The Growth of the Italian Economy, 1820–1960

Jon Cohen
and
Giovanni Federico

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This volume in the New Studies in Economic and Social History series examines Italy's transformation from a largely rural state in the nineteenth century to today's industrial powerhouse. At the time of unification in 1861, much of the country was backward, poor and agrarian: few would have believed that a hundred years later Italy would become one of the seven largest industrial countries, its people among the wealthiest in the world. This process of development and structural change has generated an enormous and evolving literature, alive with controversies and compelling insights. New research and reinterpretation of existing data have led to a re-evaluation of the nature of Italian dualism, while revisions to national income accounts are modifying the traditional picture of economic growth. Jon Cohen and Giovanni Federico provide a concise, up-to-date account of this literature, highlighting new views on old issues, and signalling areas in need of further research.

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1
Introduction

1.1 Italy ranks today as one of the seven largest industrial countries in the world. Its people are among the world's richest whether one uses as a measure per capita income or the more broadly based Human Development Index (United Nations Development Program 1990). These observations alone would suggest that Italy's rise to economic prominence merits attention. But the country's success is all the more arresting because it was so unexpected. The city-states and principalities of the Italian peninsula were economic leaders in Europe for much of the period between the twelfth and the seventeenth centuries but their prosperity waned as the locus of economic activity and economic power shifted from the Mediterranean to the Atlantic. At the time of unification in 1861, much of the country was backward, poor and agrarian. Per capita income was roughly 50 per cent of that in Britain and about 60 per cent of that in France. While some Italians retained business skills and commercial know-how acquired during the late medieval and early modern economic expansion, very few, even among the country's most ardent champions, would have believed that, in a relatively short period of time, Italy would emerge as an industrial powerhouse. This process of growth and structural change has generated a huge and evolving literature, loaded with controversies and, often enough, compelling insights. The purpose of this monograph is to provide a concise, up-to-date account of this literature, to highlight new insights into old problems, and to signal areas desperately in need of more research. This emphasis on historiography instead of history is intentional. There are now a couple of excellent textbooks on Italy's modern economic growth (Toniolo 1990;

Zamagni 1993a) but no comprehensive, critical review of the material on which these accounts are based. We have attempted in this book to fill the gap.

1.2 Italy succeeded in spite of formidable obstacles. The country lacked natural resources, especially one of the staples of nineteenth-century industry, coal. For many contemporaries, coal was the *sine qua non* of industrialization and without it Italy, they felt, was condemned to remain a second-rate industrial power. They were, of course, wrong. Some industries such as silk in which Italy had a comparative advantage were much less dependent on coal than others. There were ways to economize on the use of coal and other raw materials and Italian manufacturers exploited them. There were substitutes. Italian entrepreneurs, for example, realized early on that hydroelectric power was a compelling alternative to coal and invested heavily in its development and use. Although the import content of industrial output was relatively high, the fear of many that growth would put excessive strains on the balance of payments was unfounded.

There was a distinct shortage of fertile, well-watered, easily worked farmland in Italy. Much of the arable land was, instead, hilly or mountainous, or, even worse, swampy and malarial. The essence of the problem was not, however, land quality but low labour productivity – in short, there were too many farmers chasing too little land. Resolution was simple in theory – move people off the land – but difficult in practice. It did happen through a mixture of massive emigration, and, more slowly, through the growth of non-farm employment opportunities: as late as 1951 agriculture was still the largest sector in terms of employment.

On the other hand, there was at least one significant positive feature associated with high population density. Italian industrialists faced a very elastic supply curve of labour and could, under the right conditions, expect very high rates of return on their investments. Although unlimited supplies of labour alone explain neither the timing nor the nature of growth, they were an important permissive factor (Kindleberger 1967). In short, when opportunities for non-farm employment called, workers were quick to respond.

A unified national market and, for that matter, a unified nation

depends on the nation's capacity to move goods, people and information around the country with relative ease. Geography, however, made this much more costly in Italy than elsewhere. Mountains crisscross the peninsula and, in many places, separate coastal areas from the interior. Efforts to link the country through rail and roads put enormous fiscal pressure on government budgets and continued to haunt the country well into the twentieth century.

1.3 A few features of the growth process in Italy were distinctive. Italian industry, not known for its technological innovations, demonstrated a remarkable ability to adopt technology developed elsewhere and adapt it to local conditions. This skill was particularly instrumental in facilitating growth in the post-WWII period but has been a part of Italy's industrialization from the beginning.

Small and medium-sized firms in Italy have accounted for a much larger percentage of industrial output and employment than in other countries at similar levels of per capita GDP. Although once taken as evidence of Italy's incomplete development, many now see it as a source of competitive strength – potential efficiency losses are more than compensated by an increase in flexibility and reduction in response time to changes in market conditions.

A related but distinct phenomenon of Italian growth, now hailed as a major organizational innovation, is the tendency for small and medium-sized firms to congregate in industrial districts. These groupings, in essence, allow participants to retain the benefits of small size without sacrificing the economies associated with scale. The classic case of an industrial district – and one still going strong after two centuries – is silk production in the area around Como.

Italian governments, like governments elsewhere, employed all the usual policy instruments – interest rates, taxes and expenditures, tariffs and exchange rates – to influence allocation, distribution and the level of economic activity within the country. In one respect, however, Italy was special. For a variety of reasons, governments of all stripes – liberal as well as fascist – were unwilling to allow large firms to fail. To make a long story short, by 1960, as a result of this policy, the Italian state owned a large share of its country's businesses. The consequences of this are still being debated.

One of the distinctive features of Italy's long-term growth was the stubborn persistence of the North–South divide. Although there is still some question about the impact of unification on the South, there is little doubt that by 1914 the North was by every economic measure far ahead of the South. During the inter-war years, conditions deteriorated in the South and the gap widened. In spite of major efforts to promote development in the South after WWII, by 1960, while per capita income in the South had indeed gone up, it went up even more in the North. It is only now, at the very end of the millennium, that some regions in the South (the Abruzzi, Molise, the Puglie) have shattered the old mould and begun to close the economic gap with more advanced regions.

1.4 There has been over the last three decades a dramatic increase in the quantity of articles and books written on the economic history of modern Italy and in the quality of economic analysis contained in them. The practice of reading history ideologically and using it for political purposes – witness the Romeo–Sereni debate over the role of agriculture in the development process – is giving way to more objective approaches to the past. Research topics, once dominated by social and political considerations, are now driven as much (or more) by economic questions. As a result, the conventional wisdom on a wide range of topics is being revisited and revised in light of new data, more precise formulation of hypotheses, and often more rigorous testing. Cliometrics, in short, is thriving in Italy, and on a wide range of topics, helping scholars to rewrite the country's economic history. Thus, recent revisions to the national income accounts are modifying the traditional picture of the timing and pattern of economic growth. Tenancy arrangements in agriculture, once viewed as the cause of rural backwardness, are now seen as attempts to accommodate risk. New work on industrial organization has shown that industry was less concentrated and much more competitive than the older literature would have us believe.

Although much remains to be done – some topics are understudied, others overworked but badly in need of revision – this is an excellent moment to undertake a comprehensive and critical review of the literature on Italy's remarkable economic growth between 1820 and 1960.

We proceed as follows. In chapter 2, the data on long-run

growth are reviewed and evaluated. The main source remains the path-breaking, if flawed, national income series produced by the Italian Statistical Institute (ISTAT) in 1957. These may be supplanted by new estimates being prepared by a group sponsored by the Bank of Italy, but only time will tell. Attempts to model Italy's long-term growth are considered in chapter 3. Although most focus on the years 1861–1914 (the post-WWII years are treated separately in chapter 7), a few are more ambitious. Aside from a general consensus that Italy's growth is best described by cyclical fluctuations around a rising trend and not by a discontinuous growth spurt, there is little that unites the various models. The general consensus that agriculture performed abysmally throughout much of the period 1861–1938 has, in recent years, come under serious attack in terms of both data and interpretation. The old views and the new are discussed in chapter 4. Industrialization Italian-style is, without doubt, the most controversial feature of the country's long-run growth. In chapter 5, long-standing debates on industrial structure, finance, labour supply, technical change and the role of the state are evaluated in light of recent research. In chapter 6, we review the existing literature on the macroeconomic history of pre-1940 Italy, giving particular attention to Fratianni and Spinelli's highly provocative and sophisticated monetarist challenge to the ruling orthodoxy. Between 1950 and 1960, Italy finally came of age as an advanced industrial economy. In chapter 7 the explanations for its remarkable post-war growth are presented.

2
Measuring change in the long run: the data

2.1 After a brief burst of research on the economic causes of the Risorgimento (the political process of unification) in the 1950s and early 1960s, in large part stimulated by the centenary of Italian unification in 1961, historians lost interest in the economic history of pre-unification Italy.[1] Thus, recent reviews of the literature by Pescosolido (1998) and Crepas (1999) have almost nothing new to say about the period 1815–1860. This is most unfortunate because, in spite of tantalizing suggestions by Cafagna (1989) and Bonelli (1979) – see chapter 3 – that modern economic growth in Italy probably predated unification, these and other issues have received very little attention. There are, moreover, underutilized sources of information on the period. In short, then, the pre-unification period is still awaiting the renaissance in economic history research experienced by other periods. The payoff to such renewed attention could be substantial.

Foreign trade statistics are the most reliable and by far the largest set of data we have on the real economy before 1861 (Federico 1991). We could, in principle, use these data to construct a 'national' trade series and, through them, gain insights into the real economy. In practice, it is a challenge. Differences in collection criteria, presentation, the efficiency of the statistical agencies, and the amount of smuggling between the pre-unification Italian states, make the construction of an aggregate series, at best, difficult. Only one state, Piedmont, has year-by-year trade data for

[1] IRI and the Banca Commerciale Italiana sponsored two multi-volume series of studies, the *Archivio economico dell'unificazione italiana* and the *Studie e ricerche di storia economic italiana nell'eta del Risorgimento*, to celebrate the centenary of the unification.

the entire period 1815–61. Since most states failed to organize imports and exports by country, it is often impossible to distinguish intra-Italian trade from that with other countries. A substantial part of the foreign trade of Lombardy and Veneto went unrecorded, as both regions were at the time parts of the Habsburg Empire. No one has ever tried to reconstruct a balance of Italian trade, and even the available data by state can be used only as a rough guide to real trends in trade. Both imports and exports grew, but the rates seem quite low. Those for imports are often higher, but it is unclear whether this reflected trends in the real economy, including reductions in trade barriers (and were compensated by a net inflow of foreign capital), or simply a decrease in smuggling. Exports may have grown slowly because traditional Italian goods, such as olive oil or clothing, were uncompetitive on world markets (a supply problem), or because demand for them was sluggish. On the other hand, raw silk exports were booming: they increased by 60 per cent from the 1820s to the 1850s, when growth was halted by a serious silkworm disease (Federico 1997). They came mainly from the North (Piedmont and Lombardy), and were to be Italy's main staple after unification.

Foreign trade data, in spite of their shortcomings, are excellent when compared with those on production. As a result, opinions differ among scholars about what happened, especially in agriculture. According to Romani (1982), aside from a few farm products, notably silk, agricultural production stagnated. Biagioli (1980), on the other hand, argues that it grew, with widely different performances between areas and crops. Pescosolido (1998), the most sanguine, maintains that it increased substantially almost everywhere. It is, in fact, unlikely that production of food crops stagnated. Population grew by 40 per cent from 1801 to 1861 (Del Panta 1996), while imports of basic foodstuffs grew less rapidly. Since there is no evidence of mass starvation, it is reasonable to suppose that domestic production grew at least enough to maintain consumption levels. There is less controversy about industrial production. While there is some evidence of successful initiatives in textiles and light industry, most would probably agree that industry did stagnate during this period (Mori 1989).

