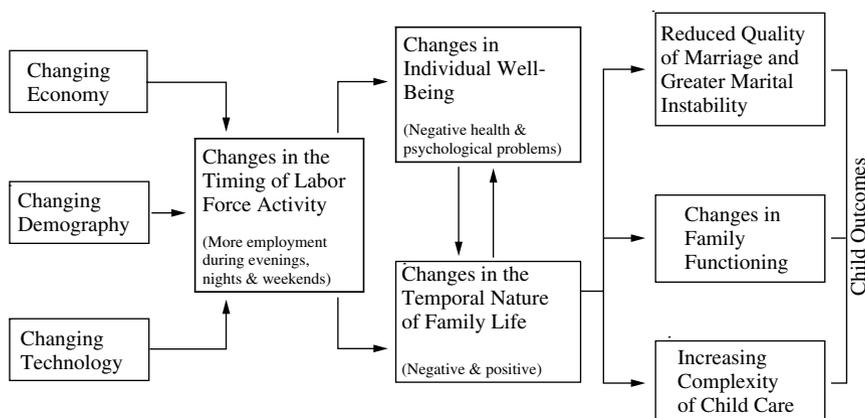
Finally, technological change, along with reduced costs, has moved us to a global 24-hour economy. The ability to be "on call" at all hours of the day and night to others around the world at low cost generates a need to do so. For example, the rise of multinational corporations, along with the use of computers, faxes, and other forms of rapid communication, increases the demand for branch offices to operate at the same time that corporate headquarters are open. Similarly, international financial markets are expanding their hours of operation. Express mailing companies, such as United Parcel, require round-the-clock workers, all days of the week.

15.1 THE PROCESS: FROM SOCIETAL DEMAND TO INDIVIDUAL AND FAMILY OUTCOMES

Given these three interrelated factors at the macro level that affect the demand for employment during late or rotating hours: a changing economy, changing demography, and changing technology, how do they affect the lives of individuals and their families?

As portrayed in Figure 1, these societal conditions affect the timing of labor force activity, which in turn affects individual well-being and the temporal nature of family life. In this paper I shall not review in detail the literature on the greater individual health risks associated working late hours, particularly nights (as distinct from evenings) and rotating shifts (whereby one periodically changes from days to evenings and/or nights). But it should be noted that very late or changing work hours affect an individual's circadian rhythms, which in turn are

Figure 15.1. *The Movement Towards a 24-Hour Economy and Its Consequences*



Presser, 2003.

linked to such biological functions as body temperature, hormone levels, and sleep (U.S. Congress, 1991). Thus, when observing negative *social* outcomes of late or rotating schedules, these outcomes may well be a consequence of the interaction among social, psychological, and physiological sources of stress.

Whereas Figure 1 points to a number of consequences of working nonstandard schedules, in this chapter I focus on the consequences for the quality and stability of marriages and for parent–child interaction. My basic question is: Is the widespread prevalence of nonstandard work hours cause for concern for the temporal structure and functioning of family life? I limit my analysis here to married couples, although I have also studied this question as it affects single-mother families (Presser and Cox, 1997; Cox and Presser, 2000).

15.2 PREVALENCE OF NONSTANDARD WORK SCHEDULES AMONG MARRIED COUPLES

It is useful to begin by documenting the prevalence of nonstandard work schedules among married couples. I have derived these figures from the May 1997 Current Population Survey (CPS), a representative sample of about 57,000 U.S. households. This 1997 CPS provides the most recent national estimates on which hours Americans are employed. My earlier analysis of *all* employed persons in this sample aged 18 and over (Presser, 2000b), married and unmarried combined, showed that 80.1% of employed Americans in non-agricultural occupations work a fixed daytime schedule – that is, most of their work hours are between 8 A.M. and 4 P.M. most days of the week. The remaining 19.9%, or one in five, work evenings, nights, a rotating shift, or have work hours

too variable to categorize. Men are somewhat more likely than women to work nonstandard hours (21.1 and 18.6%, respectively), and the gender difference obtains even when limited to those employed full time (35 or more hours a week).

When we consider married couples rather than individuals as the unit of analysis, the prevalence of nonstandard work schedules is higher, even though married persons are less likely to work nonstandard schedules than nonmarried persons. The higher prevalence is due to the fact with married couples as the unit of analysis, the nonday employment status of either spouse designates a couple as engaging in shift work.

Table 15.1 shows that almost one-fourth of all married couples with at least one earner are couples that include a shift worker – that is, a spouse (or two) who works other than a fixed daytime schedule. The percentage increases from 23.8 to 25.8 when looking specifically at married couples with a child under age 14, and to 30.6 when looking only at married couples with a child under age 5. These high prevalences of shift work among couples, and particularly couples with children, is rarely acknowledged in studies of work and family, despite the abundance of literature on the time constraints families face.

Table 15.1. Percentage of Married Couples Employed in Non-Agricultural Occupations Who Have At Least One Spouse Who Works Nonstandard Hours,^a According to Number of Earners and Presence of Children by Age: U.S. Current Population Survey, May 1997

At least one earner ^b	23.8%
At least one earner and	
Child < age 14	25.8
Child < age 5	30.6
Two earners only ^c	27.8
Two earners and	
Child < age 14	31.1
Child < age 5	34.7

^a Nonstandard hours are work hours most days of reference week being between 4 P.M. and 8 A.M. rotating hours, and those too variable to classify.

^b Couples with at least one employed spouse on the job during the reference week, including all rotators. Both spouses aged 18+.

^c Couples with both spouses on the job during the reference week, including rotators, and both in nonagricultural occupations, and both aged 18+.

When limiting the analysis to two-earner married couples – the modal family type in the U.S. – the prevalence rises because both are “at risk” of being shift workers. Over one-fourth of two-earner couples – 27.8% – include at least one spouse who works other than a fixed daytime schedule. When children under age 14 are in the household, the percentage is 31.1, and when children are under age 5, the percentage is 34.7. Again, nonstandard work schedules are a widespread phenomenon among married American couples. And virtually all couples denoted as nonstandard here are “split-shift” couples, since rarely do both spouses work nonday shifts, no less the same nonday hours.

My earlier work, based on the CPS, demonstrates that the majority of those who work nonstandard hours report that they do so for “involuntary” reasons related to their job situation, not because of family or other personal reasons that suggest preference; even when limiting the analysis to those with children, only a minority report better child care as a reason (Presser, 1995, 2003).

What is the cost to family life when spouses work nonstandard hours?

15.3 MARITAL QUALITY AND STABILITY

Two previous studies have shown that shift work affects the quality of family time and leads to greater conflict (Staines and Pleck, 1983) as well as less stable marriages (White and Keith, 1990). These studies, aside from being outdated, have some serious methodological limitations but are the only nationally representative U.S. studies on this topic. In this paper, I take advantage of a rich data source, the National Survey of Families and Households (NSFH), to explore this topic.

15.3.1 Sample Description

The NSFH is a representative survey of all American families and was conducted in two waves; the first interview during the years 1987–1988 ($N = 13,008$), and the second between 1992 and 1994 ($N = 10,008$). Spouses and partners were asked to complete a separate questionnaire. (For further methodological details, see Sweet, Bumpass, and Call, 1988, and <http://ssc.wisc.edu/nsfh/home.htm>.)

For this presentation, I restrict the analysis to married couples in the NSFH with at least one earner and complete data on the variables of interest. Some of the analysis is restricted further to dual-earner couples.

15.3.2 Shift Definition

The key independent variable is the work shift. Thus it is important to define this variable precisely. Both waves of the NSFH include detailed data on the time work begins and ends for each day of the week prior to the interview (the reference week), and whether they worked a rotating schedule, for both respondents and spouses. Based on this information, a *work shift* characterizing the entire week was derived as follows for both employed main respondents and their spouses:

Fixed day shift: At least half the hours worked during the reference week fall between 8:00 A.M. and 4:00 P.M.

Fixed evening shift: At least half the hours worked during the reference week fall between 4:00 P.M. and midnight.

Fixed night shift: At least half the hours worked during the reference week fall between midnight and 8 A.M.

Rotating shift: Work hours change periodically (e.g., from daytime to evening or night).

The usual shift is used when a spouse is with a job but not at work during the reference week. The work hours refer to all jobs for those who are multiple job holders. Spouses who are not employed are designated accordingly, although the principal contrasts of interest are between specific noonday shifts relative to day shifts.

15.3.3 Spouse Interaction

There are two measures of spouse interaction in the NSFH, one being the time spent with the spouse talking or sharing an activity (the response categories ranging from “never” to “almost everyday” and coded as 1 through 6); and the other, the frequency of sex with spouse during the prior month. Both forms of interaction may be affected by shift work, in that couples working different shifts see less of one another during the daytime and, particularly when a spouse works nights or rotating hours, often may not sleep together. We have reports from both wives and husbands in the NSFH on these variables.

As may be seen in Table 15.2 for total married couples, when the wife works fixed evenings, fixed nights, or rotating shifts, both husbands and wives report less time talking and sharing activities together than when she works a fixed day. The difference is significant or near significant in all but one case, the latter perhaps due to the small cell size. When it is the husband who works these nonday shifts, this pattern of less time obtains, but is significant only when relying on the wife’s response and for fixed evening and rotating shifts. (Spouses not employed relative to those employed days generally report more time talking

Table 15.2. Weighted Mean Scores on Time With Spouse Talking, Sharing Activities by Husband's and Wife's Work Schedules^b for All Married Couples With At Least One Earner and for Dual Earners: NSFH Wave 1

	Wife's Shift				Husband's Shift					
	Fixed Day	Fixed Evening	Fixed Night	Rotating	Not Employed	Fixed Day	Fixed Evening	Fixed Night	Rotating	Not Employed
<i>All married couples</i>										
Total	4.89	4.45***	4.57+	4.71+	4.94	4.90	4.61**	4.86	4.67**	5.02
Wife's Response	4.85	4.51**	4.70	4.62*	4.85	4.82	4.73	4.72	4.67+	5.09***
Husband's Response	2234	172	65	204	1438	3102	206	112	284	354
With children age < 19										
Wife's Response	4.53	4.23*	4.25	4.16**	4.68*	4.61	4.23**	4.57	4.34*	4.45
Husband's Response	4.45	4.27	4.44	4.05**	4.51	4.46	4.45	4.49	4.40	4.31
No children age < 19	1348	117	46	129	986	2040	140	83	201	141
Wife's Response	5.40	4.96**	5.38	5.53	5.39	5.41	5.24	5.68	5.35	5.30
Husband's Response	5.43	5.08*	5.38	5.45	5.43	5.44	5.19+	5.34	5.25	5.47
	886	55	19	75	452	1062	66	29	83	213

(Continued)

Table 15.2. (Continued)

	Wife's Shift			Husband's Shift						
	Fixed Day	Fixed Evening	Fixed Night	Rotating	Not Employed	Fixed Day	Fixed Evening	Fixed Night	Rotating	Not Employed
<i>Dual-Earner^a married couples</i>										
Total	4.86	4.44**	4.48*	4.72	-	4.86	4.44**	4.76	4.56**	-
Wife's Response	4.82	4.49**	4.66	4.57*	-	4.80	4.70	4.58	4.58*	-
Husband's Response	1958	157	56	177	-	2009	128	65	182	-
With children age < 19										
Wife's Response	4.52	4.30	4.21	4.26+	-	4.54	4.09**	4.36	4.25*	-
Husband's Response	4.46	4.32	4.47	4.02**	-	4.44	4.56	4.31	4.31	-
	1239	108	42	113	-	1297	87	44	128	-
No children age < 19										
Wife's Response	5.43	4.80**	5.38	5.44	-	5.43	5.05+	5.61	5.30	-
Husband's Response	5.42	4.92***	5.31	5.42	-	5.44	4.96**	5.13	5.23	-
	719	49	14	64	-	712	41	21	54	-

Differences from day shift are: +p = < .10; * p = < .05; ** p = < .01; *** p = < .001; ^a Current employment status; ^b Usual Shift.