It is possible to conclude that per capita GDP in Italy grew very

slowly if at all during the period 1810–60. This position is supported by the only available estimate of national income in those years (Malanima 1998). From 1810–30 to 1861, the GDP per capita in the Centre and North of the country increased by a fifth (at about 0.5 per cent p.a.). This modest increase was, however, insufficient to offset the sharp fall from the 1750s onwards. In short, the income level achieved in the Centre–North in the fourteenth to fifteenth centuries was regained only in the late 1890s. These estimates need not be viewed as the last word on the subject. Malanima deals with the changes in the very long run, and with a part of Italy only. The rest – the South – was one of the poorest regions in Europe (Reis 2000). Zooming in on the first half of the century, using all the available sources, and extending the estimate to the whole country might yield different results. We would argue that such work should be given top priority, not only for its own sake, but also to help us understand the performance of the economy in the second half of the century.

2.2 The government of the new Kingdom of Italy felt an urgent need to know the economic conditions of the country. The first census of population was held in 1861 and from then on the Ministero di Agricoltura, Industria e Commercio (MAIC for short) collected a wide variety of economic statistics on output, prices, wages, finance and so on. The exercise continued for almost thirty years until it was brought to an abrupt halt by a severe budgetary crisis. Roughly a century later, in 1957, the Central Statistics Institute (ISTAT), working with these data, published annual estimates of GDP, consumption and investment for the period 1861–1956 and, a year later, brought out a collection of historical statistics (ISTAT, 1957, 1958). This work, without any doubt a major scientific achievement, was, like many pioneering efforts, flawed. It lacked key series (such as output by sector at constant prices), details on methodology and sources, and an appropriate degree of scepticism about official sources (cf. chapter 4 for an example). Since then, ISTAT has updated its current series four times to account for the so-called grey market, that is, economic activities that are not recorded in the official data (Maddison 1992).

Golinelli and Monterastelli (1990) have attempted to produce a coherent series for the period since 1951, based on the latest

ISTAT revisions. They assume that the growth rates estimated by ISTAT in the original series were correct but that the levels of GDP were too low. But if the grey market was insignificant in 1951, as new estimates seem to indicate (Bank of Italy group: see Rey 2000), then the 1951 level of GDP as originally calculated by ISTAT was probably correct, and the post-war expansion even more rapid than was previously thought.

Although ISTAT has never revisited its estimates for the years prior to 1939, others have. The first serious attempt to improve on the ISTAT estimates was made by a team under the leadership of the economist Giorgio Fuà (1969). The team's contributions included estimates of value added by sector at constant prices, implicit deflators by sector and use, and the creation of a comprehensive series on the capital stock from 1881 onwards (Ercolani 1969). And yet, the Fuà team did not attempt to rebuild the rickety core of the work by ISTAT: the estimates of value added at current prices. It is for this reason that many economic historians, troubled by flaws in the original data, remained unconvinced by Fuà's revisions (henceforth referred to as the ISTAT/Fuà series). As a result, the search for better numbers continued. In recent years, scholars have introduced new data on value added and output (Rossi, Sorgate and Toniolo 1993; Maddison 1992, 1995; Bardini, Carreras and Lains 1995) and adopted more sophisticated weighting procedures (Fuà and Gallegati 1993). However, since all these estimates continued to rely on the original GDP estimates of ISTAT, as table 2.1 and figure 2.1 show, there is very little difference between the new series and that of ISTAT/Fuà in terms of either long-run growth rates (table 2.1) or time profiles (figure 2.1).

The data suggest that Italy, unlike other latecomers such as the Scandinavian countries, was unable to narrow the income gap between it and the leading industrial nations (see table 2.1 col. f). According to the most optimistic set of numbers, Italy managed to outperform these core countries in only one period, 1895–1913, the 'boom giolittiano', so-called in recognition of Giovanni Giolitti, a leading politician and often prime minister during these years. Italy had to await the 'golden age' of European growth in the 1950s to experience its own economic miracle (see chapter 7). This dismal assessment of performance

Table 2.1. *Growth rates in value added (linear interpolation)*

	(a)	(b)	(c)	(d)	(e)	(f)
Total GDP						
1861–1895	0.66	0.97	NA	0.66	0.75	2.50
1895–1913	2.77	3.62	2.59	2.88	3.07	2.89
1913–1939	1.56	1.55	1.87	1.68	1.39	1.82
1861–1939	1.78	2.24	NA	1.88	1.84	2.20
1939–1951	3.47[1]	4.43[1]	2.93[1]	3.59[1]	2.22[1]	1.55
1951–1963	6.27	5.68	5.97	5.42	5.68	3.06
Per capita GDP						
1861–1895	0.0[1]	0.30	NA	0.00[1]	0.08	1.30
1895–1913	2.08	2.97	1.90	2.19	2.38	1.63
1913–1939	0.61	0.62[1]	0.93	0.75	0.45[1]	1.17
1861–1939	0.91	1.20	NA	1.01	1.00	1.26
1939–1951	3.09[1]	3.99[1]	2.47[1]	3.19[1]	1.81[1]	0.90[1]
1951–1963	5.55	5.05	5.23	4.88	5.00	1.77

Note: [1] not significantly different from zero.
NA = no answer.
Sources: (a) Ercolani (1969); (b) Maddison (1992); (c) Rossi, Sorgate and Toniolo (1993); (d) Fuà and Gallegati (1993); (e) Bardini, Carreras and Lains (1995); (f) four major countries (USA, United Kingdom, Germany and France): GDP per capita computed as total GDP of these countries divided by population (Maddison 1995).

prior to WWII was confirmed recently by Rossi and Toniolo (1992). They computed total factor productivity growth from 1895 to 1939, using new estimates of GDP (still derived from the ISTAT series) and new input estimates, including a series on labour quantity. The authors conclude that 'productivity increases appear to be minor determinants of overall output growth, the latter being dominated by factor inputs growth and scale economies' (1992, p. 551).

A big question remains. If the scholars were to scrap the old ISTAT data and make new estimates based on the original sources, would the growth and timing picture remain the same? As it happens, we may soon have the answer to this question. There are now several new indexes of industrial output (see chapter 5)

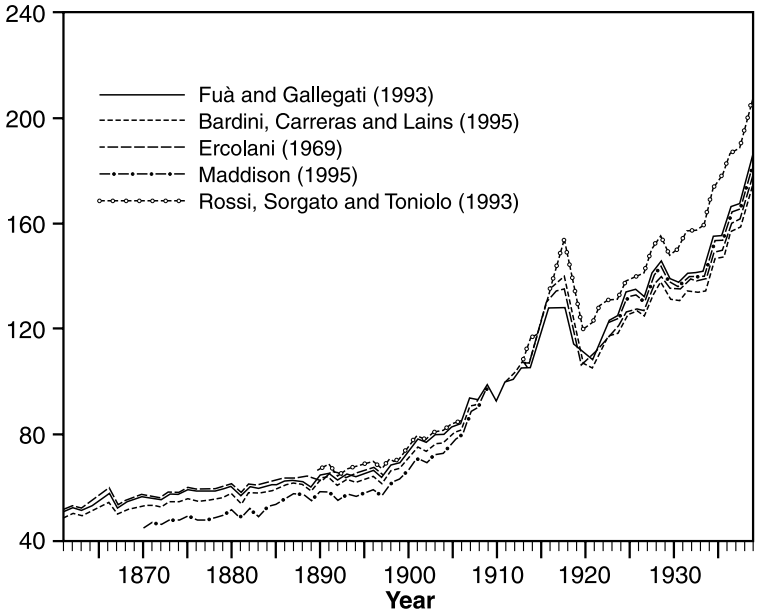

Figure 2.1 Indexes of Italian GDP.

and recently the Bank of Italy commissioned a team of scholars to construct a new set of national accounts. So far, the team has produced estimates of value added (VA) at current prices in four benchmark years (1891, 1911, 1938 and 1951). These results are compared with those of ISTAT in table 2.2.

As the comparisons indicate, the new estimates do break with the conventional wisdom, especially in terms of timing, even if the changes so far are modest. However, the new results, while promising, must be handled with care: reliance on current prices is problematic and the benchmark years may turn out to be unrepresentative. Furthermore, the most controversial period, particularly for agriculture (see chapter 4), 1860–90, is yet to be tackled. As we observed earlier, it would be desirable to extend the series back to 1815 (or at least 1830).

GDP growth is not the only yardstick to measure performance. The quality of life can be more accurately gauged by a new, more comprehensive measure of performance, the so-called Human Development Index or HDI. It is based on a weighted average of

Table 2.2. *Total value added at factor costs, current prices (millions lire)*

	ISTAT	New	Ratio
1891	11,719	12,146	1.04
1911	18,589	20,245	1.09
1938	153,766	154,849	1.01
1951 (a)	9,031,000	10,412,000	1.15
1951 (b)	9,712,000		1.07

Sources: 1891–1938: ISTAT (1957); 1951 (a) ISTAT (1957, tables 32, 34 and 35A); 1951 (b) ISTAT (1986, table 8.15); see Rey (2000).

three variables, GDP per capita, life expectancy, and 'knowledge' (itself an average of literacy and years of schooling). Italy was at the bottom of the list of the sixteen OECD countries at both the beginning of the period in 1870 and again at the end in 1950 (Crafts 1998). In 1913 it ranked fourteenth, just ahead of Finland and Japan. However, Italy's performance, on the whole, was positive. Between 1870 and 1913, the growth of its HDI was second only to Canada's, a far cry from its rank (eleventh) in terms of GDP growth and it managed, over the long run, to keep pace with its OECD peers. Furthermore, in the period 1913–50, while its relative performance lagged, it is worth noting that HDI growth was double that of GDP. These results raise two intriguing possibilities. Either the current GDP numbers underestimate Italy's actual economic growth or the nation was more successful than others in transforming income growth into improvements in the quality of life.

2.3 The growth in income was associated with substantial changes in the structure of the economy, as measured by either sectoral shares of total employment (table 2.3) or value added at current prices (table 2.4).

As one might expect, in the long run the agricultural sector experienced a relative decline while industry and services expanded. It is interesting to note that according to the new estimates (table 2.4(II)) the pace of change was quicker than the ISTAT/Fuà series led us to believe. The census figures probably

Table 2.3. *Composition of the labour force, 1881–1961*

	Agriculture	Industry	Services	Public administration
1881	61.8	20.5	15.8	1.9
1911	59.1	23.6	15.3	2.0
1936	52.0	25.6	19.0	3.4
1951	44.3	31.0	18.9	5.8
1961	30.0	39.8	23.4	6.8

Source: Zamagni (1987 table A.1).

Table 2.4. *Composition of value added at factor costs, 1870–1961*

	Agriculture	Industry	Services	Civil service
(I) ISTAT				
1870	53.2	20.9	20.9	5.1
1891	51.9	16.7	26.3	5.1
1896	46.3	18.4	29.3	6.0
1911	42.7	23.2	27.7	6.4
1938	26.5	30.5	31.6	11.4
1951 (a)	25.6	41.2	24.2	9.0
1951 (b)	22.9	36.7	31.1	9.4
1961	15.4	38.3	36.0	10.3
(II) New estimate				
1891	42.9	20.9	30.3	5.8
1911	37.4	23.8	32.7	6.1
1938	27.9	29.5	33.9	8.6
1951	25.2	35.7	30.7	8.4

Sources: (I) 1861, 1891, 1896, 1911, 1938 and 1951 (a): ISTAT (1957, tables 32, 34 and 35A); 1951 (b) and 1961: ISTAT (1986, table 8.15). (II) Computed from Rey (2000).

overstate the numbers actually working full-time in agriculture – many peasants were engaged in household manufacturing, transportation and other non-agricultural activities.

The transfer of workers from traditional low-productivity agri-

Table 2.5. *Percentage of agriculture according to the 'European norm'*

(a)	(b)	(c)	(d)
1,000	Before 1870	44.6	65.7
2,000	1905	33.2	50.1
3,000	Late 1920s	26.4	41.0
4,000	1953	21.7	34.6
6,000	1961	15.0	25.5

Note: (a) level of GDP per capita (in 1990 dollars); (b) date in which the threshold was attained by Italy; (c) 'European norm': agricultural output as a percentage of GDP; (d) 'European norm': agricultural workers as a percentage of the total workforce.
Source: Prados *et al.* (1993, table 6).

culture to the rest of the economy is a powerful source of aggregate productivity growth. Broadberry (1997) has recently argued that a substantial part of the differential in growth rates between the UK and the US or Germany in the second half of the nineteenth century can be attributed to the limited extent of such structural change. In Italy there was plenty of scope for intersectoral transfer, but the process has been decidedly slower than the 'European norm', as estimated by Prados *et al.* (1993) from a sample of sixteen countries, including Italy. Table 2.5 (cols. (c) and (d)) reports the average composition of the workforce and value added at different levels of development. Italy is close to the 'European norm' in terms of the composition of output – closer for the new data (table 2.4(II)) than the old (table 2.4(I)) – but not in terms of the allocation of labour. In 1951, for example, the share of agricultural workers corresponds with a normal income of about $3,000, a level that Italy had already achieved in 1921. In other words, the productivity gap in Italy between agriculture and other sectors was substantially above the European average.

The gap was quite wide in 1938 and 1951. In Italy relative labour productivity (the ratio between agriculture and the whole economy) barely exceeded 0.5 in both years, against about 0.65 for the 'European norm' at that level of development. Such a slow

Table 2.6. *Regional differences in GDP per capita (Italy = 100)*

	North-West	North-East and Centre	South
1871	108	106	87
1891	113	106	86
1911	141	106	78
1938	152	92	66
1951	161	101	53
1971	132	105	69

Note: North-West = Piedmont, Liguria and Lombardy; North-East and Centre = Veneto, Emilia, Tuscany, Marches, Umbria and Latium; South = Abruzzi, Campania, Apulia, Basilicata, Calabria, Sicily and Sardinia.
Source: 1871 and 1891–Esposto (1997, table 4); 1911–Zamagni (1978); 1938 and 1951–SVIMEZ; 1971–Zamagni (1997, table 8).

structural change might have acted as a drag on overall GDP growth. Of course, this is simply a statistical statement: the causes of this slowness, and the possible remedies, have to be investigated.

2.4 The discussion has so far treated Italy as a single unit, in effect ignoring one of the most salient features of the Italian economy: the wide and persistent disparity in income between the North and the South. The extent of the gap after 1950 is reasonably well documented but before that it is still the subject of controversy. Forty years ago, in a pioneering article, Eckhaus (1961) suggested that, in the early 1860s, GDP per capita in the North was 15–25 per cent higher than it was in the South. Recently, Pescosolido (1998) has argued that these figures overestimate the real gap, but these regional disparities pale when compared with the huge gap that existed between Italy as a whole and the United Kingdom or France. In between these two articles, a number of attempts have been made to estimate per capita GDP for selected time intervals. These estimates are presented in Table 2.6.

The figures are not perfectly comparable, and, in some cases, are more guesses than estimates. Nevertheless, the main point is clear: the gap between the 'industrial triangle' of the North-West and the largely rural South widened substantially between 1871 and 1951. The North-East and Centre, for the most part, held its

own over the same period. The revised version of the national accounts may affect these results, assuming it contains regional estimates, although it is unlikely to reverse the overall trend in regional income disparities.

3
The big picture: models of growth and structural change

3.1 Between roughly 1860 and 1940 Italy went from being a poor, backward, primarily agricultural country to a relatively prosperous, modern industrial economy. There were still pockets of poverty and backwardness, especially in the South, and agriculture was still the dominant economic activity, but the country also possessed a large, modern and competitive industrial sector. By 1951, the date of the first post-WWII census, agriculture employed less than 50 per cent of the active population for the first time in the country's ninety-year history (cf. table 2.3). The purpose of the macroeconomic models of growth and fluctuations is, in general, to help us understand the nature and timing of this transformation.

Two views of Italian economic development dominate the literature. In one, it is seen as a success, even though modest; in the other, as a failure, even though partial – the two positions are the scholarly equivalent of the optimist's half-full and the pessimist's half-empty glass of water. Adherents to the former view once again fall into two groups. Those in the first argue that in the 1880s (Romeo 1961, 1963) or 1890s (Gerschenkron 1968) Italy underwent a discontinuous jump in industrial production that marked the beginning of its modern economic growth. Their objective is to pinpoint the spurt and to explain why it occurred when and where it did.

Those in the second maintain, instead, that the observed surge in the growth rate was merely a positive cyclical fluctuation around a rising trend. According to Bonelli (1979) and Cafagna (1989), to understand both the cycles and the trend it is necessary to begin the story in the early years of the nineteenth century,

while for others (Fenoaltea 1973; Warglien 1987) it is sufficient to start with unification in 1861.

The macroeconomic models have one flaw. Since they treat Italy as a single entity, they have nothing to say about the most striking feature of the country's long-run development – the stubborn persistence of regional income inequality (for estimates of the gap, see table 2.6). In this chapter, we first review the macroeconomic models, then turn to the 'Southern Question'.

3.2 The pessimists, mostly Marxists, concentrate on trying to explain why Italy's modernization was so slow, painful and incomplete (Sereni 1966, p. 98 and *passim*). They acknowledge that output and income went up, but hasten to point out that it did so much less than in other Western European countries at a similar stage of development. The question for them is what features of the economy or society acted as obstacles to growth. It is worth noting that the contrast between optimists and pessimists is more one of degree than kind. On the other hand, it is fair to say that the former are, for the most part, motivated by a desire to understand what happened in history, while the latter wish to use history as a guide to economic and social reform.

The Marxists maintain first that economic growth in Italy was retarded during the early stages of industrialization and second that, as a consequence, the economy remained a hybrid of the old and the new well into the twentieth century. The original sin of the Italian bourgeoisie, as Sereni (1966, p. 99) put it, was its unwillingness at the time of the Risorgimento to pursue a full-scale revolution in agriculture aimed at dislodging the feudal landowning aristocracy. As a result, a feudal residue held on in the countryside, especially in the South and Centre, agriculture in these areas remained backward and the domestic market restricted, and a clear-cut separation of industry from agriculture failed, for the most part, to materialize. By revolution, the Marxists, following Gramsci, mean a transfer of land by fair means or foul to the peasants. Had the Italian bourgeoisie carried out its historic mission more effectively, the new peasant landowners would have increased investment and productivity in agriculture and consumed more domestic manufactured goods. Domestic industry, as a result, would have prospered and the spectre of dualism would have been banished. Italian growth, then, was held back by the lack

of a robust market for manufactured goods. It should be noted that this model is based on Gramsci's reading of the French Revolution, enhanced by Lenin's account of the development of capitalism in Russia. It is not the classic case of expropriation English-style, as described by Marx in vol. I of *Capital*.

The model depends heavily on questionable assumptions about peasant behaviour and scale economies in manufacturing, while the term 'feudal residue' is never adequately defined, much less is any attempt made to establish its presence. Finally, no attempt is made to test systematically any of the hypotheses thrown up by the model.

3.3 Romeo (1963, p. 108), in response to the Marxists, argued that the principal obstacle to the development of industry in Italy lay not in a restricted domestic market but in the sector's modest productive capacity. To build capacity in industry required substantial investment in plant and equipment. Moreover, development necessitated substantial outlays by the state in railways and other forms of social overhead capital which, in fact, was done. These expenditures had to be paid for out of domestic saving or international borrowing. Although some of the latter did take place, it was the former that provided the bulk of the funds during the first twenty years of unification. And agriculture was the principal source. According to Romeo, high rents and low wages ensured that the surplus ended up in the hands of landowners, while high taxes facilitated its transfer to other sectors. In short, the engine of growth in Italy was investment not consumption. When the agrarian crisis struck in 1880, the foundation for modern industrial growth was already laid.

Although Romeo and Gerschenkron agreed on the discontinuous nature of economic growth in Italy (Gerschenkron explicitly, Romeo more by inference), they disagreed on almost all other features of the process. Gerschenkron (1962, 1968), whom one might describe as a disappointed optimist, was concerned by the modesty of Italy's big spurt (much as the Marxists were), and attempted to pinpoint the sources of relative retardation. He blamed government tariff policies (wheat and iron and steel, instead of engineering and chemicals, received protection) and the timing of railway construction (too early). He searched in vain for a pervasive, growth-supporting ideology, and labour, he felt, had

too much clout too early in the growth process. The only bright spots in an otherwise dreary landscape were the German-style industrial credit banks that set up shop in the early 1890s. In fact, Gerschenkron was prepared to credit them with the little growth that did take place: 'It is possible to surmise that the upsurge of 1896–1908 was largely made possible by the importation of the great innovation of German banking in its most developed and mature form' (1962, p. 88).

Romeo, on the other hand, dated the big spurt from the 1880s and was more sanguine than Gerschenkron about the effects of the tariff. He viewed early railway building not as a shortcoming but as a prerequisite for industrial growth. While he did acknowledge the contribution of the banks, he was unwilling to attribute the Giolittian boom (1895–1913) to their arrival.

3.4 Discontinuity has, in recent years, fallen from favour. Most scholars today believe instead that Italy went through a number of phases of rapid growth: in the 1830s–40s, the 1880s, 1895–1906, and again in the 1920s. Each was marked by higher levels of per capita income and significant structural changes. The purpose of these models, then, is to help identify the forces that influenced the timing and the locus of industrial investment and output growth.

In his reconstruction of Gerschenkron's index, Fenoaltea (1973) traced the fluctuations in output during the period 1861–1914 to fluctuations in industrial investment. In the first of his two models, he attributed the changes in investment to alterations in government policy. Active support of industry encouraged industrial investment (1876–87, 1896–1914) while passivity, indifference, or hostility (1861–76, 1887–96) discouraged it. At the same time, he criticizes all governments for ignoring, occasionally even impeding, the development of a robust engineering sector. Since Italy's comparative advantage lay in engineering, greater support for it would have speeded overall growth and moderated cycles. Although Fenoaltea focuses on the years between unification and WWI, his model is, in principle, applicable to other periods. In particular, favourable economic policies in the early 1920s, including a balanced budget, tariff reductions and monetary stability, facilitated rapid growth, while restrictive policies inhibited growth in the second half of the decade (Toniolo 1980).

In a subsequent attempt to explain growth and fluctuations in Italy, Fenoaltea (1988a) attempted to establish links between the Italian investment cycle and parallel movements overseas. He argued that swings in Italian construction and in other activities were strictly supply-induced, driven by fluctuations in British capital exports that were, in turn, determined by investor sentiment in Britain. In contrast with the political business cycle of his earlier model, Fenoaltea proposed a financial business cycle in which domestic economic activity was linked to international capital flows. His point was that Italy's investment cycle was essentially that of the financial periphery as a whole and, contrary to his earlier understanding, only marginally influenced by domestic policies. Country risk considerations in the period before 1914 had a relatively small impact on capital flows. In the inter-war period, access to foreign capital markets was closely linked to the political problems of debt repayment (Kindleberger 1986; Forsyth 1993).