Response categories: 1 never; 2 about once a month; 3 two or three times a month; 4 about once a week; 5 two or three times a week; 6 almost everyday.

Means and t-tests are weighted; N's in italics; sample includes main respondents' spouses (i.e., using couples data) with and without spouse's shift information.

and sharing activities, but is significantly more time only when husbands are not employed and it is husbands who are reporting.) Thus, one toll of evening and rotating shifts relative to days shifts is what we would expect: less time for spouses to spend quality time together.

When looking specifically at couples with children in the household, the same pattern is evident, particularly when it is the wife reporting. For couples without children, it is only the evening shift (and not rotating) that shows significantly less time together talking and sharing activities relative to the day shift, and only for women's shifts regardless of which spouse is reporting. For men, the difference in quality time between those working evenings versus days is near significance, and only according to husbands' reports.

Limiting the analysis to dual earners does not change the general finding that spouses report less quality time when they or their partner work evenings and rotating schedules. However, the wife's night shift becomes significantly linked to less quality time, as reported by wives, rather than near significant. Looking only at those dual earners with children, we see that the wife's shift seems to have a significantly negative effect only for rotators, and only when husband's report, whereas the husband's shift shows a significantly negative effect for both the evening and rotating shifts, but only as reported by wives. Among couples without children it is only the evening shift that shows a significant negative effect, both for husbands and wives, regardless of which spouse reports.

Overall, then, evening and rotating shifts may have a negative effect on the extent to which spouses spend quality time, relative to those on day shifts, with some modifications depending on whether children are present, whether the couple are dual earners, and whether it is the husband or wife reporting. Night work, however, does not seem to have a significant negative effect for any but one instance. It may be that night work gives couples more quality daytime to spend together, even when they are dual earners. But, as we shall see, it is the night workers who have the most unstable marriages.

Differences in the frequency of sex with spouse in the prior month by work shift are shown in Table 15.3. We see for total married couples that the only statistically significant difference in means is when men work evening as compared to day shifts, as reported by men – and the difference is greater frequency for the evening workers. Moreover, while not statistically significant (the *n*'s are small), we see that night work generally shows higher levels of sexual frequency. The important finding here is that the nonday shifts do not seem to *decrease* sexual frequency. (The lowest frequencies are for those not employed – all of whom have an employed spouse; this pattern obtained even when looking only at spouses aged 18–39; data not shown.)

Table 15.3. Weighted Mean Scores on Frequency of Sex With Spouse Last Month by Husband's and Wife's Work Schedules^b for All Married Couples With At Least One Earner and for Dual-Earners: NSFH Wave 1

	Wife's Shift				Husband's Shift					
	Fixed Day	Fixed Evening	Fixed Night	Rotating	Not Employed	Fixed Day	Fixed Evening	Fixed Night	Rotating	Not Employed
<i>All married couples</i>										
Total	6.95	6.91	8.87+	6.55	6.92	7.06	7.31	8.09	6.87	5.22***
Wife's Response	6.95	7.11	8.38	7.10	6.78	6.89	8.61**	8.01	6.95	5.36***
Husband's Response	1708	134	48	163	1038	2396	150	80	203	231
With children age < 19										
Wife's Response	7.20	7.51	8.36	7.46	7.90*	7.60	7.09	8.01	7.17	6.59
Husband's Response	7.13	7.68	8.43	7.38	7.84*	7.35	9.33*	8.13	6.86	6.91
	1045	97	33	105	737	1607	102	60	140	97
No children age < 19										
Wife's Response	6.58	5.28	10.21	5.23*	5.02***	6.04	7.64	8.35+	6.30	4.48**
Husband's Response	6.66	5.59	8.24	6.69	4.72***	6.04	7.50	7.60	7.12	4.53**
	663	37	15	58	301	789	48	20	63	134

(Continued)

Table 15.3. (Continued)

	Wife's Shift			Husband's Shift						
	Fixed Day	Fixed Evening	Fixed Night	Rotating	Not Employed	Fixed Day	Fixed Evening	Fixed Night	Rotating	Not Employed
<i>Dual-Earner^a married couples</i>										
Total	7.17	7.22	8.41	6.72	-	7.26	7.46	6.79	6.90	-
Wife's Response	7.17	7.32	8.09	7.23	-	7.13	8.68*	6.46	6.94	-
Husband's Response	<i>1525</i>	<i>123</i>	<i>43</i>	<i>144</i>	-	<i>1585</i>	<i>97</i>	<i>48</i>	<i>140</i>	-
With children age < 19										
Wife's Response	7.26	7.76	7.34	7.48	-	7.55	7.15	5.70+	6.75	-
Husband's Response	7.17	7.93	7.88	7.25	-	7.25	8.72	5.73	6.36+	-
	<i>971</i>	<i>89</i>	<i>30</i>	<i>94</i>	-	<i>1031</i>	<i>93</i>	-	-	-
No children age < 19										
Wife's Response	7.00	5.67	11.49+	5.58*	-	6.73	7.97	9.67+	7.19	-
Husband's Response	7.17	5.53	8.68	7.21	-	6.91	8.61	8.39	8.09	-
	<i>554</i>	<i>34</i>	<i>13</i>	<i>50</i>	-	<i>554</i>	<i>30</i>	<i>15</i>	<i>47</i>	-

Differences from day shift are; +p < .10; * p < .05; ** p < .01; *** p < .001
 Over 30 times per month are assigned 30.

Means are weighted; N's in italics; sample includes main respondents' spouses (i.e., using couples data) with and without spouse's shift information.

^a Current employment status; ^b Usual Shift.

When limiting the analysis to only those couples with children, we see in Table 15.3 that similar findings obtain. For couples without children, when wives are working rotating shifts, the frequency of sex is significantly lower relative to days, but only as reported by wives.

When looking only at dual-earner couples, and their breakdown by presence of children, the general pattern as noted above obtains, except that with the smaller *n*'s, only the husband's evening shift shows a significant difference (increase) in sexual frequency, and this is, again, as reported by husbands but not wives. Again, a couple's sex life does not seem to be hampered by working nonstandard hours.

What about marital satisfaction?

15.3.4 Marital Satisfaction

The NSFH also included questions on marital happiness (very unhappy to very happy), whether their marriage was in trouble during the last year (yes/no), and their perceived chance of eventual separation or divorce (very low to very high). To sum up these findings (data not shown; see Presser, 2003), marital happiness did not significantly differ by shift status among the employed, with one exception: women expressed significantly lower levels of marital happiness when they worked rotating rather than day shifts; the percentages with troubled marriages were not likely to differ by shift status, except that men were more likely to say their marriage was in trouble when their wives were rotators compared to day workers; and a significantly greater chance of divorce was reported by women (but not men) when their husbands worked evenings rather than days, or when they (wives) worked evenings or rotating shifts (nights were also relatively high but not significantly so, since the cell sizes were small).

Additional analyses were conducted that control for many of the social and demographic factors that might affect marital quality other than shift status, as well as distinguish between single- and dual-earner couples (Presser, 2003). It is particularly dual-earner couples who report lower quality marriages when either spouse works a nonday schedule, relative to when both spouses work days (data not shown).

We consider next the issue of whether shift work is associated with separation and divorce.

15.3.5 Marital Stability

To address this issue, I draw upon some of my published findings that utilize both waves of the NSFH (Presser, 2000a). Of the 3,476 couples married at Wave 1 (1987–88) 12.3% had separated or divorced by Wave 2 (1992–94).

The weighted percentage is 10.2: 20.7% for those who were married less than 5 years at wave 1 and 8.2% for those who were married 5 or more years.

A logistic regression analysis that controlled for the number of hours employed as well as various demographic factors known to be associated with marital instability, showed that shift work is associated with a higher risk of marital instability, but only among couples with children. Moreover, the higher risk is further conditional on the type of shift, the gender of the spouse, and the duration of marriage.

Men who were married *less* than 5 years at Wave 1, had children, and worked nights were about six times more likely to separate or divorce by Wave 2 relative to their counterparts who worked days. Women who were married *more* than 5 years at Wave 1, had children, and worked nights were about three times more likely to separate or divorce relative to their daytime counterparts. Shift rotation doubled the odds for these women relative to day workers, but not for men. Higher risks of marital instability were evident in these instances even after adjusting for differences in the time couples reported spending alone together as well as for differences in gender ideology.

These findings suggest that problems with sleep deprivation (common among night workers and rotators) may be exacerbated when children are present – and the combination of such deprivation with the social stresses of working such late or changing hours may be a critical factor enhancing marital instability. Of course, it could be that spouses who enter into night work may do so because their marriages are shaky, rather than vice-versa. I tested this hypothesis indirectly by examining men and women who were married at both Waves 1 and 2 but were not employed at night or on rotating schedules at Wave 1. The quality of their marriages at Wave 1 did not determine whether they were working fixed nights or rotating schedules at Wave 2. This finding lends support to the notion that there is something about working late hours that has a special toll on marriages, although this is not a definitive test.

15.3.6 Parent–Child Interaction

I have analyzed the consequences of nonstandard work schedules for parent-child interaction and for child outcomes in some depth in my book (Presser, 2003). Of special interest is the effect of such schedules on the “family dinner,” since this activity may be the most significant day-to-day organizing feature of family life. Typically, it is the only daily event that allows for meaningful family interaction.¹ As DeVault (1991) has stated, eating is “profoundly social” (p. 35) and its day-to-day nature creates a family’s “reality”

(p. 39). Dinner is also time bound, usually occurring in the evening—at least during weekdays. Thus, it is important to consider what happens to the family dinner when parents work evenings or rotating schedules.

The NSFH asked each parent how many times in the prior week they had dinner with their children aged 5–18. Since which days of the week they were present for dinner was not ascertained, we cannot determine from the child's point of view how many times last week they had one versus two parents (or none) present at dinner. But we can look at this separately for mothers and for fathers by shift status. We would expect those who work evening or rotating shifts to show the lowest frequencies of being present at dinner.

We see in Table 15.4 that this is the case. Relative to day workers, nonemployed parents are significantly more likely to have dinner with their children, and those working evenings and rotating shifts are significantly less likely.² Working nights (whereby most hours are between midnight and 8 A.M.) shows little difference from working days. At similar shifts, mothers are more likely than fathers to be present at dinner, and this pattern obtains even when limited to dual-earner couples.

Looking specifically at children age 5–13, who may be more in need of the socializing benefits of the family dinner than older children, we see that evening work seems to reduce the mean number of days mothers have dinner with such children by about a day, and for fathers, about $1\frac{3}{4}$ days. This pattern holds when looking only at dual-earner couples.

The effect, if any, that this greater parental absence at dinner time due to evening work has on child outcomes remains to be seen. But this difference in family functioning is evident, and with the increasing demand for evening workers in the U.S., to be discussed shortly, dinner time might be increasingly be less of a “full family” event.

15.4 DISCUSSION

Returning to my initial question, whether the widespread prevalence of nonstandard work hours is cause for concern for the temporal structure and functioning of family life, we clearly need much more analyses than what I have presented here before this can be answered confidently. But for now, the evidence seems mixed for married couples. While nonday shifts often mean spending less time with spouses talking and sharing activities, particularly if they are working evening or rotating shifts, it does not seem to have a negative effect on the frequency of sex. Overall, couples do not seem to be less satisfied with their marriages when a spouse works a shift, but a multivariate analysis specific to dual earners shows less satisfaction under such conditions. In terms of separation and

Table 15.4. Number of Days Last Week Had Dinner With Child by Shift Status^b, According to Family Type, Age of Child, and Dual-Earner Status, for Married Couples With Children Aged 5–18: NSFH Wave 1

	Mothers					Fathers				
	Fixed Day	Fixed Evening	Fixed Night	Rotating/ 24hr	Not Employed	Fixed Day	Fixed Evening	Fixed Night	Rotating/ 24hr	Not Employed
<i>All married</i>										
Child Age 5–18	5.91 980	4.80*** 73	6.23 30	5.12*** 83	6.27*** 637	5.48 1372	3.66*** 97	5.25 58	5.07* 134	5.66 92
Age 5–13	6.19 744	5.12*** 58	6.33 26	5.21*** 73	6.42** 540	5.74 1100	3.95*** 81	5.44 45	5.18** 109	6.03 69
Age 14–18	5.63 465	4.58** 31	6.12 10	4.87+ 32	6.06*** 241	5.16 597	3.18*** 37	4.56 25	4.82 56	5.19 41
<i>All Dual-Earner^a married</i>										
Child Age 5–18	5.90 895	4.75*** 69	6.39 26	5.29** 74	– –	5.41 905	3.59*** 59	5.00 32	4.82** 86	– –
Age 5–13	6.18 680	5.08*** 54	6.54 22	5.28*** 68	– –	5.71 705	3.97*** 48	4.93+ 26	4.95*** 64	– –
Age 14–18	5.61 428	4.44*** 29	6.06 8	5.24 27	– –	5.03 420	3.17*** 25	4.95 14	4.61 39	– –

Differences from day shift are; +p = < .10; *p = < .05; **p = < .01; ***p = < .001

Means and t-tests are weighted; N's in italics; sample includes main respondents' spouses (i.e., using couples data) with and without spouse's shift information.

^a Current employment status; ^b Usual Shift.

divorce, five years after the first interview, late night shifts (and shift rotation for women) seem to have taken a toll on marriage for couples with children.

Parent-child interaction effects may also be mixed. With regard to the family dinner, it is the evening shift that is most relevant, reducing the extent to which parents with children can all participate. On the other hand, as I have shown elsewhere (Presser, 1988), in the large majority of cases in which dual earner couples with preschool aged children are working different shifts, the father is the primary caregiver of these young children while the mother is at work. So nonstandard hours increases father-child interaction among split-shift dual-earners relative to couples with both spouses working day shifts. The sharing of child care in this way may be viewed by parents as preferable to alternative child care arrangements – or the wife not working for pay – but the potential stress (including sleep deprivation for the late night workers) that such arrangements may have on the well-being of individuals and their family members should not be minimized.³

A great deal remains to be studied on the social consequences of working nonday shifts, not only among married couples but among single mothers. We have no representative national studies for any country that were designed to focus on this important issue. My approach for the U.S. has been to rely on secondary data sources, primarily the NSFH, which included a limited set of questions on work schedules. Although a rich data source, the reasons for working nonday shifts and the perceived consequences to family life were not directly asked. Moreover, when one distinguishes the type of nonday shift the respondent or spouse works, cell sizes become very small even with the large NSFH sample – and one clear lesson from the research thus far is that for many outcomes, it is important to differentiate the particular nonday shift. Sometimes it is the evening shift that is problematic, sometimes the night or rotating shifts.

As I stated at the outset, I expect the movement toward a 24 hour economy to continue in the decades to come, both in the U.S. and elsewhere. Demographers and other social scientists need to pay more attention to this important social phenomenon so that we better understand both its causes and consequences. Such knowledge should provide both scholars and policy makers with a more realistic view of the complex home-time structure of families today – and in the future.

ACKNOWLEDGEMENTS

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NOTES

1. The provision of dinner mostly by women may also be seen as symbolic of the social relations of power and subordination within the family (Charles and Kerr, 1988).
2. It should be kept in mind that day workers often work *some* evening hours, precluding many parents from having dinner with their children, but because *most* of their hours are not in the evening, they are classified as having day shifts. And, of course, there may be parents who prefer not to have dinner with their children even when they are home – and vice versa, especially teenagers.
3. Another difference in household work by shift status is the greater involvement of men in housework among dual-earner couples when a spouse works nondaytime hours (Presser, 1994).

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CHAPTER 16

WORKING SCHEDULES: IN SEARCH OF A BALANCE BETWEEN FAMILY TIME AND ECONOMIC WELLBEING

EVELYNE LAPIERRE-ADAMCYK, NICOLE MARCIL-GRATTON,
CÉLINE LE BOURDAIS

16.1 INTRODUCTION

Recent decades have been marked by major changes in family life, transformations which started with the decline in the desire to have children and in their actual numbers in the 1960s. The increase in divorce rates and in marital instability soon emerged afterwards. The increase in the number of unmarried couples as a mode of couple formation and as a basis for the family emerged in the 1980s and further diversified contemporary family structures. These new behaviours have combined with a redefinition of the respective roles of men and women, especially that of women. As a result there has been a gradual and sustained decline in the prevalence of the type of family in which the father is considered as the sole breadwinner, and the mother as the only person in charge of domestic tasks and of the education of the children. In fact, women, whose level of education is constantly increasing, who are better equipped to enter the labour force and are increasingly convinced that the latter is a source of social equality and personal fulfilment, are joining the workforce in ever growing numbers, even when they have small children. Needless to say that even if the roles of men have started to evolve, change is progressing more slowly among men than women since men find it more difficult to adopt new models, being only very weakly supported by the social, economic and political environment in this regard.

Moreover, the labour market welcomes women with open arms, whilst resisting the pressures exerted by these new workers who have to reconcile professional responsibilities with the demands of motherhood and of caring for children. This resistance on the part of the world of work along with the extent of

women's participation in the labour market appears to be both the cause and the consequence of a major change: the standard of living sought after by families can no longer be attained solely with the income of the husband or of the father of the family. This situation exerts strong pressure on the way the life of the family is organised.

The problems encountered by couples seeking to address the demands of their work and the aspirations they have regarding their family life are many and seem at times irreconcilable because of the way they compete with one another. More specifically it is the time the members of families have to spend together which appears to suffer as a consequence of the work schedule to which the parents are subjected. This calls for a reflection on the balance between the parents' work schedule, economic wellbeing and "family time".

The notion of family time may seem vague; however, it conjures up images and stimulates the imagination. It has emerged in a more or less explicit manner over the last decade in a number of research projects, including those dealing with the sharing between men and women of domestic tasks and of the education of the children (Le Bourdais et al., 1987; Le Bourdais and Sauriol, 1998), the variability of working hours and its effects on family life (Presser, 1989 and 1999) and mothers' work and the time they dedicate to their children (Bianchi, 2000).

Family time is necessarily limited, and the reasons linked with its reduction are often "socially accepted". Thus the time spent at work by one of the two parents who must earn the family's income through his/her economic activity is an unavoidable reality accepted by all, especially when the activity is conducted during weekdays and during regular working hours. In addition, when children reach school age they attend school every day of the week and are therefore not available for family life. Lastly, the work of the other parent does not contribute any further to reducing "family time" if it is conducted when the children are at school; the organisation of the collective childcare services of young children bears witness to the fact that this is accepted by society. Finally, within the framework of a rather wide ranging definition, family time corresponds to weekends and evenings.

Family time therefore comprises several dimensions. First must be taken into account the fact that the children have needs and obligations that vary according to their age and which have an impact on their availability for family life. The composition of the family according to the number and the age of the children therefore represents the first dimension to be taken into account when discussing the issue of family time. Secondly, it is through the way the parents participate in the labour market that one may derive their common availability for family life. The work of both parents outside the household will be looked at from three different angles. This approach makes it possible to identify the diversity of working schedules that we shall interpret according to the competition they

exert upon the time families have to spend together. These schedules are defined according to three criteria:

- whether or not the two parents work outside the home;
- whether the mother, the father, or both have a full-time job or a part time job;
- whether the working hours of these jobs are within regular working hours (weekdays, 9 to 5) or nonstandard working hours (evenings, nights and weekends).

Finally, the income of households, closely linked to the parents' working schedule, is the third element to be taken into consideration, since the standard of living of the family depends on it. Often, decisions concerning participation in the labour market reflect the need to increase the income of the household in order to maintain an acceptable standard of living.

These three family characteristics (composition of the sibling group, parents' working schedule and family income) will be looked as elements with which families must juggle when looking for a balance between economic wellbeing and family time.

These concepts seem very simple: they are less so when we seek to operationalise them by means of empirical data. The facts presented here must therefore be considered as the results of ongoing exploratory research; they make it possible to open discussion on the orientations adopted by couples (or that couples are forced to adopt) in respect to the importance they currently give family life in their very busy schedules.

16.1 SAMPLE AND DATA USED

The population considered corresponds to two-parent families with children aged 0–11 inclusively, in Quebec. Why choose two-parent families and not all families? The research concerns essentially the question of family time and its more complex aspects, that is to say in a context in which obligations linked to the working lives of mothers and fathers, as well as the time available to children outside school hours, constitute essential factors in research on family time, or the time families have to spend together. The two-parent families chosen here differ according to the family history of their individual members: although most of the families are “intact”, there are, however, 15% of them that are step families; and although the majority of the couples are married, 30% of them are unmarried couples. These are distinctions that we will have to take into account in the analysis dealing with the way parents and children succeed in managing the family time available to them. The case of single-parent families presents another perspective to be considered as such and deserves special attention; something difficult to do within the context of an exploratory study such as the one presented here.

Only children aged 0–11 are retained because they require constant supervision in their activities and because their schedule is entirely regulated by the school system on the one hand, and, on the other, by the parents who decide whether or not to rely on childcare services so they may fulfil their professional obligations, and who chose to have their children participate in different extra-curricular activities that also compete with family time.

Lastly, the analysis concerns families in Quebec, since the social and economic environment and the existence of a clearly defined family policy in this province justify this choice as opposed to a wider analysis including all Canadian families.

This analysis is based on the data of the National Longitudinal Survey of Children and Youth conducted by Statistics Canada and the Department of Human Resources Development Canada. It was conducted among 22,831 Canadian children aged between 0 and 11, including 18,562 children from 10,978 two-parent families. This survey is representative at the level of Quebec: there are 4,461 children aged from 0 to 11 from 2,747 two-parent families. It is a panel survey conducted every two years, the first wave of which was carried out in 1994–1995. Within the context of this survey, based on the data of the first wave, the sample of children was weighted to represent the families with children under the age of 12.

In addition to the information concerning the marital and parental background of the two parents, the survey contains information on the working schedule of the two parents during the year preceding it and on the income of the household during the same period; these are the variables which are at the heart of the analysis. The data do not make it possible to precisely identify all the different jobs held by the two partners during the year before the survey, but by analysing the information concerning the main job held by the mother and that held by the father, it is possible to obtain an estimate of the parents' working schedule which is realistic. Among the components of this working schedule, jobs requiring 30 hours or more a week will be classified as "full-time jobs", and the time spent at work outside of the so-called "regular" working hours, i.e. from 9 to 5 during weekdays, will be referred to as "nonstandard" and will be considered to be in direct competition with the family time that children have, at least among those of school age; it is also the time during which parents will not be able to resort to the different childcare services usually available during "regular" hours.

16.2 THE COMPOSITION OF THE SIBLING GROUP: SOME VERY YOUNG, SOME OLDER ONES...

The first point aims at illustrating the fact that the behaviours of the parents concerning work outside the household and childminding will vary according to the size of the family and the age of the children. The classification

of families is based on variations in childcare needs according to the age of the children. A distinction is made between 3 age groups:

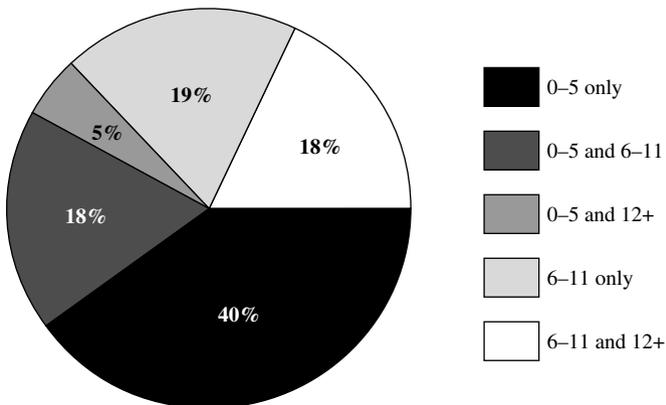
- the 0–5-year-olds: these are the most dependent children who need to be minded all of the time as soon as the parents leave home to go to work;
- children aged 6–11, who go to primary school. These children are already cared for during most of the day during the week, for approximately 180 days per year by the school system. The question of their supervision before and after school, during holidays and during the summer break, is one of the headaches that parents, whose working hours usually do not correspond with their children’s school schedule, have to contend with;
- lastly, adolescents aged 12 and over, who no longer need to be “minded” as such, but who often need to have activities outside of school hours organised for them. These adolescents can also help with the minding of the younger members of the family, after school until the parents come home, or in the evening and during weekends.