Warglien (1987) maintains that the dramatic swings in industrial investment were the result, not of international capital flows, but fluctuations in the supply of domestic capital. A backward and fragmented capital market in Italy compelled industrial firms in need of external funds to rely for assistance on a small number of financial institutions. It was, he observes, a recipe for trouble. Relatively small perturbations in demand, interest rates or profits could very quickly trigger a full-blown liquidity crisis, shut down new investments, and threaten the solvency of the banks. Although Warglien, like Fenoaltea, limits discussion to the period 1861–1914, the model may, in fact, be more appropriate for the later period. Thus, a number of authors argue that it was only in the inter-war years that industrial firms, especially in capital goods sectors, became heavily dependent on a few large commercial banks – at substantial cost to both industry and the banks (Toniolo 1980; Confalonieri 1974–6, 1992).

According to Bonelli (1979) and Cafagna (1989), a long wave of growth and accumulation began early in the nineteenth century, stimulated by an expansion of agricultural exports, particularly silk (see also Castronovo 1995, chapter 1). The upswing also permitted imports of raw materials and semi-manufactured goods to increase without putting pressure on the balance of payments

and exchange rates. The agrarian crisis of the 1880s effectively ended the key role for agriculture as the country's export engine but, by that time, other sectors had taken up the slack and a mix of emigrant remittances and tourism, at least up to 1914, helped finance growth-induced imports.

Bonelli assigns particular importance to unification since, from 1861, the state began to play a major role in the accumulation process through the strategic use of taxes, expenditures, subsidies and tariffs. In the period 1861–80, agriculture was the main source of capital to finance infrastructural initiatives; afterwards it was domestic and international borrowing and a high rate of domestic saving. This pattern was maintained throughout the inter-war period and, after 1927 with the beginning of autarky, it was, if anything, intensified. It is worth noting that, for both Bonelli and Cafagna, because Italy was a relatively backward, resource-poor country, industrialization required massive investment in plant, equipment and modern infrastructure. Since the import content of domestic output growth was large, the problem was to find ways to ease balance of payments pressures. These included a suppression of domestic consumption, high rates of domestic saving, international borrowing, exports by agriculture and other traditional sectors, tariffs on imports, and a commitment by the state to support, by its purchases, import-competing industries. In this context, according to Bonelli and especially Cafagna, periods of rapid economic growth among Italy's trading partners provided an impetus for domestic expansion. Thus, the growth in world trade and world income during the decade or so before 1913 facilitated at least in part the Giolittian boom. Most economists today would argue that this preoccupation with the trade balance is misplaced in a world of reasonably flexible prices and wages and, for the most part, flexible exchange rates.

3.5 The models discussed in the previous sections, with the exception of Bonelli's, deal with the pre-1914 period. All authors seem to agree that, in the beginning, Italy was a backward, resource-poor country with a minimal modern infrastructure. The key challenges, then, were to build up the country's social overhead capital and facilitate a shift of productive factors from low to high productivity activities, primarily from agriculture to industry, without provoking adverse movements in the domestic terms of

trade. Although the process was far from complete by 1914 and regionally very uneven (see below), it was certainly well underway by that time.

Toniolo (1980) argues that, in spite of the economic changes before 1914, the main structural features of the Italian economy – low per capita income, an elastic supply of labour, a poor resource base, a large agricultural sector – remained unchanged during the inter-war period. If correct, and today most would agree with him, models of growth during the fascist years differ in detail from those for earlier (and later periods) but not in kind. This would suggest that the fascist period was not, as some earlier writers maintained, a discontinuous interlude in the long-run process of capitalist development. On the other hand, the details matter. The 1920s and 1930s were decades of unprecedented cyclical fluctuations in output, income, employment, and investment in both Italy and abroad (Toniolo 1980; Del Monte 1977; Crivillini 1993). Growth did occur. GDP and GDP per capita grew in line with long-term trends but below the maximum rates achieved in other periods. However, most of the upswing in GDP came in the years before 1925, while for the other macroeconomic aggregates expansion lagged substantially behind the rates achieved during the Giolittian boom and during the post-WWII period. Economic historians of the period have, therefore, focused more on cycles than trends, and more on the sources of failure than the roots of success.

There may be other reasons for the emphasis on cycles instead of trends. The literature on the fascist period reflects a subtle change in the perception if not the reality of Italy's economic status – from that of a developing country to that of a developed one. This may be the result of the peace treaty and post-war settlements in which Italy was treated as one among equals (or almost) with the UK and France. Italy's status was enhanced as well by the size and breadth of its military–industrial complex, its expansion being a direct result of the war and government support. The issues, then, were similar to those faced by other members of the entente – how to discharge war debts, when to return to gold, how to control wage and price inflation, and so on – and not how to promote development.

The fascist experiment attracted the attention of contemporaries, much of it positive in the early days, and has since provided

a major field of research for historians. The questions, however, have less to do with issues of growth and structural change and more with the impact of fascism on policy decisions. Did political differences, for example, between Britain and Italy lead to differences in labour or trade or industrial policies and what impact did these have on cyclical fluctuations in output and employment? While perfectly valid for some purposes, this emphasis on the short run has led historians to neglect the longer-run issues of backwardness, poverty and regional inequality, all of which increased during the inter-war period.

Most economists today would argue that Italy's economic fate was strongly influenced by international trade and capital flows. Since the import content of industrial growth was relatively high, growth depended on the country's ability to buy and sell abroad (Bonelli 1979). Moreover, international competition had always promoted efficiency and innovation at home while access to markets abroad allowed manufacturers to achieve greater scale economies. The ability to borrow abroad eased balance of payments constraints and supplemented domestic sources of investment capital. The inter-war years were not a good time to be a small open economy. Trade growth was at best episodic in the 1920s and negative in the 1930s. International capital flows in the 1920s were disrupted by disagreements over schedules for war debt repayment and reparations and in the 1930s they were essentially annihilated by the Depression. As most authors acknowledge, it is impossible to understand much less assess government economic policies (the Quota Novanta, the Battle For Wheat, even the Integrated Land Reclamation scheme) unless viewed in an international context.

The fascist government did have one degree of freedom inaccessible to more democratic regimes. It intervened directly in the labour market to control wage increases (Del Monte 1977; Toniolo 1980). The result of this should have been high profits, substantial investment and rapid growth of output and productivity. None of this seems to have occurred, except perhaps during the period 1922–5 when control of the labour market was in fact minimal. Del Monte (1977) observes that wage controls alone were insufficient to guarantee rapid profit growth and thus a high rate of capital formation. Fascist policies failed to sustain aggregate

demand while protection, subsidies, suppression of competition and an ill-advised exchange rate policy provided support for inefficient enterprises, did little to promote investment and innovation, and led to domestic deflation. None of these were growth-inducing.

A couple of attempts have been made to show that fascism, in Gregor's (1979) terminology, was a developmental dictatorship (see also Petri 1997b). Although autarky may have led to a misallocation of resources, it also promoted innovation, scale economies, and modernization of plant and equipment. This outcome was not accidental but represented a conscious effort on the part of the fascist leadership to foster economic development.

This position contrasts sharply with the view, expressed by Marxists and others, that the fascists were, on the whole, the puppets of big business and/or large landowners (Grifone 1945) and that the growth of intervention in the economy was the result of efforts by the fascists to support the interests of heavy industry and the banks: in short, that the fascists put the machinery of the state at the disposal of private capital. Few today find either of these arguments compelling (Toniolo 1980; Cohen 1988). They fail at the policy level – the evidence suggests that policies represented a response to crises and trade-offs among competing interest groups, not a consistent, growth-promoting ideology or one at the service of big business (Sarti 1971; Ciocca 1976) – and in terms of outcome – growth during the fascist period fell well below trend (Rossi and Toniolo 1996).

3.6 In macroeconomic models, Italy is considered as a single unit. While reasonable for many purposes, the approach disregards the North–South divide, for many the leitmotif of Italian economic development.

Both areas were predominantly agricultural in 1861 but there were striking differences between the two economies. The North had a better climate (at least for agriculture), more water (a key source of power), a superior economic infrastructure, a better-educated population, a more diversified farm sector, and more dynamic and technologically advanced industry (Federico 1994a; Cafagna 1989). Many people in the North believed that political and economic freedom and an efficient, honest public administration would enable the South easily to close the economic gap with

the North. This did not happen. The South is, of course, much richer and more developed today than it was in 1861, but it still lags behind the North.

Regional economic inequality was not unique to Italy but, with perhaps the exception of the North and the South in the USA, itself a special case – and now, of course, the US South is booming – it has never dogged the heels of national development to the same degree as in Italy. With a few exceptions, good and bad times seem to alter regional rankings in other countries, but not in Italy. There is no simple answer to the question of why this should be. It may be the geographical specificity and persistence of the inequality. It may be a question of perception and culture (Bevilacqua 1993; Donzelli 1990). This was certainly the opinion of the early southern advocates (*meridionalisti*) – writers who argued for strong state intervention to promote development in the South. As Leopoldo Franchetti, the Florentine aristocrat whose compelling analysis of conditions in the South in the 1880s gave birth to the Southern Question, noted, Sicily (but it was the same elsewhere in the Mezzogiorno) was dominated by 'a very unequal distribution of wealth; by the absolute lack of the concept of equal rights under the law; by the predominance of individual power; by the exclusively personal character of all social relations' (from Bevilacqua 1993, p. 39). Giustino Fortunato was even harsher in his appraisal. The North was linked by tradition, geography, climate and custom to Europe; the South to Africa (Fortunato cited in Cafagna 1994, p. 28). Echoes of these cultural explanations can be found in the current social science literature (Putnam 1993) and have been recently restated by A'Hearn (1998) to explain the failure of the southern cotton industry (1998) and the *banche popolari* (cooperative banks) in the South (2000).

3.7 Unification had a number of important economic implications for the previously independent states. They had to relinquish control over monetary policy, taxes and expenditures, tariffs and subsidies, and the exchange rate. The movement of goods, services and productive factors, previously restricted, was now unfettered. It is these changes, alone or in combination, that many feel sealed the economic fate of the South.

Although it is inappropriate at this point to review in detail the literature on the impact of government policies on regional

inequality (see chapters 5 and 6), we can present a summary of the arguments. According to the traditionalists, the economic difference between the two regions at the time of unification was so great that, without a special effort on the part of the state, the South was condemned to stagnation. As it happened, massive intervention on the part of the government took place only after 1950; for almost 100 years, this special effort was lacking. Some maintain that many of the government's actions were actually harmful to the South. As usual, the first suspect is the government's trade policy. The laissez-faire policies of the 1860s and the 1870s, it is said, fatally wounded southern industry (Bevilacqua 1993). Moreover, the return to protection in the late 1880s harmed the more dynamic export sectors of southern agriculture, bolstered the existing social and political system, and thus inhibited growth and structural change. These arguments have been challenged in recent years. Cafagna (1989, 1994) maintains that the prospects for southern industry in the 1860s were poor, while a number of authors have shown that the impact of protection was modest (see chapter 5).

Francesco Nitti, among others, attacked unification because the state, through its taxation and expenditure policies, transferred capital from the South to the North. No one has documented this transfer and there is little evidence to support it (see Gini (1914) and Zamagni (1978) for criticism of Nitti). Cafagna (1989) says – and Bevilacqua (1993) concurs – that government spending was, in per capita terms, probably equal in the two areas between 1861 and 1914, and taxes, if anything, probably fell more heavily on northerners than southerners. Some seem to believe (Nitti again) that southerners may have held a disproportionate share of government debt but, even if it were true, it does not support the capital transfer argument. A more unified capital market may have facilitated a more efficient allocation of investment funds within Italy but this would have made everyone, southerners included, better off.

Capacelatro and Carlo (1972), in a similar vein, argue that the monetary policy of the Italian state was deliberately biased in favour of the National Bank, the Piedmontese note-issuing bank, and against the major note-issuing bank in the South, the Bank of Naples. The policy bias facilitated the flow of capital out of the

South, to the great benefit of northern industry and at the expense of southern initiatives.