Figure 16.1 presents the distribution of two-parent families with children under the age of 12 according to the composition of the sibling group and by age group. The following may be observed:

- only 40% of the families are composed only of children of pre-school age;
- 18% have children of pre-school age and children attending primary school;
- 19% only have children aged between 6 and 11;
- 18% only have children aged between 6 and 11;

Figure 16.1. Distribution of Two-Parent Families with Children Aged Under 12, According to the Age of the Children. Québec, NLSCY, 1994–1995

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- another 18% have children in primary school and adolescent children;
- lastly, a small percentage (5%) have both very young children (0–5 years old) and older children (12 and over), including a few cases with also children aged 6–11.

This is a static picture, but it should not be forgotten that families will move from one category to another as time goes by, and the question of family time will vary according to the stage at which the families find themselves.

When one introduces, in addition to the age of the children, the size of the sibling group, the picture becomes more complex. It becomes apparent that the parents' workload, irrespective of the age of the children, is to a great degree linked to the number of children. It may be demonstrated that the number of children is closely linked to the working schedule adopted by the parents (Marcil-Gratton et al., 2000).

16.3 WORKING SCHEDULES THAT ENCROACH ON FAMILY TIME

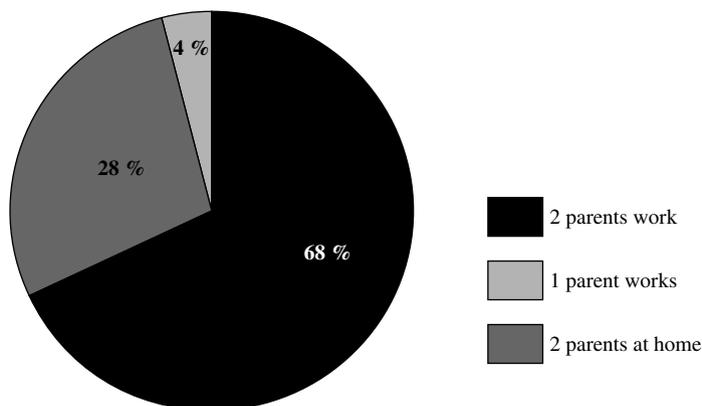
We already know that increasing numbers of families have both parents employed in paid jobs outside their homes. We are also beginning to know about the diversification of the working hours, linked to changes in the labour market. Of course there have always been jobs which by nature require to work outside so-called regular hours, i.e. weekdays and from 9 to 5. Moreover, paid work in the evenings, at night and during weekends has always existed with, for example, jobs in the health sector or in the service sector (catering and retail).

However, there are two new phenomena. Firstly, a notable aspect is the growth in the number of these jobs, because of new lifestyles. Ironically, it should be stressed here that the development, for example, of trading hours in the evenings and on Sundays is a response to the needs of families with both parents at work, but at the same time this contributes to increasing the proportion of families where parents have to cope with nonstandard working hours. Secondly, these jobs are no longer reserved for men or women who are still single and without children, but increasing numbers of fathers and especially mothers of young children occupy these positions.

To illustrate the different aspects of labour market participation among Quebec parents with children aged under 12, Figures 16.2–16.4 present the distribution in percentages of these families according to criteria characterising the economic activities of both parents.

Figure 16.2 presents the distribution of families according to whether or not the parents participate in the labour market. In the majority of cases (68%), the two parents have paid jobs. For a tiny fraction of the families (4%), the two

Figure 16.2. Distribution of Two-Parent Families with Children Aged Under 12, According to the Parents' Participation in the Labour Market the Previous Year. Québec, NLSCY, 1994–1995.



parents are unemployed. Lastly, only 28% correspond to the traditional model, with one parent (the mother) staying at home to look after the children.

The two jobs (and especially the double income, as we shall see further on) correspond to an unavoidable reality of family life today, and therefore the majority of families with children need childcare services to be able to cope with

Figure 16.3. Distribution of Two-Parent Families with Children Aged Under 12, According to the Parents' Working Part time or Full time During the Previous Year. Québec, NLSCY, 1994–1995.

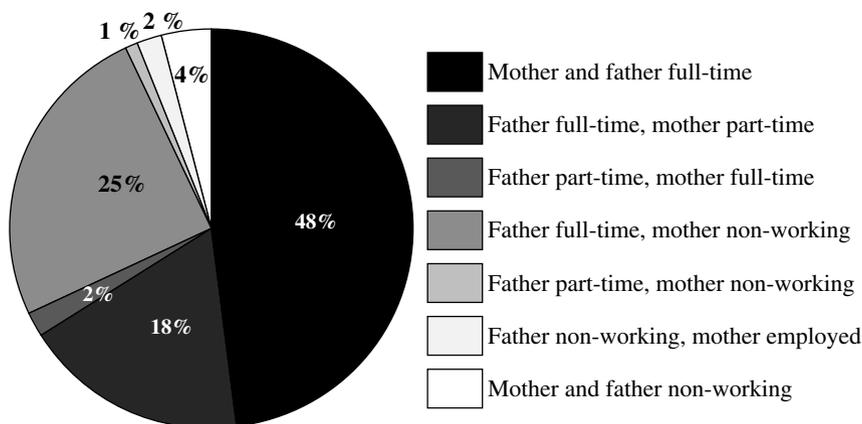
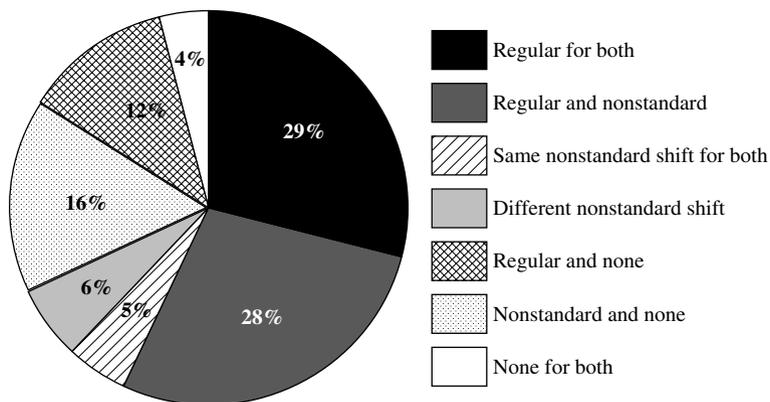


Figure 16.4. Distribution of Two-Parent Families with Children Aged Under 12, According to the Parents' Working Schedule During the Previous Year. Québec, NLSCY, 1994–1995.



reconciling family life and work. We shall also see further on that the majority of families are confronted with a reduction in family time, because of the working schedules the parents have to accept.

Figure 16.3 introduces the notion of full-time and part-time employment. The model is diversified, and the most remarkable aspect is the following: nearly half the parents of children aged under 12 both have full-time jobs (48%). Secondly, part-time work concerns 20% of families, but here the model is relatively traditional: the father with a full-time job and the mother with a part-time job in 18% of cases and only 2% in which the roles are reversed.

The persistence of the traditional model is also manifest in that when one of the parents remains at home, it is the mother in almost every case (25% out of 28%). The father at home, an occurrence which sometimes grabs media attention, remains the exception!

Lastly, there are completely unusual situations, probably temporary, representing 4% of the families: the mother is employed and the father unemployed (2%); only the father employed part-time (1%).

In short, not only do most families have both parents working but for half the families with children aged under 12, their jobs are full-time.

Figure 16.4, the last one concerning the parents working schedule, shows that not only the majority of parents each have a job outside the home, but that in most cases their working hours are also nonstandard: only 45% of families have parents who work during regular hours; either both parents (29%) or one of them, with the mother staying at home (16%).

In addition, there are 51% of families in which at least one of the parents has nonstandard working hours, i.e. evenings, nights or weekends. It is therefore safe to say that for half the families with children aged under 12 the parents' working schedule is in direct competition with their family time. The competition between family time is all the more intense in the families where the two parents have nonstandard working hours that do not coincide: this is the case for approximately half the couples who both work outside regular working hours (5% have working hours that coincide compared with 6% who do not).

In short, analysis of the parents' working schedule shows that a large proportion of families with children of an age requiring childminding have to cope with the challenge of reconciling family responsibilities with those linked to work, and that the answer to this challenge comprises sacrifices concerning family time, since:

- almost half families have both parents employed full-time,
- and a little more than half (51%) have at least one parent with nonstandard working hours, and who works at times when the children are available to spend time with the family.

Moreover, a more detailed analysis (Marcil-Gratton et al., 2000) reveals that these special aspects of the parents' working schedule today affects families differently, according to the number and age of the children.

16.4 ACCESS TO ECONOMIC WELL-BEING TO THE DETRIMENT OF FAMILY TIME?

Given the complexity of the parents' working schedules and their ties with the composition of the family, it may be assumed that the wellbeing of the family will also be associated with them. It is evident that there are links between access to economic wellbeing, measured by the level of income of the family, and the working schedule adopted by the parents.

To have access to a level of income which enables parents to cater to the aspirations and the needs of their children, the data indicate that:

- most families need two incomes;
- these two incomes rest on two full-time jobs in the majority of cases, from the moment that the median level of family income is reached;
- in addition, parents in families with average incomes are more likely to work at nonstandard hours than those with higher incomes.

From this last observation stem several issues concerning the ties between policies in support of families and their economic reality. Among other things, in the special case of the Québec family policy, one may wonder whether the concentration of support for families in the programme for low-priced childcare centres, which currently cater essentially for the clientele with regular

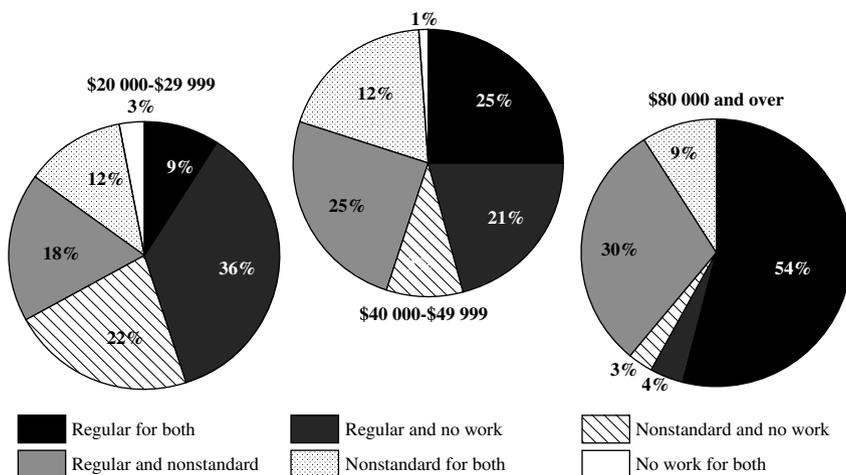
working hours and the presence of children of pre-school age, does not present a perverse effect consisting of mainly supporting families with the highest incomes. Something we believe should be the focus of reflection.

The distribution of Quebec families with children aged under 12 according to the total income of the household is as follows:

- 7% of these families may be classified as “poor”, with an income of less than \$20,000 per year;
- 12% earn between \$20,000 and 30,000 per year, and may be considered as low-income families;
- the median is at around \$50,000;
- families with incomes ranging from \$30,000 to \$50,000 are categorised as medium to low-income families (34%) and those whose income ranges between \$50 and 80,000 are categorised as medium to high-income families (31%);
- lastly families whose income exceeds \$80,000 constitute the class of high-income families (15%).

To illustrate the link between the level of income of a household and the parents’ working schedule, Figure 16.5 uses three categories of income, families with an income of \$20,000–\$29,000, of \$40,000–\$49,999 or of \$80,000 and more. Each of these categories is distributed according to the parents’ working schedule.

Figure 16.5. Distribution of Two-Parent Families with Children Aged Under 12, According to Level of Income and Working Schedule of the Parents. Québec, NLSCY, 1994–1995.



Here are the main observations that may be drawn from this illustration: the higher the income levels are the greater the proportion of parents with a job during the week and within regular working hours; this goes from 9% in families with incomes between \$20,000 and 30,000, to 25% for families with incomes ranging between \$40,000 and \$50,000, and to 54% in families which earn more than \$80,000; the higher the family income, the fewer the families with both parents working only nonstandard hours (from 12% and 19%, to 9%); as for families having adopted the “traditional” regime of the mother at home, these are greater in number among low-income families (36% + 22%) or medium-income families (21% + 9%) than in the high-income category (4% and 3%); and the lower the income, the more frequently it is based on a nonstandard working schedule for the father when he is the only parent employed (22%, 9% and 3%).

Therefore, although it is true that a certain financial wellbeing depends on both parents having paid work, it is also true that among the higher-income categories, both jobs are more often jobs with regular working hours and less frequently compete with family time.

16.5 THE REDUCTION IN FAMILY TIME: LINKED TO PROFESSIONAL OBLIGATIONS?

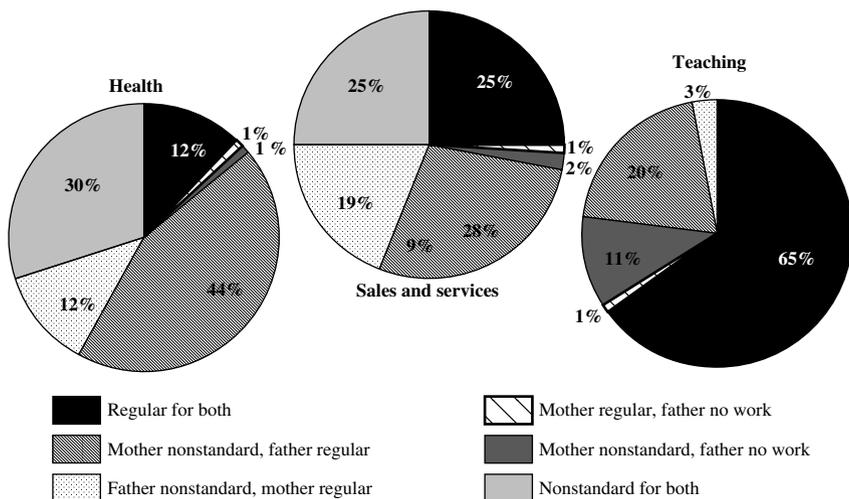
The last aspect of the reduction in family time examined in this paper attempts to answer the following question: Is the adoption of a nonstandard working schedule, above all, the reflection of a strategy on the part of the parents who, whilst wanting to increase their income, would also like to make sure that one of them is at home to mind their children? Is this a deliberate choice motivated by the perspective of saving on the cost of childcare or the expression of a sincere desire to care for their children themselves outside school hours? It is difficult to find reliable quantitative data to fuel this debate which is only just starting. But it would seem that the beginning of an answer may be obtained by examining the parents’ working schedules according to their occupations. As an exploratory example this analysis focuses specifically on some of the occupations of the mothers. Let us, first of all, recapitulate the distribution of families according to the working schedule of both parents, based on a gradient varying from the least to the most penalising in terms of family time: (a) for 48% of families with children under the age of 12, neither parent has a job outside regular working hours, including 16% where one parent (the mother principally) does not have a paid job and 4% where both parents are unemployed; (b) this leaves 40% of families where one of the two parents has nonstandard working hours; (c) lastly 12% of families have both parents working nonstandard hours, these families seem to be most penalised in terms of family time; (d) since we

also examine this distribution according to the mother’s occupation, we note that 24% of families have a mother who regularly works in the evenings, at night or during weekends.

Figure 16.6 shows that the labour market has a major impact on the working hours adopted by the parents and they are not just a tool used by the families to ensure their wellbeing. The figure only focuses on three jobs occupied by mothers: health sector jobs and those of “sales and services”, which are two sectors with nonstandard working hours, the services to be provided being often required outside so-called regular working hours; these two sectors are compared with that of teaching where, typically, the services must be provided during regular working hours.

Immediately noticeable are the variations in the percentage of families in which both parents have regular working hours: 12% (health), 25% (sales and services), and 65% (teaching). The percentage of families where both parents have nonstandard working hours varies inversely: 30%, 25% and 3% respectively. Lastly, since this concerns the job sector of the mothers, it is notable that when they work in the health sector, 74% (44%+30%) of their families have nonstandard working hours to contend with, compared with 53% (28%+25%) when they work in the sales and services sector, and only 14% (11%+3%) when they work in the education sector. It cannot be denied that the labour market has

Figure 16.6. Working Schedule of the Two Parents in Two-Parent Families with Children Aged Under 12, According to the Different Employment Sectors of the Mothers. Quebec, NLSCY, 1994–1995



a strong impact on the parents' working schedule. However, nothing can yet be said as to which component affects the other: up to which point does the early choice of job by the women take into account the future impacts on their family life? The deliberate or strategic choices of families cannot be understood without considering the characteristics of each parent's occupation, which could be used to ensure a better sharing of the childminding. Longitudinal data, such as those of NLSCY, should help to gain a better understanding of this ambiguous link between the occupations of men and women and the time available to families to spend together.

16.6 CONCLUSION

These exploratory analyses are very stimulating and open prospects for more in-depth research on the balance between family and professional obligations. The results obtained certainly indicate that research into family time should be pursued. The complexity of working schedules which vary according to several factors, including the demands of the labour market and the need to maintain an acceptable standard of living, come into direct conflict with the time that the parents and children can spend together. It is immediately apparent that family time does not come out the winner in this competition and that the quality of family life suffers as a consequence, since the adoption of nonstandard working hours leads to a standard of living that remains low, inferior to the median.

Complementary research (Marcil-Gratton et al., 2000) also shows that resorting (more or less voluntarily) to nonstandard working hours concurs with increased stress for parents and seems to be associated with greater tension among these couples, measured by a depression indicator among the mothers and a propensity to the separation of couples. This association between nonstandard working hours and increased stress subsists even when other socioeconomic factors are taken into consideration.

The notion of family time deserves more in-depth research since it especially concerns the context in which children are brought up. Amongst other things, the evolution in the participation in the labour market of the two parents should be studied over time, according to the age and the number of children. The question of the availability of childcare services and of support for parents, which especially takes into account the nonstandard working hours, is particularly relevant. And in this regard, the notion of family time comprises dimensions linked to social policies affecting families and the workplace. It could also be further enhanced and qualified by more concretely taking into account the time available to the children themselves, whose leisure activities are often organised in such a way as to considerably encroach on evenings and especially weekends.

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CHAPTER 17

DETERMINANTS OF PATHS OF TRANSITION TO TOTAL-WORK RETIREMENT: A PRELIMINARY EMPIRICAL ANALYSIS

LEROY O. STONE

17.1 KEY ISSUES

What are the key determinants of changes in work patterns among cohorts in the main transitional ages to retirement from all forms of work, and what is their relative importance? By which mechanisms do these determinants shape the dominant paths of transition to total-work retirement within an ageing cohort?

In this chapter, the expression “total-work retirement” denotes a broader concept of retirement than that commonly used. Someone in total-work retirement does *neither* paid work, *nor* unpaid work for organizations, *nor* unpaid work for family or friends, nor has any immediate plans to resume such work.

This expanded concept of retirement highlights the challenges of ageing for those who have given most of their adult lives to unpaid work of civic value, including non-labour market work. Such people make up a sizeable share of the ageing population.

Retirement from unpaid work is a useful but unfamiliar concept in our present-day societies, but the right to be remunerated for such work in old age is very much on the agenda.

Unpaid work during old age is also a major issue for people whose adult working lives have been largely taken up with full-time paid employment. The future will see a big rise in the number of older adults who have exited the paid labour market early and remain physically and mentally capable of significant work for 15 or more years afterwards. Feeling useful within an organized framework is important to the self-respect of many such people. From the mental health aspect alone, questions should be asked about access to this kind of role, when older adults have little paid-for work to do. It is also a key issue for communities that rely on active voluntary agencies, i.e., an active civil society.

Participation by older people in civil society must be part of the debate on retirement issues, and should be seen as an aspect of the transition to retirement.

17.2 DATA SOURCES

The data needed for this study must give measurable indices of how people apply their time to market *and* non-market work.

The data used here are extracted from the master files of the Statistics Canada *Total Work Accounts System* (TWAS) for 1986, 1992 and 1998. These files are themselves the product of time use cycles from the General Social Survey (GSS) for the same years. The Total Work Accounts System comprises two sets of micro level data, statistical concepts, cross-referenced statistical tables, and statistical indicators¹. Its main purpose is to support analyses of the paid work and unpaid productive work done by individuals, especially the large amount of non-labour force work of value. Chiefly, it allocates the estimated output of each episode of work to a specific beneficiary (or group of beneficiaries) collectively described as “destination”.

The public-use microdata files of the Total Work Accounts System for 1986, 1992 and 1998 are the product of time use data extracted from the General Social Survey (GSS) for the same years.

17.3 PRELIMINARY CONCEPTUAL CONSIDERATIONS

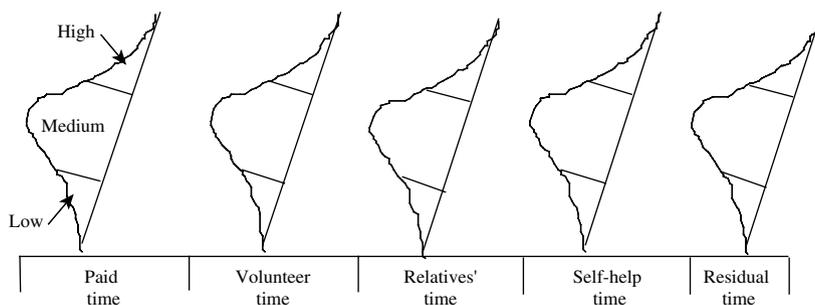
To structure these data for analysis, we must go back to some established concepts and develop new ones. A word or two must also be said about the concepts of “work pattern”, “work pattern path” and “work pattern class”.

17.3.1 Work Pattern

In this chapter, “work pattern” is used to mean the way work outputs are distributed across all the classes of work output user (called here “destinations”). The small sample sizes and other constraints on the data sources used mean that only a small number of destinations are considered here (a larger number of destinations are detailed in Stone and Chicha, 1996).

Figure 17.1 illustrates the general idea. It shows four different classes of work output users:

- users who will have to pay for the output (paid work). Time spent on this work pattern class is called “paid time”;

Figure 17.1. Variations in Work Patterns

- organizations that will not have to pay for the output (including for-profit organizations). Time spent on this work pattern class is called “volunteered time”;
- family and friends who will not have to pay for the output. Time spent on this work pattern class is called “relatives’ time”. Time spent on childcare is typical of this class;
- time spent on oneself or one’s home not included in the preceding category. Time spent on this work pattern class is called “self-help time”. Time spent doing gardening or housework falls into this class.

To clarify the explanation of total-work time reduction, a fifth class (residual time) is added² to the work pattern classes. Two big questions arise at this stage: are the different kinds of work activity substitutes or complementary, and what demographic or social characteristics of individuals are explanatory of the substitute and complementary forms? Before addressing this issue, the meaning of the words “substitute” and “complementary” in this context must be clarified. Activities are substitutes when a person starts with one activity, then replaces it by another. They are complementary when a person who started with one activity adds another to it because of consequences or requirements of the first.