3.8 In the early 1900s, the Italian government appeared to accept the principle, long promoted by the *meridionalisti*, that the South deserved special support. The actual measures, however, such as the special law of 1904 for Naples, were little more than token gestures. The South suffered during much of the inter-war period, both in relative terms and absolutely. To make a long, sad episode short – but no less sad – government policies did nothing during this period to promote the interests of the South and, in fact, they were in many cases counterproductive. For example, the agrarian policies of the fascist government encouraged the expansion of wheat production at the expense of wine and citrus fruits in which the South had a comparative advantage.

There is evidence that many compelling economic initiatives failed to find a congenial home in this harsh environment and, it would seem, without some type of exogenous push, they never would (Lupo 1990; Cafagna 1989). Emigration (see chapter 4) provided the necessary shock. Emigrant remittances helped to monetize the southern economy: they increased saving among southern families, promoted the use of banks and facilitated greater access to credit. Emigrant remittances stimulated the market in land (Commissione 1909–10), while those who returned brought back with them new attitudes and tastes. Some speculate that it helped erode the dominant position of landowners, pushed up real wages (Taylor and Williamson 1997) and encouraged more mechanization. However, emigration had a downside: the potential loss of human capital. No one has tried to quantify this loss for Italy, but the presumption is that the most ambitious and capable left.

With very few exceptions, then, the conventional wisdom provides a dismal picture of the South: one characterized by failed efforts and slow growth. The only positive features came from world markets for goods and labour and the impact of these were either muted or mixed. Trade policies hampered the specialization in and export of goods in which the South had a comparative advantage and emigration may have drained off some of the brightest and best. Cafagna (1994, fn. 22, p. 34), instead, argues that the South underwent a passive modernization (southerners,

for example, grew export crops but foreign merchants handled the trade), in contrast with the North which experienced active modernization. The problem with the distinction is that it looks a lot like specialization along lines of comparative advantage.

In the last twenty years or so, a group of southern historians associated with IMES (Istituto Meridionale di Economia e Storia) and the journal *Meridiana* have attempted to recast the Southern Question. Although the South may have lagged behind the North at unification, the tendency to stress the South's backwardness neglects areas of considerable development (Donzelli 1990; Lupo 1990). The idea, for example, that the South was an undifferentiated agricultural wasteland masks significant intra-regional differences in farm and non-farm activities. Lupo (1990), Pezzino (1995) and Bevilacqua (1993) identify pockets of growth associated with export agriculture and with urban renewal. Although it is difficult to evaluate these arguments, since they are supported by anecdotal instead of standard economic evidence, they are very appealing and full of promise.

3.9 It is worth noting that each of the standard arguments presented above has specific implications for the trend in regional income inequality between 1861 and 1914. In the traditional view associated with Fortunato and supported by the quantitative work of Esposto (1997) and Eckhaus (1961), a substantial gap in income at the time of unification widened over the next fifty years. The analysis of the IMES group instead corresponds with the statistical results of Federico and Toniolo (1991) and Zamagni (1978) in which the gap in income and living standards remained constant between 1861 and 1914. There is no quantitative support for the arguments of Capacelatro and Carlo (1972) and Nitti that minimize the size of the gap at unification but maintain that it rose dramatically thereafter. The quality of the regional data, especially for the period before 1891, is very poor. The bad news is that, without an improvement in the underlying numbers, we are unlikely to resolve the issue. The good news is that it would be relatively easy to improve on these numbers and this is thus a highly promising area for research.

4
Modernization versus tradition: new views and old on agriculture

4.1 Stefano Jacini, chairman of the commission that produced the great survey of Italian agriculture in the 1880s, observed in his introduction that 'we still find many different agricultural Italies' (Jacini 1882–6). This simple, frequently quoted observation has provided justification for agricultural historians in Italy to focus on small areas (a region or a province) instead of the country as a whole and to stress differences in environment, crop mix, techniques and institutions more than similarities. While often rich in local details, this approach poses a challenge for the reviewer concerned as much with the forest as with individual trees. The research fails to adhere to a single format, to ask standard questions and thus to provide comparable kinds of answers. The studies are difficult to review as a group and almost impossible to use as a source for national trends in productivity, crop yields and overall output. We draw on them where appropriate but rely for the most part on the few studies that do attempt to deal with Italian agriculture as a whole.[1]

Until recently, it was generally accepted – Romeo (1963) was a conspicuous dissenter from this consensus – that Italian agriculture was technologically backward and subsistence-oriented. As Renato Zangheri, a well-known agricultural historian, observed (1969, p. 53): '[Italian] agriculture has never sustained a regular and general development.' Most scholars argued that landlords were largely (but not exclusively) to blame for agriculture's unimpressive performance. Although both landlords and peasants were

[1] See the general syntheses by Daneo (1980) and Rossini and Vanzetti (1986), the three-volume *Storia dell'agricoltura italiana* (Bevilacqua 1989–91) and the reviews by Federico (1994a) and Nenci (1997).

viewed as ignorant, risk-averse and hostile to new technology and to the market, peasants were, by and large, exonerated. They were, after all, too poor to take risks with untested techniques and, at least prior to 1918, lacked the right to act independently, since most were tenant farmers or sharecroppers. Landowners, on the other hand, members of the rural and urban elite, did have the authority and the financial resources to invest but failed to do so because they, like their feudal ancestors, regarded land as a source of power and social status not as a productive asset. Their goal was simple – to maximize rent with minimal capital outlay. To this end, they imposed very unfavourable tenancy arrangements on a powerless and hapless peasantry. The agrarian policies of the state were at best ineffective, at worst positively damaging. The outcome was agricultural stagnation and rural poverty.

The conventional wisdom is now under attack. New research has raised questions about the facts and about their interpretation. However, as we will show in the following sections, while the revisionists have breached the walls, they have yet to quell all resistance.

We begin our review of the literature with the data on output (section 4.2), then move to technical progress (section 4.3) and the diffusion of market transactions and peasant behaviour (section 4.4). In the next two sections we discuss the alleged causes of backwardness: the tenancy system and related institutions (section 4.5) and agrarian policy (section 4.6). We provide a summary in section 4.7, and in section 4.8 we deal with emigration, perhaps the single most powerful force for change in the countryside.

4.2 The ISTAT (1957) series on agricultural production supports the conventional wisdom. Aggregate output grew at a mere 0.7 per cent per year between 1862 and 1938, an increase of approximately 75 per cent in eighty years (Ercolani 1969). Since the population doubled during the same period, output per capita fell by about 13 per cent. The two relatively short bursts of rapid expansion, from the mid-1890s to 1913 (the Giolittian boom) and from 1920 to 1925, were sandwiched between periods of very slow growth or stagnation. Since agriculture accounted for about a third of total GDP prior to 1940, the overall cost in terms of missed opportunity was substantial. To make the point crystal

clear, had agricultural output grown over the entire period at the annual average rate of 2 per cent that was achieved between 1895 and 1913, total GDP in 1938 would have been 20 per cent larger.

Are the ISTAT numbers correct? Initial estimates by the Bank of Italy group on the whole confirm the trends from 1891 onwards (Federico 1992, 2000). The growth rate is lower during the Giolittian boom and higher from 1911 to 1938, but the long-run rate is almost identical. Although the group has not yet addressed the years before 1891, which are the really controversial ones, there is reason to believe that ISTAT/Fuà numbers for this period are wrong. According to them, total output increased very slowly in the 1860s and 1870s, fell during the agrarian crisis of the 1880s, then stagnated until the late 1890s. Pescosolido (1979) has criticized these results – in support of Romeo's optimistic assessment of growth during these years – buttressing his argument with anecdotal evidence on nationwide increases in land rents and with a series of data depicting output expansion on three large estates in Latium. Although neither set of numbers provides compelling evidence of widespread growth of output and yields (the rent data may reflect redistribution not growth), data from other estates, mostly in central Italy, do tend to confirm Pescosolido's results (Galassi 1986; Porisini 1971; Lazzarini 1990–5). Once again, however, the sample size in these studies is too small and the estates too large to be considered representative of the country as a whole.

There is, however, macroeconomic evidence that supports the optimists. An inspection of the official statistics (ISTAT 1957) reveals that the stagnation was caused mainly by a fall in wheat output. And yet cereal imports were modest until 1885 and population was growing. The official statistics, as reworked by Barberi (1961), imply that per capita caloric intake decreased by a quarter between the early 1870s and the early 1890s, mostly as a consequence of a stagnant wheat output. The estimated level of caloric intake in the 1870s seems decidedly too high – it matches that of the early 1910s. An abrupt fall of the magnitude implied by the ISTAT/Fuà series for the 1880s is both inconceivable and inconsistent with other data. The price of bread, for example, was falling, real wages were constant or rising, and there is simply no evidence of mass starvation in those years. It is much more likely

that the official statistics of output are wrong (Federico 1982), and thus ISTAT/Fuà figures are highly doubtful, to say the least.

4.3 The conventional wisdom that technical progress in agriculture was, at best, modest throughout much of this period has received support from a variety of studies. As we will show, while there is reason to question the reliability of these studies, much more research is required before we can speak with confidence about the rate and nature of technical progress during these years. We begin with a critical assessment of the case for pessimism.

In 1969, the economist G. Orlando published a pioneering estimate of the growth in total factor productivity (TFP) in agriculture (Orlando 1969). His results indicate that technical progress was indeed slow during the period 1881–1938. The overall rate was a disappointing 0.20 per cent per year and was respectable only between 1897 and 1925, in large part thanks to the progress in the North (1.6 per cent versus 0.75 per cent in the Centre–South). In 1925–39 the annual average growth rate was a mere 0.3 per cent and from 1881 to 1897 TFP actually declined by 0.3 per cent per year. The estimates are, however, questionable. The numbers used by Orlando for output, labour and capital differ from those constructed by Ercolani (1969), which are by far the most reliable we have for these years, even if the two articles are in the same volume. Orlando omits land, in all likelihood because he assumed that the supply was constant. As it happens, thanks to land reclamation, the supply increased. Finally, he assumed that capital accounted for 50 per cent of total value added – much too large a share for the reality of Italian agriculture. Simply correcting these mistakes more than doubles the rate of growth of TFP. But, as we indicated above, the whole data set used for the computations (output, inputs, factor shares) is badly in need of revision.

The case for pessimism, however, made mostly by historians, does not rely on Orlando's estimates of TFP but is instead based on anecdotal, qualitative evidence, with one major exception. Historians point to the relative constancy in yields per hectare to bolster the case for sluggish technical progress (Porisini 1971). The argument is untenable. Yields (the physical output per unit of land) can serve as proxies for technical progress only if the quantity of other inputs and the nature of cropping patterns on the

same fields remain constant. Since this condition was violated in Italy, yields cannot be used to measure technical progress. Were this insufficient to torpedo the use of yields as proxies for technical change, it is worth noting that historians rely on the MAIC statistics, which, as we have noted, are seriously flawed and limited to a few products.

The anecdotal evidence is equally weak. It is based largely on the publications of nineteenth- and early twentieth-century agronomists, who criticized Italian farmers for their failure, on the whole, to adopt the advanced farming techniques of the British – the consequence of conservative peasants and absentee landlords. In fact, in the irrigated areas of the lower Po valley, this advanced farming style had been practised since the Middle Ages, while mechanization started quite early, in the 1880s–90s. On the other hand, the agronomists were quite right to argue that, elsewhere in the country, traditional (or slightly modified) rotations prevailed until well into the twentieth century, and machines were quite rare. The facts are beyond dispute. The question is, instead, what do they tell us?

The apparent aversion to advanced farming and mechanization is not evidence of blind conservatism or retrogressive institutions. In most of Italy, dry summers made advanced farming impossible while the abundance of labour and the scarcity of capital made mechanization unattractive (Galassi 1986; Biagioli 1984). There is, on the other hand, evidence that peasants and landowners were quick to adopt innovations suited to local conditions (Corona and Massullo 1989). The consumption of fertilizers, a land-saving innovation, soared from almost nothing in 1893 to 13.3 quintals per hectare in 1913 (Pezzati 1993). Although Italy continued to lag behind Belgium, the Netherlands, and Germany in the use of fertilizers per hectare, it compared favourably with France and matched that paragon of agricultural progress, Britain (Van Zanden 1991, table 5). There was widespread use of new seed varieties and improved tools. Even machinery had its place. The use of steam threshers, which saved labour and minimized weather-related risks of crop loss, spread more quickly in Italy than in either France or the Netherlands (Federico, forthcoming). In many areas of the North, landowners and capitalist tenants quickened the pace of mechanization in response to wage increases

in the first decade or so of the twentieth century, much to the displeasure of the trade unions (Cazzola 1996). While none of this evidence is conclusive, it is certainly suggestive. We now need new and better estimates of technical progress, preferably on a regional level.

4.4 The process of commercialization of Italian agriculture was first addressed by Sereni in the late 1930s and 1940s (Sereni 1947, 1966). He argued that in the 1860s–80s the construction of railways and the pursuit of free trade lowered the prices and widened the range of industrial products available to farm families. Rural households, in response, brought more of their farm products to market to earn the money they needed to substitute more desirable factory-made commodities for less desirable domestic manufactures. Sereni concluded that as a result the overall level of commercialization must have risen.

The analysis failed to generate much interest and lay dormant until quite recently. It was assumed that peasants preferred self-sufficiency to trade and, for the most part, were able to achieve it. The spread of commercialization was slow, incomplete and tardy (Caizzi 1975). The argument was based on very little and often inappropriate quantitative evidence. For instance, Caizzi quotes some numbers on railway traffic to illustrate the lack of commercialization. However, his data tell us more about the geographical range of market transactions (local vs. regional or national) than about the penetration of the market into previously isolated areas. It is the latter not the former that measures the degree of commercialization. In any case, the main source of support for the self-sufficiency thesis came from the opinion of experts about the mentality of the peasants.

In recent years, scholars have reopened the issue and come down on the side of Sereni. Biagioli (1990) and Salvemini and Visceglie (1991) have shown that there was a dense network of fairs not only in the economically advanced region of Tuscany but also in the allegedly backward South. Federico (1986) estimated that, by the 1880s, about 75 per cent of Italian agricultural output was sold or otherwise exchanged outside the producing household. Such a wide diffusion of market transactions should come as no surprise. Italy was already a highly urbanized country by the medieval period and only a small part of the urban population (i.e.

landowners and their households) had a direct access to foodstuffs. Even in the countryside there were many day labourers who lacked a direct claim on output and had to rely, like city dwellers, on the market for their food. As late as WWI, the population census classified more than half of the rural population as landless labourers (*braccianti*).

The supply necessary to satisfy this potential demand came from three sources: capitalist farms, landowners' rent-in-kind (of which they were able to consume only a small part), and the surpluses of peasant households. In other words, the structure of the Italian economy made the preferences of peasants irrelevant. Even if they were wholeheartedly opposed to the market and in favour of self-sufficiency, need would have compelled them to truck, barter and trade.

One final question remains. Were peasants really as conservative and hostile to the market as some would have us believe? An analysis of their behaviour (their revealed preferences as opposed to what others attribute to them) would suggest that the answer is no. There is overwhelming evidence that peasants reacted positively to relative price movements and market opportunities. Federico (1991) found that farm households often specialized in a few products for the market and/or released some family members for part-time work off the farm, the degree of specialization and outside work being negatively related to farm and family size. Although Federico's sample was small and perhaps unrepresentative, other studies make a similar point. Time and again, favourable prospects for exports unleashed large-scale investment booms in tree crops. From the 1850s to the 1880s the 'absentee' Sicilian landowners invested large sums in the creation of new orange and lemon groves (Lupo 1990). Of even more significance was the positive response of southern peasants to the export-led boom in wine production in the 1880s. They were prepared to plant new vineyards in exchange for a long-term land lease (De Felice 1971). Although it turned out to be a bad investment – a trade war with France caused exports and the price of wine to collapse – they were perfectly prepared to accept the risk in exchange for a substantial reward. They were, in other words, fully engaged in the market.

4.5 Modern contractual arrangements in Italian agriculture,

developed in the late Middle Ages/early modern period (Giorgetti 1974), fall into three basic types, each associated with a specific area of the country. In the Po valley, the most advanced agricultural area, the system closely resembled the British one. The land was divided into large, intensively farmed estates, each rented to a rich tenant who worked the farm with hired hands. In the South, large, extensively farmed estates (*latifundia*), often with substantial uncultivated tracts, dominated the landscape. The land was cultivated by day labourers and/or divided into small plots and let to peasants, for a year or less in some cases, for the performance of a few specific tasks. In the rest of the country, including most coastal areas in the South, the land was divided into small farms and let to individual peasant households, occasionally for a fixed rent, more commonly for a share (usually one-half) of the output. These share contracts, officially for one year, were, in most cases, automatically renewed.

In the 1950s and 1960s, Marxist historians attacked these contracts, with the exception of the capitalist leases of the Po valley, as retrogressive, exploitative and obstacles to technical progress (Biagioli 2000; Nenci 1997). Sereni (1947) identified them as feudal residues with the clear implication that they had no place in the post-feudal world. This view was shared by a number of non-Marxist historians. Zaninelli (1992, p. 28), for example, observed that:

> the Italian agricultural systems were thus prisoners of a difficult dilemma: for technical innovation (and thus for creating a demand for technical education) it was necessary to modify the social organization. If, as was the case, there was a tendency for social relations to change slowly and without shock, the price was equally slow and contradictory innovation.

The problem is that none of these authors bothers to explain the causal link between the tenure system and technical progress. In fact, the argument seems to be that technical progress was slow in the Centre and South; therefore, it must have been the result of these feudal residues. As Gill (1983, p.151) puts it, 'the [Tuscan] landowners then by and large refused to be drawn into the capitalist mode of production'. There are two serious difficulties with this analysis. First, as we noted in the previous section, it may very well be incorrect to argue that farmers in the Centre and South failed to innovate. Second, even if we were to assume that

actual practice lagged behind best practice, correlation does not establish causality.

In recent years, a number of economic historians have challenged the ruling orthodoxy. Galassi and Cohen fail to find any statistically significant effect of tenancy systems on regional differences in input productivity (Cohen and Galassi 1990; Galassi and Cohen 1992). Moreover, there were sound economic reasons for the persistence of traditional contracts. Thus, Galassi (1986, 1993) shows that sharecropping provided an efficient way to tackle problems specific to Mediterranean crops such as wine and oil, in particular the high risk and the need for strict supervision to protect the valuable capital embodied in tree crops. Even the *latifundia*, the bugbear of nineteenth century agrarian reformers, can be considered a rational response to a hostile environment, highly variable yields and poor communications (Petrusewicz 1990; Bevilacqua 1985; Galassi and Cohen 1994).

There were, as well, other factors that may have limited the ability of farmers to adopt best-practice techniques. A number of authors, picking up on the complaints of landowners and experts, argue that scarce and expensive agricultural credit acted as the major impediment to innovation. Muzzioli (1983) presents evidence to suggest that the supply of agricultural credit fell short of the amount required. However, the data refer to a very specific type of loan: that made by the agricultural credit branches that some banks were authorized to establish. Most of these loans went to large estates to finance long-term investments and thus provide at best a partial view of the situation. How did small-scale farmers (and even large-scale ones in need of working capital) manage?

In the North, there were the rural credit cooperatives, established in 1883, which provided small amounts of credit to members, mostly small or very small operators. Although many historians (for example, Romani 1961; Zalin 1978) regard these credit networks as crucial for growth, the total amount of credit they provided was quite small. In the Centre, sharecroppers had recourse, as part of their contracts, to short-term credit from landlords. The problems were really severe in the South. There is reason, first of all, to believe that need was greater here than elsewhere because of greater yield volatility (Galassi and Cohen 1994). Second, the supply of credit was much more limited.

Assessment of the credit situation in the literature ranges from very bleak (De Felice 1971) to mildly optimistic (Barone 1977). Credit coops were much less successful than in the North in part, Galassi speculates (2000, 2001), because of the difficulties in establishing and maintaining trust where the potential moral hazard problems were enormous. Interlinked contracts were rare, probably for similar reasons, and the formal banking network was much less dense. In the face of these credit constraints, peasants were often compelled to borrow from moneylenders and the like, frequently at usurious rates (Placanica 1990).

The shortage of credit may have slowed technical progress nationally but, of greater significance, it may also have contributed to expansion in the income disparity between the North and the South. Unfortunately, the lack of data on total credit and on rates of interest makes it impossible to be precise on this point.

4.6 Prior to the 1880s, there was very little state involvement with agriculture. Although landowners were politically well connected, the growth of exports, output and rents made them ardent supporters of laissez-faire. They did complain about the level and even more about the unequal regional distribution of taxes (Musella 1984; Marongiu 1995), but the implicit rate of taxation was in fact modest: less than 10 per cent of combined profits and rents. The sector was a net contributor to the state coffers during the early post-unification period (Bonelli 1979; Pescosolido 1998). The land tax yielded about a sixth of total state revenue in the 1860s–70s (Repaci 1962) and about a quarter of those of local authorities (Corbino 1931–5, II, p. 327).

The start of the agrarian crisis in the 1880s changed both the situation and attitudes. Grain prices collapsed, imports soared and rents plummeted. Capitalist farmers and landowners quickly abandoned their commitment to laissez-faire and scurried to the government for assistance. The response, not surprisingly, was positive. The state put money into land reclamation projects (1882), it cut land taxes (1885), and, in 1887, it levied a duty on wheat imports. Free trade, aside from a brief ten-year interval during and after WWI, was essentially dead. Much of the literature is concerned with the impact of these and other policies on both agriculture and the rest of the economy.

In his authoritative treatment of agrarian policies, G. Orlando

(1984) divides them into two broad categories: those intended to protect the income of landowners and those designed to enhance production. The mainstay of the former was the duty on wheat, first introduced in 1887, then raised several times until, by 1894, it was roughly 50 per cent in nominal terms. The wheat duty exceeded that on almost all industrial products (Federico and Tena 1998). The duty was suspended at the outbreak of WWI, and only re-instated in 1925, when the fascist regime launched the so-called 'Battle for Wheat', a campaign aimed at self-sufficiency.

The purpose of the latter group of policies was to help resolve three main problems of Italian agriculture: the lack of capital, land and know-how. A number of banks set up special sections to provide government-subsidized loans to landowners with sizeable properties to mortgage. In the period before WWI, the state, together with local authorities, helped to finance the reclamation of roughly 1.8 million hectares of private land (a tenth of total farmland at the time), funding up to three-quarters of total expenditure (Bevilacqua and Rossi Doria 1984. pp. 64–5). In the 1920s, the fascist regime launched a plan for the *bonifica integrale* ('Comprehensive Land Reclamation' programme) that by the 1930s had resulted in the reclamation of another 0.7 million hectares. Finally, in the years between 1890 and 1914, the state strengthened the few existing university programmes in rural studies and established new ones. It created special secondary schools for agricultural studies and funded the *cattedre ambulanti*, which dispensed technical advice and know-how to peasants.