Two given work activities may be substitutes for individual A, but complementary for individual B. The above questions can only be answered, therefore, by considering a specific individual and the particular circumstances of their situation. It is not therefore possible to specify a general list of demographic or social characteristics of individuals that are explanatory of the substitute and complementary forms.

The first thing to do in defining a person’s work pattern is to record the different kinds of work done by that person, and then to measure the intensity of effort for each form of work, rated by whether the effort is high, medium or low.

To classify effort for a certain class of work, we measure the overall sample distribution by the number of hours spent on each work class. Generally, effort for a work activity x is rated as high, medium or low intensity depending on its place in the distribution. For example, effort in the upper quartile of the distribution is rated as high.

The particular classification rules are set out in Stone (2000). Two details are worth mentioning: (1) for paid work, the limits are set such that high effort individuals are generally in full-time work while medium effort individuals are in part-time work; (2) the share of volunteer work for organizations is so low that individuals are considered simply by whether they do such work or not.

17.3.2 Total-Work Retirement Paths

The concept of a path among work patterns stems from the following considerations: a person's work pattern can be estimated at the ages of 50, 55, 60, 65, 70, 80, and 90, for example. This gives a series of seven work patterns comprising a path of work patterns which the person has actually performed relatively sequentially between the ages of 50 and 90.

However, numerous work pattern paths are possible, even considering a single cohort of people from an average age of 50–90, and it is important to bear this in mind. The cohort members will have followed a specific work pattern path up to death, and so the cohort will include a distribution covering all possible paths. Within this distribution, there will probably be a modal (or most often followed) path. The cohort may be relatively typical if the modal path is highly dominant (including a high proportion of the cohort members) and several of the most commonly followed paths closely resemble the modal path.

17.3.3 Work Pattern Classes

Considering the class of work done and intensity of effort in each situation produces numerous work patterns. One pattern, for example, could be high paid work, no volunteer work for organizations, medium relatives work and low self-help time (i.e., unpaid work for oneself or own household which could be purchased on the paid labour market). Since any individual has a specific point-in-time work pattern among numerous possibilities, work patterns must be classified into significant categories or classes.

For the present study, 162 possible work patterns were subsumed into 13 broad classes (described in condensed form in Table 17.1). The typology was established to maximize the scope for significant gender differentiation. The subsamples also had to be sufficiently large.

Table 17.1. Distributions of Fictive Cohorts Aged 50–54 in 1986 Over Alternative Work Pattern Classes, Canada

Work Pattern Class	Cohort Aged 50–54 in 1986		
	1986	1992	1998
	50–54	56–60	62–66
1 High paid time and at least Medium relatives' time	16.0	8.8	2.1
2 High paid time and Low relatives' time	24.7	16.2	4.8
3 Medium paid time and at least Medium relatives' time	21.7	12.8	6.9
4 Medium paid time and Low relatives' time	8.3	9.7	4.6
5 Low paid time and at least Medium relatives' time and Medium mostly non-work time	6.1	7.4	18.0
6 Low paid time and at least Medium relatives' time and High self-help work	1.9	6.4	13.3
7 Low paid time, Low relatives' time and High self-help work	1.8	5.0	12.3
8 Low paid time and at least Medium relatives' time and High mostly non-work time	1.6	4.2	3.4
9 Low paid time, Low relatives' time and High mostly non-work time	3.5	6.8	11.4
10 Medium paid time and volunteer work	0.8	0.5	1.6
11 Low paid time and Low relatives' time and volunteer work	2.4	3.8	8.7
12 Other volunteer work	2.1	1.9	2.7
13 Remaining patterns	9.2	16.4	10.1
Total	100.1	99.9	99.9

1 Each column adds to 100, except for rounding error.

Source: Statistics Canada, General Social Survey and the Total Work Accounts System

17.4 THEORETICAL FRAMEWORK

We hypothesize that during the transitional years, a cohort will display a particular distribution among a range of possible work pattern paths, within which some path types will dominate (high proportion of cohort members by these work pattern classes), giving a distinctive shape to the distribution.

What are the main determinants that influence the formation of the distinctive shape of such a paths distribution? We propose a theory to answer this question in the following paragraphs.

Causal factors can be divided into two categories: positive forces and constraints (Figure 17.2).

The positive forces that incite a person to work can be split into two categories: duties, especially family duties, and aspirations. Three categories of constraint are identified: opportunity, aptitudes and perceived social support. In terms of general principles, their relevance seems clear.

A long series of variables could be suggested that can serve as indicators of the positive forces and constraints just mentioned. However, we must confine

Figure 17.2. Forces That Drive Work Patterns

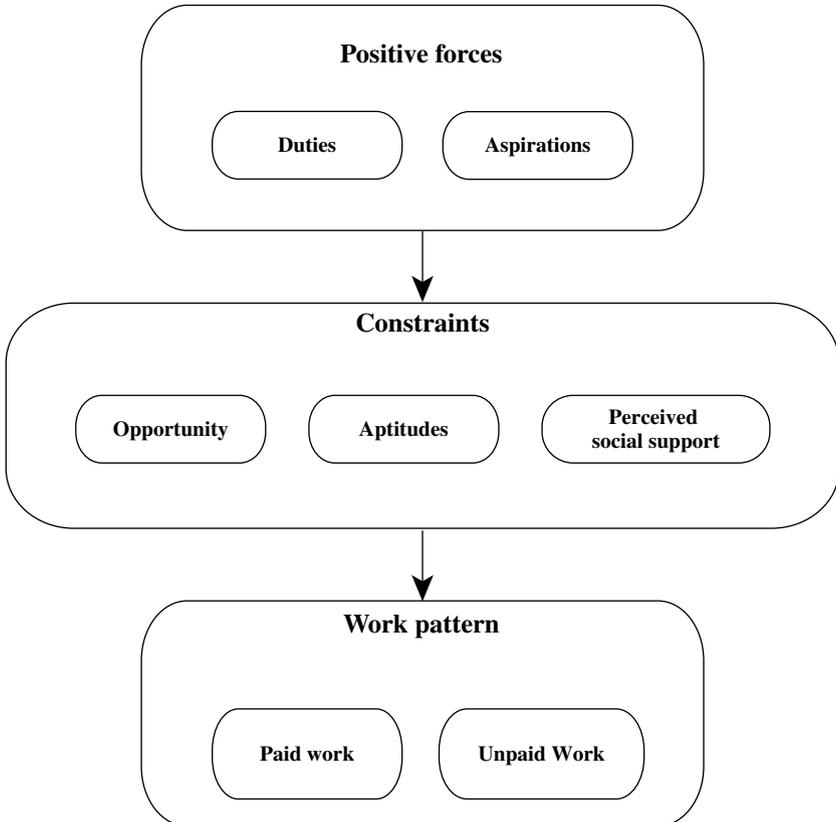
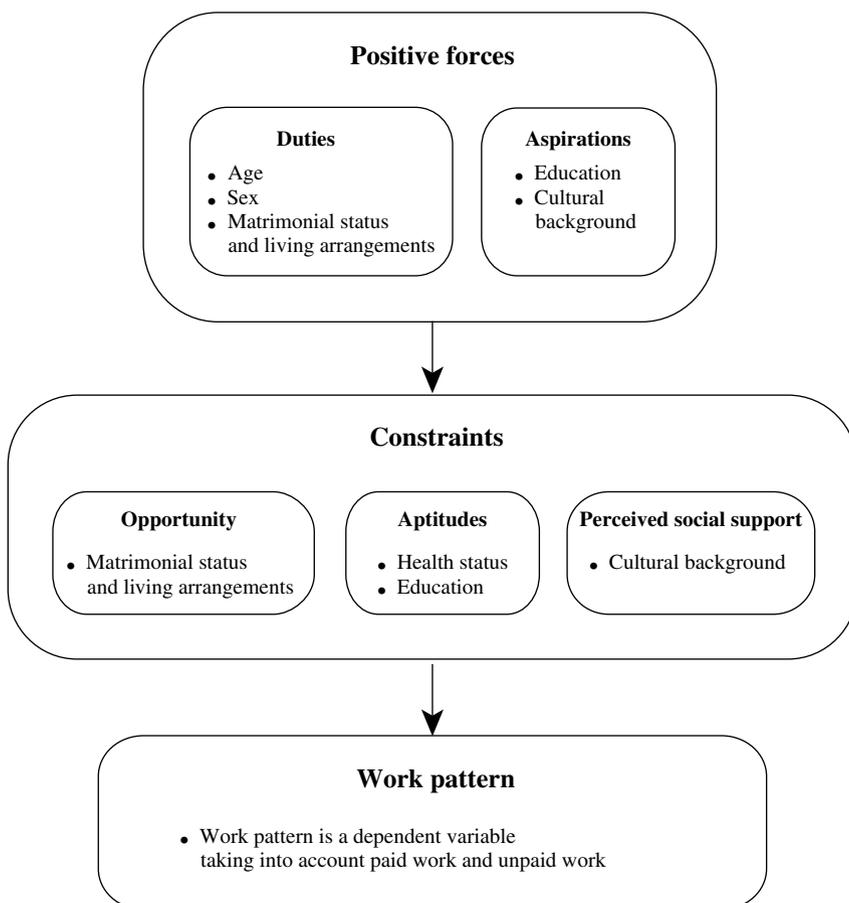


Figure 17.3.



ourselves to the variables available in the data source used for this study – chiefly, the Statistics Canada General Social Surveys (GSS) for the years 1986, 1992 and 1998.

Figure 17.3 shows the suggested indicators of the determinants of transition to retirement accessible in the GSS³.

The variables shown in this figure are not always ideal, the choice being dictated more by what was accessible in the GSS. This means accounting for the linkages between the designated indicators and the previously stated factors.

Unfortunately, the linkages considered are so indirect, at least in some significant instances, that to account for them all would be too complex a task.

17.5 STRATEGY OF THE ANALYSIS

We consider the cohorts aged 50–54 in 1986 (aged 56–60 in 1992 and 62–66 in 1998) and also track the cohorts aged 55–59 in 1986. These two cohort groups cut across the key transitional ages to retirement.

It is not possible to track the same sample of people in each cohort group, because the General Social Survey sample differs for each of the three years (1986, 1992 and 1998). A stochastic simulation method was also used to convert the age groups into years of age for 1992.

The limitations of the data already mentioned mean that we do not know the real transition paths among the various work pattern classes, since all we have is an estimated distribution of a cohort group at each date.

They also do not allow a multivariate analysis of cohort data to be performed. In the absence of desirable cohort data, the available information is used in the hope that appropriate judgements can be made on the statistical interpretations.

The method used is to give a time-dependent description of the distribution trends of each cohort group by the different work pattern classes. Then, selected outputs of the multivariate analysis are presented with hypotheses as to the causal processes behind the observed trends.

17.6 OUTPUTS

Arguably, four key questions arise, for public policy at least: (1) How rapidly does full-time labour force participation decrease? (2) What if any increase is discernible in part-time labour force participation, while full-time participation is decreasing rapidly? (3) In what classes of unpaid work activity is the participation rate higher when the labour force participation rate is falling? (4) Among the growing classes of unpaid work activity, what is the relative importance of volunteer work for organizations?

Tables 17.1 and 17.2 give a provisional basis for answering these questions, at least for the cohort groups aged 50–54 and 55–59 years in 1986. In these tables, each column represents these cohorts; in the second column, the cohorts are six years older and, in the third, 12 years older than in 1986.