Orlando (1984) has a simple way to evaluate the state's policies: those that enhanced production and productivity were good and those that defended the income of landowners were bad. His criteria are, on the whole, compelling, although his enthusiasm for the good ones may be excessive. For example, he argues that support for technical progress was the main reason for the relatively fast growth in output in the Giolittian boom (Orlando 1969). Others are more muted in their praise (Zaninelli 1990). The *cattedre ambulanti* performed well in some areas of the North, but much worse elsewhere, thus, perhaps, exacerbating regional income inequality. The institutes for higher education (transformed into faculties of Agrarian Studies in the 1930s) graduated only a few hundred students per year. An increase in the endow-

ment of land was to be welcomed in a country such as Italy, but the costs of land reclamation were very high and may have eclipsed the benefits. Unfortunately, a proper cost-benefit analysis has never been attempted. We do know that the impact of the 'Comprehensive Land Reclamation' programme on output and yields was mixed, at best (Cohen 1973).

Orlando's negative assessment of the duty on wheat is widely shared by others, with good reason. Wheat, a land-intensive, labour-saving crop, was unsuited to Italy's factor endowments. Attempts to protect it were bound to reduce welfare (Fenoaltea 1993; Gerschenkron 1962; Cohen 1979). Estimates of the static loss in 1911 range from 0.25 per cent of GDP (Fenoaltea 1993) to 1.25 per cent (Federico and O'Rourke 2000). Although these figures seem modest, Fenoaltea (1993), elaborating on a suggestion by Sylos-Labini (1972), argued that the duty on wheat led to a large increase in emigration and thus a loss of human capital. In his model, real wages in Italy were determined on the world market, adjusted for emigration costs. A higher price for wheat (the perfect wage good) forced up nominal wages throughout the economy and thus reduced the ability of Italian industry to compete internationally. This translated into a smaller number of jobs and thus compelled more Italians to emigrate. The argument, while clever, is empirically weak. Fenoaltea speculates that free trade in wheat would have resulted in an increase in real wages on the eve of WWI of approximately 10 per cent. According to a recent estimate, such an increase would have reduced the emigration rate by less than a tenth (Hatton and Williamson 1998). On top of that, a recent computable general equilibrium (CGE) estimate suggests that, without the duty on wheat, real wages would have increased by 2.2 per cent only (Federico and O'Rourke 2000b).

A few attempts have been made to justify the duty but none is compelling. Zamagni (1993a) and Federico (1984) have argued that, in the late 1880s, protection reduced the danger of social unrest in the countryside and/or helped to avert a short-term crisis in the balance of payments. However, as we show in chapter 6, the state of the balance of payments did not depend on trade flows, while easing tensions in the countryside required at most a temporary duty to facilitate the transition to a new set of relative

prices. In the long run, as farmers shifted out of wheat into other crops, the demand for farm labour would have increased.

Most historians are critical of all the government's agrarian policies, even those intended to enhance output and productivity. Many, for example, maintain that the positive policies were a case of too little too late, while the duty on wheat was unconscionable. Some historians, in keeping with the sentiment of nineteenth-century social reformers, argue that the state should have intervened to modify tenancy agreements. Fascist policies fare no better, in spite of the *bonifica integrale*. Cohen (1979), for example, argues that the duties on wheat, agricultural implements and fertilizers, the repression of trade unions, and the laws against internal mobility (see chapter 5) combined to slow mechanization and technical progress.

4.7 The discussion to this point seems to suggest that, overall, the performance of Italian agriculture was less dismal than conventional wisdom would have us believe. Peasants adopted suitable innovations and responded rationally to market opportunities; institutions were reasonably efficient, and at least some of the government's policies were helpful. The new data set suggests that output and productivity may have grown more than the ISTAT/Fuà series indicates. The revisionist view will require a good deal more support with numbers and analyses before it becomes the new orthodoxy but the battle lines are clearly drawn.

No amount of revision is, however, likely to change the overall assessment of the living standards of Italian peasants. There is abundant evidence that they were very poor (Vivarelli 1990; Jacini 1882–6; Commissione 1909–10). What was the cause of this poverty? A standard economic answer, and the one we consider in this section, is that there were simply too many peasants chasing too little decent farm land. Population density was indeed high by European standards, even higher if an adjustment is made for the poor quality of a large part of the land. Thus, about 10 per cent of the country was classified as totally unproductive and a third was mountains: productive perhaps, but of limited value as farmland. The hills made up another 40 per cent, while the plains accounted for a mere 20 per cent of total hectarage, of which at least some portion was marshland.

The scarcity of land and, to a lesser extent, of capital, encour-

aged the use of labour-intensive techniques and, naturally, reduced labour productivity (wages) and pushed up the return to land (rents). In fact, according to recent estimates (O'Brien and Toniolo 1991; O'Brien and Prados de la Escosura 1992), in 1911 labour productivity in Italian agriculture was between a third and half of that in Britain. Land productivity, on the other hand, was 60 per cent above that in the UK if measured by gross output and more than double on a value-added basis. With capital scarce and expensive, with rural population growth exceeding that of total factor productivity, the only effective escape from poverty was a reduction in the land-to-labour ratio. In the long run, industrialization was the answer, but in the short run Italians found a more expedient alternative – emigration.

4.8 Italian emigration constitutes one of the most massive voluntary movements of people in world history. Temporary migration always provided a much-needed source of seasonal employment for those living in the Alps, but the bulk of the peasant population stayed at home until the late 1870s. From then until WWI, more than 14 million Italians emigrated at least once in their life-time, about 5 million – slightly less than one-fifth of the country's population in 1913 – settled abroad for good, mostly in the USA and in Latin America. After a sharp drop in the inter-war years, the flow resumed in the 1950s and 1960s, when an additional 3.2 million people left permanently. In the 1880s–90s, the majority of emigrants came from the North (especially from the Veneto), but in the twentieth century the outflow was almost exclusively from the South. Most emigrants were young men in search of work. They needed money for a variety of reasons – to increase household disposable income, to discharge debts or to create savings for a house or a land purchase. Relatively few families left with the intention of settling abroad.

Although scholars have always paid lip service to the importance of emigration, its causes and consequences have remained until recently largely unexplored. Standard works are by and large superficial (Cinel 1991) or rich in information but analytically weak (Sori 1979; Lazzarini 1981). The general consensus is that emigration was a response to poverty in Italy – Sori, for example, attributes it to the 'underutilization of the labour force, low pay and a generally unfavourable relationship between capital, land,

and labour' (Sori 1979 p. 101). The statement represents a good start, perhaps, but, as it stands, is imprecise. Two recent papers, one by Faini and Venturini (1994), the other by Hatton and Williamson (1998), have fundamentally changed the nature of the analysis. In both, it is estimated that fluctuations in the (gross) emigration rate depended on movements in relative wages in Italy and abroad and on the economic cycle in the receiving countries. The authors, however, disagree on the causes of the long-term growth in the rate of emigration. Faini and Venturini argue that rising income reduced the relative cost of emigration, while Hatton and Williamson maintain that emigration was a cumulative process in which the long-term increase was a positive function of the stock of previous emigrants who provided money and information for newcomers. Hatton and Williamson also show that in 1901 and 1911 the migration rate by province varied inversely with the level of development and positively with the share of the population engaged in agriculture. Although the results do not overturn the conventional wisdom on the causes of emigration, they do add a level of precision to it.

On the other hand, if the initial results of the work on the economic impact on Italy of emigration are confirmed, the account of Italian growth may have to be rewritten. The analytical framework is simple enough. As workers left Italy, the supply of labour fell or, more precisely, increased less than it would have done without emigration (given the natural increase in population). Real wages increased, ceteris paribus. The question is, by how much did they rise? Sori (1979) argues that the increase was small because employers substituted women and children for men and introduced labour-saving machinery. There is, however, substantial anecdotal evidence from the Commissione (1909–10) and Arcari's wage data (1936) to suggest that Sori may have underestimated the increase in wages. Moreover, if the labour market in Italy had been integrated and reasonably efficient, the wage increase in agriculture would have eventually pushed up wages elsewhere in the economy. Taylor and Williamson (1997) maintain that this is exactly what happened. They estimate that without emigration the average wage in Italy in 1911 would have been 22 per cent lower – equal to the 1900 level according to Zamagni (1990) – and GDP per capita 12 per cent lower. These are large

numbers. They imply that emigration alone accounted for almost all of the growth in real wages and GDP per capita in Italy and explains, as it does in the Irish case as well, much of the catch-up with the UK (O'Rourke and Williamson 1997). It is important to stress that the results are still tentative. They depend crucially on rough estimates of key parameters (labour supply elasticity, labour's share and so on) and on the assumption of a perfect labour market. The latter needs to be confirmed since the migrant pool was quite distinct from the new industrial workers. Whatever the outcome of subsequent work, Italian historians face an exciting challenge.

5
Against all odds? The growth of industry and services

5.1 The growth of industry did exceed that of agriculture (or so it would appear from the ISTAT data) but, because expectations were higher, its performance is considered unsatisfactory. Italy lagged behind in the adoption of modern techniques of production and organization (Castronovo 1980), especially in sectors such as steel and engineering in the nineteenth century and chemicals in the twentieth, where mass production and scale dominated (Amatori 1997). Aside from Hunecke (1977), however, who argues that industrialists voluntarily refrained from introducing new techniques for fear of the social and political consequences, most historians do not view entrepreneurs as the villains of the piece, but stress instead the formidable hurdles that they had to overcome. These included a small domestic market, competition from abroad, expensive power and shortages of key inputs such as capital and skilled labour. The success that Italy did manage to achieve late in the period has been attributed to three factors: the German-style, universal banks, industrial policy that promoted growth among capital goods industries, and the abundance of unskilled labour that sparked the development of textiles and other consumer goods.

Two distinct patterns of industrial development emerged in Italy, often referred to as the Mancunian and the oligopolistic (Sapelli 1992). The first, typical of consumer goods, featured small-scale firms in competitive industries reliant on cheap labour and labour-intensive techniques, and located for the most part in the North. The second, associated with heavy industry, was highly concentrated with large-scale, capital-intensive production units dependent for the most part on protection and government

demand for output. This dualistic structure, it is argued, contributed to the North–South cleavage, slowed the pace of innovation, and kept wages low. As we intend to show, although scholars have begun to question this pattern, the construction of a new paradigm must await the provision of crucial pieces of missing information.

There is a huge literature on industry, utilities and banks, but much of it consists of old-fashioned business history. Moreover, the coverage is biased in favour of firms in the 'oligopolistic' core, primarily because they have the best records. For example, Ansaldo, Italy's principal maker of warships and artillery, is the subject of an authorized ten-volume history (Castronovo, Mori and Hertner 1994–6) and of at least three other books and numerous articles. It is difficult, on the basis of this literature, to sketch a complete picture of long-run industrial growth, unless one strongly believes in the leading role of a few big companies as Amatori does (Amatori and Colli 1999), following Alfred Chandler. Since this would seem to be particularly inappropriate for Italy, we will instead employ this literature selectively to enrich the more quantitative work on industrial development.[1]

We begin the chapter with a review of the data on performance (section 5.2), competition (section 5.3) and technical progress (section 5.4). We then consider exogenous constraints and opportunities – insufficient demand (section 5.5), lack of coal (section 5.6), and the role of banks (section 5.7). In section 5.8 we review the literature on labour markets and worker recruitment, and finally, in section 5.9, we consider industrial policy.

5.2 There are four different indexes of industrial output for the period before 1914 – those of Gerschenkron (1962), ISTAT/Fuà (Ercolani 1969), Fenoaltea (1967, 1982) and Carreras (1992). There are three for the inter-war years – ISTAT (ASI), OEEC (1956), and one (ISTAT/Fuà) that encompasses both. The indexes for the pre-1914 period differ widely. Not only does Fenoaltea find a much higher growth rate than either ISTAT/Fuà or Carreras (3.4 per cent per annum between 1861 and 1913 vs.

[1] Additional information on the business history literature can be found in the recent surveys by Bigazzi (1990), Bigatti (1998) and Carnevali (1998). Giannetti *et al.* (1994) use this literature to sketch the strategy and behaviour of the 'representative' Italian firm.