Predictably, there is a very sharp drop to be seen in the proportions of work patterns that include full-time paid work. This is especially so where the full-time paid work is associated with a medium (or higher) level of unpaid

Table 17.2. Distributions of Fictive Pseudo Cohorts Aged 55–59 in 1986 Over Alternative Work Pattern Classes, Canada

Work Pattern Class		Cohort Aged 55–59 in 1986		
		1986	1992	1998
		55–59	61–65	67–71
1	High paid time and at least Medium relatives' time	9.9	3.0	0.8
2	High paid time and Low relatives' time	21.6	7.9	1.1
3	Medium paid time and at least Medium relatives' time	20.4	15.9	6.4
4	Medium paid time and Low relatives' time	7.9	8.4	3.6
5	Low paid time and at least Medium relatives' time and Medium mostly non-work time	6.7	7.6	17.6
6	Low paid time and at least Medium relatives' time and High self-help work	3.1	8.3	13.1
7	Low paid time, Low relatives' time and High self-help work	3.2	9.1	13.9
8	Low paid time and at least Medium relatives' time and High mostly non-work time	1.7	4.3	5.6
9	Low paid time, Low relatives' time and High mostly non-work time	4.6	4.6	9.2
10	Medium paid time and volunteer work	2.4	1.0	0.9
11	Low paid time and Low relatives' time and volunteer work	4.8	6.8	9.8
12	Other volunteer work	3.2	2.3	2.4
13	Remaining patterns	10.5	20.8	15.6
	Total	100.0	100.0	100.0

1 Each column adds to 100, except for rounding error.

Source: Statistics Canada, General Social Survey and the Total Work Accounts System

work for relatives (see line 1 in both tables). However, the drop is slightly less sharp than in line 2, where full-time paid work is associated with a low level of unpaid work for relatives.

If the trends in work patterns that include part-time paid work ran counter to those that include full-time paid work, there would be a rise in the shares of lines 3 and 4 in Tables 17.1 and 17.2. In fact, however, there is a pattern of fall in lines 3 and 4 of Tables 17.1 and 17.2, except for the class

where medium paid time is combined with low relatives' time. For the cohorts selected, therefore, there are no significant counterbalancing trends during the key transitional years to retirement between the work pattern classes which include full-time paid work and those which include part-time paid work.

What counterbalancing trends can be seen among the work pattern classes where unpaid work predominates? Counterbalancing trends are seen in lines 5, 6 and 11 of Tables 17.1 and 17.2. The proportions rise systematically as the cohorts age from 1986 to 1998. Lines 5 and 6 contain several work patterns where the level of performance of unpaid work for relatives is medium or higher. Line 11 of Tables 17.1 and 17.2 includes work patterns that associate low paid time with volunteer work for an organization. At the start of the observation period, this line (Tables 17.1 and 17.2) has shares below 5% which, 12 years later, are approaching 10%. The other work pattern classes where volunteer work for an organization predominates reveal no comparable trend (see lines 10 and 12).

The percentage rises in line 11 are less striking than in lines 5 and 6, which evidence a medium or higher level of assistance to relatives. So, as the share of unpaid work activity increases and that of paid work decreases among work patterns, volunteer work for an organization appears statistically less significant than work of assistance to relatives.

All in all, the answer to the above questions is that the two cohort groups bear out the established trend of a sharp fall in the paid work component of total work patterns in the transition years to total-work retirement. They suggest no significant propensity towards a counterbalancing rise in the predominantly part-time paid work form of work pattern. Such counterbalancing rises are evidenced in work patterns that include a medium or high amount of relatives' time, and volunteer work for an organization; but relatives' time is more significant than volunteer work.

What are the key determinants of the distribution trend in a cohort group during the transitional years to retirement? And what are their mechanisms? Answers to these questions will be hypothesized from the findings of a multivariate analysis of cross-sectional data.

The sample size requires a more approximate classification of work patterns into five classes to be used for the dependent variable, instead of the 13 classes so far used.

The explanatory variables in the full model, staying within the parameters of the General Social Survey, are gender, age, a combination of marital status and living arrangement, level of education, a general health indicator, and a general indicator of cultural background.

Before considering these variables individually, it needs to be examined whether the model presents acceptable goodness of fit. This can be determined by calculating a coefficient that measures the ratio of the model's predictive

error reduction to the *alternative* model which premises no linkage between the explanatory variables and the dependent variable. Broadly, our model establishes a predictive error reduction level of nearly 40%, for the 1998 data. This is a value frequently observed in articles reporting the findings of multivariate analyses.

We shall now consider the contribution of the model variables. Since age is used only as a statistical control factor, it is not discussed further in this chapter.

17.6.1 Impact of Gender

Table 17.3 gives the estimated gender-specific parameters in five different models. Because these are the crude value of the SPSS log-linear procedure, the level of each value has no material significance without undergoing mathematical transformation. But transformation is not necessary here, since the emphasis is only on the value's sign (positive or negative) and its stability across the five models.

Predictably, Table 17.3 shows that the "male" category has a consistently positive and stable impact on the probability of having a work pattern that

Table 17.3. Estimated Parameters for the Gender Variable in the Log-Linear Models Predictive of Distributions of a Population Across Different Work Pattern Classes, Cohorts Aged 50 and over, Canada, 1986, 1992, 1998

Work Patterns Comprising	Full Sample 1998	Full Sample 1992	Full Sample 1986	Individuals Aged 50-64 in 1998	Individuals Aged 65-74 in 1998
<i>Male parameters</i>					
High paid time	0.266	0.3846	0.3691	0.3328	na
Medium or higher relatives' time	-0.2749	-0.3087	-0.457	-0.1119	-0.1897
Volunteer work	-0.1139	-0.0631	-0.2161	-0.0719	0.0657
<i>Female parameters</i>					
High paid time	-0.266	-0.3846	-0.3691	-0.3328	na
Medium or higher relatives' time	0.2749	0.3087	0.457	0.1119	0.1897
Volunteer work	0.1139	0.0631	0.2161	0.0719	-0.0657

The interested readers may obtain from the author a description of the variables and the estimation programmes

includes full-time paid work. Additionally, the “male” category has a negative and stable impact on the probability of having a work pattern that includes high relatives’ time and the probability of performing volunteer work.

Conversely, the relatively stable coefficients for females evidence a positive and stable impact on the probability of having a work pattern that includes unpaid work for relatives, and a less stable impact on the probability of a work pattern that includes volunteer work for an organization.

What can be hypothesized from this for a cohort going through the key ages of transition to total-work retirement?

Higher male mortality in the cohort will produce a growing share of work patterns that include assistance to relatives and volunteer work. These work pattern classes will be numerically most significant. This, at least, is what is suggested by Tables 17.1 and 17.2, which deal with two cohort groups. Until these members begin to lose their parents at a faster pace, they will increasingly be required to provide assistance to relatives.

17.6.2 Impact of Health Status

The pace of change in cohort group distribution by health is central to the conjectured trends panning out. Table 17.4 bears out this postulate.

In this table, the coefficients for the “worse health” category are negative and stable for the probability of having a work pattern that includes either full-time paid work, or volunteer work for an organization. Conversely, positive and stable coefficients are seen for the “good health” and “better health” categories.

Can it be inferred that the cohorts ageing in the years ahead will move more slowly than preceding cohorts towards a significant share of members in the “worse health” category? If so, their transitions to total-work retirement will move towards unprecedented proportions of work patterns with volunteer work and paid work components.

17.6.3 Impact of Education and Cultural Background

Levels of education and cultural background, along with gender, locate each cohort in specific areas of work pattern, i.e., they exclude the cohort from certain areas. These areas can be identified for each cohort group in the earliest transitional years to retirement. It is hypothesized that these areas will tend to remain constant throughout transition.

Table 17.5 indicates that the highest levels of education exert a positive and quite stable effect on the probability of having a work pattern that includes either full-time paid work, or volunteer work for an organization.

Table 17.6 shows that the “born outside Canada” category has a positive

and quite stable effect on the probability of having a work pattern that includes full-time paid work, but also has a negative effect on the probability of having a work pattern that includes volunteer work for an organization. One potential key determinant of this variance is the greater average need of those born outside Canada – even though elderly – to seek paid work.

What can be conjectured from the education and cultural background trends about the distribution trajectory for an ageing cohort across various work pattern classes?

Cohort members with a low level of education will probably display a higher mortality rate than those with an above-average level of education. That could give rise to a growing share of work patterns that include either full-time paid work, or volunteer work for an organization. But will the trend be pronounced enough to significantly influence the cohort path by different work pattern classes?

Table 17.4. Estimated Parameters for the Perceived Health Variable in the Log-Linear Models Predictive of Distributions of a Population Across Different Work Pattern Classes, Cohorts Aged 50 and Over, Canada, 1992, 1998

Work Pattern Class Comprising	Full Sample 1998	Full Sample 1992	Individuals Aged 50–64 in 1998	Individuals Aged 65–74 in 1998
<i>Parameters if perceived health is less than “good health”</i>				
High paid time	–0.4492	–0.1599	–0.3303	na
Medium or higher relatives’ time	0.0798	0.203	0.1728	0.1349
Volunteer work	–0.2031	–0.5181	–0.1773	–0.3367
<i>Parameters if perceived health is “good health”</i>				
High paid time	0.1516	–0.0142	0.0836	na
Medium or higher relatives’ time	–0.078	–0.172	–0.1043	–0.098
Volunteer work	0.0703	0.3845	0.0798	0.1298
<i>Parameters if perceived health is better than “good health”</i>				
High paid time	0.2976	0.1741	0.2467	na
Medium or higher relatives’ time	–0.0018	–0.031	–0.0684	–0.0369
Volunteer work	0.1328	0.1336	0.0975	0.2069

The interested readers may obtain from the author a description of the variables and the estimation programmes

Table 17.5. Estimated Parameters for the Level of Education Variable in the Log-Linear Models Predictive of Distributions of a Population Across Different Work Pattern Classes, Cohorts Aged 50 and Over, Canada, 1986, 1992, 1998

Work Pattern Class Comprising	Full Sample 1998	Full Sample 1992	Full Sample 1986	Individuals Aged 50–64 in 1998	Individuals Aged 65–74 in 1998
<i>Parameters if level of education is below completed secondary education level</i>					
High paid time	−0.2551	−0.1163	−0.3012	−0.4619	na
Medium or higher relatives' time	−0.0665	−0.0459	0.0062	0.0161	0.0947
Volunteer work	0.0482	−0.2521	−0.0681	0.118	0.0043
<i>Parameters if level of education is below completed higher education level</i>					
High paid time	−0.0022	0.1018	0.0287	0.0527	na
Medium or higher relatives' time	−0.0048	−0.05	0.0535	0.0729	−0.1139
Volunteer work	−0.2444	−0.064	−0.2225	−0.2665	−0.0853
<i>Parameters if level of education is equal to completed technical education level</i>					
High paid time	0.0993	0.0531	0.1439	0.1055	na
Medium or higher relatives' time	0.0162	0.0661	−0.07	−0.1571	0.1197
Volunteer work	0.079	−0.022	0.1886	0.0665	−0.0693
<i>Parameters if level of education is equal to university degree level</i>					
High paid time	0.1580	−0.0386	0.1286	0.3037	na
Medium or higher relatives' time	0.0551	0.0298	0.0103	0.068	−0.1005
Volunteer work	0.1172	0.3381	0.102	0.082	0.1502

The interested readers may obtain from the author a description of the variables and the estimation programmes

Table 17.6. Estimated Parameters for the Cultural Background Variable in the Log-Linear Models Predictive of Distributions of a Population Across Different Work Pattern Classes, Cohorts Aged 50 and Over, Canada, 1986, 1992, 1998

Work Pattern Class Comprising	Full Sample 1998	Full Sample 1992	Full Sample 1986	Individuals Aged 50–64 in 1998	Individuals Aged 65–74 in 1998
<i>Parameters if mostly English-speaking</i>					
High paid time	-0.1052	-0.1672	0.0564	-0.0184	na
Medium or higher relatives' time	-0.07	0.0619	0.0238	0.0626	0.1255
Volunteer work	0.0952	0.3052	-0.1115	0.178	-0.0018
<i>Parameters if mostly French-speaking</i>					
High paid time	-0.3722	-0.1974	-0.3492	-0.2627	S/o
Medium or higher relatives' time	0.0772	0.0122	-0.1871	0.2294	-0.3164
Volunteer work	0.2933	0.2626	0.3925	0.0977	0.5605
<i>Parameters if other European</i>					
High paid time	0.0457	na	na	0.1028	S/o
Medium or higher relatives' time	-0.0696	na	na	-0.0119	-0.1628
Volunteer work	-0.1787	na	na	-0.1139	-0.0663
<i>Parameters for others born in Canada</i>					
High paid time	0.0424	0.0315	-0.1726	-0.1704	S/o
Medium or higher relatives' time	0.0264	-0.183	0.1837	-0.4222	0.0897
Volunteer work	0.3783	0.1821	0.1368	0.4426	0.1126
<i>Parameters for others born outside Canada</i>					
High paid time	0.3892	0.3331	0	0.3486	S/o
Medium or higher relatives' time	0.0359	0.1089	0	0.142	0.264
Volunteer work	-0.588	-0.7499	-0.4177	-0.6044	-0.6049

The interested readers may obtain from the author a description of the variables and the estimation programmes

Is there any means of predicting how cultural background will influence changes in the distribution of work patterns of a single cohort in the transitional years? Seemingly, not here, since the cohort distribution trend by cultural background cannot be predicted.

It should be noted, however, that on a cohort-specific basis, i.e., taking a succession of cohorts, there is evidence in Canada of a rise in the share of people born outside the country. This finding suggests that between-cohort variations have a negative effect for ageing cohorts on the prevalence of work patterns that include unpaid work for organizations.

17.6.4 Effect of Marital Status and Living Arrangement

The combination of marital status and living arrangement in the model represents the situation of having parents that one has an obligation to help. The trend evidenced by the (estimated) parameters of Table 17.7 bears out this interpretation of the role of this explanatory variable in the model.

Living alone has a negative effect on the probability of having a work pattern which includes unpaid work for parents. Living with a spouse produces the opposite effect, likewise the category "living with other persons". But both categories – living alone and living with a spouse – have a positive effect on the probability of having a work pattern that includes volunteer work for an organization.

We hypothesized that marital status and living arrangement would have minimal effect on the cohort trend in different work pattern classes during the cusp years of transition to total-work retirement. This conclusion was reached because of the very limited changes foreseeable in the within-cohort distribution by marital status and living arrangement during the cusp transitional years⁴.

17.7 DISCUSSION

The key mechanism for developing a cohort distribution trajectory by different work pattern classes in the cusp years of transition to total-work retirement is cohort redistribution by various categories of variables that represent different aspects of the positive forces and constraints cited in the theoretical part of this study.

It is hypothesized that the most significant factors in the redistribution of different work patterns within an ageing cohort are changes in the cohort distribution by functional capacities, and tendencies of institutions and the societal

Table 17.7. Estimated Parameters for the Living Arrangement Variable in the Log-Linear Models Predictive of Distributions of a Population Across Different Work Pattern Classes, Cohorts Aged 50 and Over, Canada, 1986, 1992, 1998

Work Pattern Class Comprising	Full Sample 1998	Full Sample 1992	Full Sample 1986	Individuals Aged 50-64 in 1998	Individuals Aged 65-74 in 1998
<i>Parameters if living with spouse (mf)</i>					
High paid time	-0.0406	-0.0632	-0.0951	-0.0925	na
Medium or Higher Relatives' Time	0.652	0.4629	0.3811	0.3835	0.5664
Volunteer work	0.1829	0.0397	0.1806	0.0459	0.0657
<i>Parameters if living alone</i>					
High Paid Time	-0.0254	-0.083	-0.1199	0.0087	na
Medium or Higher Relatives' Time	-0.4295	-0.5041	-0.2777	-0.5927	-0.8012
Volunteer work	-0.0718	0.1589	-0.124	0.0269	0.0627
<i>Parameters if living with other individuals</i>					
High Paid Time	0.066	0.1462	0.215	0.0838	na
Medium or Higher Relatives' Time	-0.2225	0.0411	-0.1034	0.2091	0.2348
Volunteer work	-0.1112	-0.1986	-0.0566	-0.0728	-0.1284

The interested readers may obtain from the author a description of the variables and the estimation programmes.

culture to compromise (or create) labour market and voluntary sector opportunities. The weight of work patterns that include unpaid work for parents will rise during the transitional years to retirement until the point where the mortality rate of cohort members' parents rises.

Excess male mortality would probably produce a fall in the weight of the work pattern classes that include paid work and a corresponding rise in unpaid work for organizations and parents for ageing cohorts with a median age above the average age of withdrawal from paid work.

Excess mortality in persons with a low level of education would tend to increase the weight of work pattern classes that include paid work and volunteer work for organizations. But this influence will decline as the cohort experiences

substantial losses of cohort members with good or better health. The consequences of this loss will be exacerbated by the tendency of institutions and societal culture to compromise labour market opportunities as the average age of the cohort rises.

These hypotheses cannot be verified on existing data; that would require multi-cohort historical data, and that is a challenge to statisticians who would need to track an actual cohort through the transitional years to produce the necessary cohort data.

There is one challenge to public policy analysts that must be mentioned in conclusion. Tables 17.1 and 17.2 may cause them to reflect on how to promote increased participation in volunteer work by reducing the weights of work patterns that include low levels for paid work and unpaid work for parents. It should be noted that for both cohort groups, nearly 25% have work patterns that include neither paid work nor work for parents, nor yet volunteer work (lines 7 and 9 of Tables 17.1 and 17.2), although most are under 70 years of age. Therein lies a significant potential for increasing participation by older people in volunteer work during the years of transition to total-work retirement.

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NOTES

1. Information on the structure of the System, definitions of concepts and statistical indicators, together with examples of its applications, can be found in Stone and Chicha (1996) and Stone and Pelletier (2002).
2. Residual time comprises three kinds of work-like activity not considered in this study: reproduction (childbirth), community involvement (voting or attending meetings relevant to community life), and personal empowerment activities (like time spent on personal development).
3. Each of these activities is a form of work different to “work” as defined in this chapter. For a more comprehensive outline of the theory, see Stone (2001).
4. The cusp years are ages 50–70. The big changes in cohort distribution by marital status and living arrangement are seen around age 70.

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CONCLUDING REMARKS BEYOND MECHANICISM: NORMS AND VALUES

JACQUES VÉRON AND SOPHIE PENNEC

Given the complexity of the issues considered in this book, it would be an impossible task to summarize the different contributions in just a few pages. We have no intention of concluding with a final judgment on the future of intergenerational relationships. We would just like to draw the reader's attention to the risk of reductionism or overgeneralization when the economic and social consequences of demographic changes are explored.

As we have seen, the demographic context of the future of intergenerational relationships is generally quite similar in all developed countries: everywhere fertility is low and below replacement level, everywhere age at first birth is increasing, everywhere people live longer, everywhere the proportion of old people is increasing, everywhere unions are becoming more unstable, etc. But, we have also seen that when the level of observation changes, i.e. when the situation of each country is considered in more detail, substantial differences appear among the developed countries. This means that the demographic trends challenge the social contract in somewhat different ways in each country, depending on the particularities of fertility, family, mortality and labour force patterns.

There are some other important differences explained by the variety of social policies adopted by each country. Family policies, for instance, may make it easier for women to reconcile fertility and labour force participation. The way elderly people behave depends partly on social policies (on the support provided for dependent old people for example). It is also important to see how the responsibilities of caring for the elderly are shared respectively by the family and by the state in each country to determine more precisely the consequences of demographic changes on the contract between generations. Age at retirement differs from one country to another and the social treatment of unemployment is not the same, etc. There is no doubt that institutional arrangements play an important role as an intermediary between past and present demographic changes and the transformation of the social contract binding the different generations.

This book, because of its format, doesn't focus on these institutional aspects; though on no account is this dimension considered as secondary.

However, in these very short concluding remarks, our intention is to stress the importance of the transformation of norms and values over time, regarding the future of intergenerational relationships. Some authors have emphasized the role played by norms and values during the fertility transition, for instance. We remember that Ron Lesthaeghe explained the contrasts in the tempo of the demographic revolution between Belgium and France not in terms of economic or social disparities but mainly in terms of differences in the degree of secularization of the two countries (Lesthaeghe, 1990). Moreover, for Ron Lesthaeghe and Dirk Van de Kaa, who consider that the first demographic transition has been followed by a second one, the new and present demographic situation is mainly the result of a profound change, over the last decades, in the norms and attitudes of people in developed countries (Lesthaeghe and Van de Kaa, 1986; Van de Kaa, 1987). For Dirk Van de Kaa the "two keywords" characterizing the change between the first and the second demographic transitions are "altruistic" and "individualistic". Thus, he noted: "the first transition to low fertility was dominated by concerns for family and offspring, but the second emphasizes the rights and self-fulfilment of individuals". In his analysis of the causes of low fertility in Japan, Makoto Atoh (2001), for his part, didn't conclude that Japan is becoming a less "child-centred" society but insisted on the change in values. If fertility is so low in Japan, it is because of a sharp increase in the proportion of never-married people and a rise in the age at marriage and in the age at childbearing. For Atoh, the reason for these trends are a change "in the value system regarding women's social and familial role and status, a change toward the valuation of a gender-equal society". The Japanese demographer considers that it is the improvement in the socio-economic status of women, linked to higher levels of education and higher labour force participation, rather than greater individualism that explains the very low fertility in his country. Other studies highlight this same issue. Thus, Nukiro O. Tsuya and Larry L. Bumpass (2004) have compared the United States and Asian countries, focusing on individualism and considering generations and gender in terms of equity versus hierarchy. In South Korea there are specific obligations for housing and care of parents for instance, but this is not the case in the United States. In Japan co-residence – the proportion of couples living with one parent – reaches 46%, versus only 2% in United States, etc. If we compare European countries with each other, we observe very different attitudes towards the family. Young adults leave the parental home much later in Italy than in Germany for example.

Ageing is also a complex issue and cannot be considered in a purely technical way. Though people are living longer and the prevalence of families

with 3, 4 or even 5 living generations is increasing, familial solidarity may simultaneously be weakening because the value systems of children, parents, grandparents and great-grandparents are too different. The relationship between parents and their children varies with changes in norms and attitudes. According to a recent survey conducted in the United Kingdom, the relationships between baby-boomers and their descendants is ambivalent, as shown by attitudes regarding inheritance (Harkin and Huber, 2004). On the one hand they behave in an hedonistic way and want to guarantee their financial autonomy in their old age: they want to be free to use their money as they see fit. On the other hand, they want to help their children when they become adult. They are willing to devote a share of their assets to giving their descendants a good start in life. A purely demographic approach is certainly a useful starting point to analyse the dynamics of the ageing phenomenon itself. But the economic and social interpretation of the increasing number or proportion of over-65s must take into account the possible changes in the value system of society as a whole (Veron, 2005).

In the same way, the dynamics of the labour force depends partly on the value system of the active population. Participation rates differ through time and space. Trade-offs between time devoted to work and to leisure evolve over time as, in a synchronous manner, does the standard of living. The past increase in female participation was also a consequence of new norms and values, in particular a consequence of women's desire to become more financially independent.

As a consequence, we believe that it is very important to keep this dimension of norms, values and roles in mind when examining the possible future of the systems of solidarity and exchange. Of course, nobody will contest that the recent and long-term demographic changes have created a very new situation in terms of relationships between the different generations at both micro and macro levels, nor that they are challenging the social contract in a new way. Nevertheless, these relations are frequently complex interactions; not simply one-to-one relationships, and secondly, they evolve when the value system is changing. Individualism is frequently singled out as a reason for the "crisis" of social protection in developed countries, but the diagnosis is certainly far too simplistic. As we have already said, the same people –parents – may be individualistic as far as the funding of their retirement is concerned, and altruistic because they want to smooth the entry of their children into adulthood. Of course, micro and macro levels have to be considered simultaneously since the modes of reasoning involved are different, as is the degree of interplay with social norms. Demographic changes modify the constraints of the systems of solidarity and exchange. Changes in the value system make these systems even more dynamic.

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