2–2.5 per cent), his index also reveals a much more striking cyclical pattern, with a steep, if brief jump in output in the 1880s.[2] This result which coincides perfectly with his cyclical model of Italian development (see chapter 3), receives scant support from the other indexes, which reveal instead a marked discontinuity in the 1890s. Although the indexes for the inter-war period differ significantly in the size of cyclical peaks and troughs, they are similar in terms of timing and overall trends (Zamagni 1993a). None of the indexes are perfect and, at present, there is no particular reason to favour one over the others.

This may soon change. As mentioned in chapter 2, Fenoaltea is revising his index and has already published data series for utilities, mining, silk and construction. His estimates suggest that the ISTAT/Fuà series underestimates the growth of Italian industry. Total value added (including mining, construction and utilities) in 1891 and 1911 was higher than the comparable ISTAT (1957) estimates by 30 per cent and 15 per cent respectively (Fenoaltea 1992, 2000). In three cases out of four, the growth rate of the revised series exceeds that of the ISTAT/Fuà series (table 5.1).

Fenoaltea (1992, 2000a) also provides a detailed breakdown by sector of Italian manufacturing at the four benchmark years. As late as 1911, the 'modern' sectors, which include a number of traditional activities such as blacksmithing, accounted for less than a third of manufacturing value added.[3] These industries boomed during WWI, and, after a serious post-war crisis, grew remarkably during the 1930s. Yet as late as 1938, they accounted for only 45 per cent of the VA, substantially less than in other large industrial countries, such as the United Kingdom, Germany or the United States. What exactly do these numbers tell us? If one subscribes to a stage model, they indicate that Italy was still backward. If one accepts the possibility of different growth paths, they may suggest that industrialists responded rationally to natural endowments.

5.3 The level of competition must be a key feature in any model of industrialization and has implications for economic efficiency

[2] This index and the others by Fenoaltea referred to below have been used by Maddison to compute his estimate of Italian GDP. This accounts for the higher growth rate of Maddison's series (see chapter 2).

[3] The aggregate includes metal processing, engineering, chemicals, coal and oil processing, rubber and the production of photographic material.

Table 5.1. *Growth rates of GDP, selected industries, 1861–1913*

	(a)	(b)	(c)
Utilities	6.33	8.92	3.4
Mining	2.76	0.59	4.5
Construction	2.13	1.15	14.1
Wool	3.00	–	1.75
Silk	2.19	1.54[1]	1.8
Cotton	6.32	–	3.8
Wool	2.98	–	1.8

Note: [1] output of reeled silk (presumably used as a proxy for the whole industry).
(a) Fenoaltea (1982, 1987, 1988b and c, 2000, forthcoming); (b) Ercolani (1969) except silk from ISTAT (1958); (c) share of total value added in the secondary sector in 1911 (Fenoaltea 1992, 2000).

and welfare as well. It was widely believed that Italian industry was heavily concentrated and closely linked to banks. This view has a long history. Liberal economists in the late 1880s were the first to express it in their critique of the country's industrial structure, a position that was buttressed in the 1910s and 1920s by a series of innovative estimates of concentration (Giannetti *et al.* 1994). Its most lucid exposition is to be found in *Il capitale finanziario in Italia*, a short book by Pietro Grifone (1945), written when the author, a Marxist economist, was exiled on the island of Ponza during the war. Although some would consider his characterization extreme, it remained, until recently, unchallenged in the literature.

The issue of concentration has once again begun to receive attention. Rossi and Toniolo (1992) in their attempt to estimate a production function for the entire economy, also develop a national coefficient for 'market power', represented by the ratio of actual prices to marginal costs which, in perfect competition, would have been the market price. The coefficients fluctuate between 1.4 and 2.5 from 1895 to 1938 – that is, prices were 40 to 150 per cent above marginal costs. Such a result, if correct, would validate the conventional wisdom. It is, however, questionable.

There is, for example, reason to believe that concentration increased during the inter-war years and yet the index is flat. It is almost certainly too high. Agriculture, traditional services (trade, domestic and personal services, and so on) and consumer goods industries were competitive. Market imperfections were, therefore, restricted to industries in the 'oligopolistic core' such as steel making, shipbuilding, chemicals, banking and utilities. But these sectors accounted for a relatively small share of the economy – in 1911, a mere 7 per cent of GDP. For the Rossi and Toniolo result to hold, market imperfections in the core had to be unbelievably high.

These doubts are reinforced by direct estimates of concentration in industry (Giannetti, Federico and Toninelli 1994) and banking (Cotula and Garofalo 1997). Almost all the Herfindahl-Hirschman indexes are well below 0.1, where pure monopoly equals 1. The indexes indicate that concentration did increase during the 1920s and 1930s, and some industries, such as synthetic fibres and automobile manufacture, were highly concentrated. Overall, however, the Italian economy would seem to have been more competitive than was once believed. However, these results are also open to question (Battilossi 1999). The coefficients for industry are based on capital and not on sales and are further weakened by two (conflicting) biases.[4] Although the index for banking is more reliable, it may understate the level of concentration for the country as a whole because the market for credit was still largely a local one, especially in more backward areas.

5.4 There is surprisingly little research on the history of technological innovation in Italy. Although information on equipment and its provenance is often provided in company histories, it is rare to find details on possible alternative technologies and their productivity implications. The literature on technical innovation in Italy, brief as it is, contains five basic propositions.

[4] The source reports only the capital of joint stock companies, with no information on ownership. It is thus necessary to treat each company as if it were independent. This is not true and the Herfindahl coefficients are undervalued. On the other hand, the source omits all firms with other types of ownership arrangements (unlimited liability and so on) so that the coefficients are overvalued. For example, the production of shoes would have seemed more concentrated than that of steel.

1. Italy was barely a minor contributor to technological progress throughout most of the nineteenth and twentieth centuries. Vasta (1999a, 1999b) argues that the 'national system of innovation', a combination of human capital creation, state support for industrial research, and the existence of institutions that reward research and development, was one of the weakest in the Western world. The results, as measured by the number of patents – the usual, if questionable, proxy for inventive activity – indicate that Italy's performance was poor. It ranked eleventh out of the fifteen more advanced countries in 1890–2, ninth in 1910–12, and eighth in 1963–83 in terms of the number of patents granted in the United States (Cantwell 1991 table 2.2). Italian companies were the world leaders in one technology, silk reeling, and, in this sector, total factor productivity was substantially higher than that of its competitors until the 1920s (Federico 1997). The test, however, was not very demanding, as Italy's two main competitors, China and Japan, were even more backward.
2. Italy imported substantial amounts of foreign technology, both as patents (Vasta 1999b) and embodied in machinery. Imported equipment dominated some markets (cotton spinning machinery until the 1920s) while in others, such as steam boilers before 1910 (Bardini 1997), imports provided the more advanced types of equipment (for example, multi-tubular boilers) while domestic firms supplied the less sophisticated models.
3. Personal relationships and direct foreign investment facilitated technology transfer. In the early stages of industrialization, large numbers of Swiss, French and German entrepreneurs opened up shop in Italy and brought with them technical expertise and skills. At the same time, Italian entrepreneurs routinely toured Europe in search of technical know-how. By the end of the century, direct investment by foreign firms became a major source of new technology as Hertner's (1983) case studies on German companies show.
4. Whenever possible, Italian firms pursued a piecemeal approach to innovation, adding new machines to existing ones instead of changing whole plants. In light industries such as cotton textiles (Romano 1992), where the equipment was highly divisible, the capital stock was often a patchwork of equipment of different vintages and technical characteristics.
5. The small size of Italian firms, even in the oligopolistic core (FIAT had some 30–35,000 employees in the 1930s), seriously constrained their ability to adopt modern management and production techniques, and also the extent of investment in research and development.

These propositions are usually taken as proof of Italy's technological backwardness and evidence that the country could have developed faster had it invested more in research and development and imported more advanced foreign technology. Giannetti (1998) holds a less gloomy view of the situation. He admits that Italy, unlike any other advanced country, was never on the cutting edge technologically but nevertheless managed to compete by combining different (foreign) technologies according to its needs. His argument is compatible with standard economic analysis in the sense that German or British techniques were highly capital-intensive, and thus unsuited to the Italian input endowment. Italian entrepreneurs, instead, preferred labour-intensive technologies that drew heavily on Italy's large supply of unskilled labour. Technological mixing and matching was simply a rational response to relative factor prices.

Neither argument is, at this point, conclusive. Both Giannetti and the technological pessimists base their contentions on a few, possibly unrepresentative, case studies. Vasta (1999b) does use the number of patents, but the measure is notoriously fraught with methodological pitfalls. The resolution of the issue depends on a quantitative estimate of technical progress by industry, a task that must await the completion of Fenoaltea's work on output and a revision of the data on inputs. The standard series on the capital stock (Vitali 1969, 1970) is based on the ISTAT/Fuà estimates of output in construction and engineering. Once Fenoaltea's new estimates are available, the capital stock series will have to be recalculated. Census data are currently being revised to produce more reliable estimates of labour inputs (Vitali 1968; Zamagni 1987; Rossi, Sorgate and Toniolo 1993). When we move from a consideration of quantities to one of prices, profits and wages, the data problems are even greater. There are reasonable numbers on industrial wages from 1890 (Zamagni 1989, Fenoaltea 1985), but only very scattered and partial evidence on profits, and, so far, no price index for manufactures.

5.5 Historians still largely accept Sereni's argument (1947 and 1966) that insufficient domestic demand was a major obstacle to development. Thus, in recent works on the beer industry (Colli 1997), chocolates (Chiapparino 1997) and chemicals (Zamagni 1990), the small domestic market is included among the impedi-

ments to growth. Bonelli (1979, p. 1238), in the most articulate exposition of the model to date, singles out what he calls the 'missing development of sectoral interdependence' as a serious constraint on Italian industrialization. He contrasts Italian reality with an ideal pattern of development, *à la* Hirschman, based on the exploitation of backward linkages in a closed economy. The growth of mass-produced consumer goods industries creates a market for equipment and other intermediate goods, whose production in turn increases demand for semi-finished inputs such as steel or chemicals. In the end, a fully developed industrial structure emerges. Bonelli argues that the small size of the domestic market for consumer goods in Italy prevented this process from ever getting started.

The first problem we face in evaluating this argument is that we have very poor information on the consumption of manufactures. Romano (1992) outlines the slow growth of sales in the South by the large Lombard cotton firms but this tells us relatively little about the growth of consumption. The demand by farmers for agricultural implements did offer opportunities for small engineering workshops (Lazzarini 1990–5; Varni 1988), but we have no measure of the size and growth of the market

It is, however, perfectly reasonable to assume that the market for manufactures in Italy was small well into the twentieth century. Dozens of sources, including the great agricultural surveys of Jacini and Faina (Jacini 1882–6; Commissione 1909–10), attest to the poverty of Italian peasants, while most evidence indicates that urban workers fared only marginally better. This is, of course, exactly what we would expect given the low level of per capita income and its uneven distribution. All the contemporary estimates (surveyed in Zamagni 1980), suggest a very high level of inequality. For example, in the 1890s–1900s, the top 1 per cent of wealth holders at death owned between 40 and 50 per cent of total wealth (as much as in the United States in 1929).[5] Since the rich purchased luxury goods, either imported or produced by local craftspeople, the market for mass-produced goods depended on demand by low-income consumers. The greater the degree of

[5] The figure may overvalue the inequality because the data on post-mortem inventories are unadjusted for great wealth at death.

inequality, the smaller the market for manufactures. However, a recent estimate (Rossi, Toniolo and Vecchi 1999), suggests the problem may have been less serious in the long run. Inequality decreased steadily between 1881 and 1961, with a particularly sharp drop in the 1900s and in the years from 1936 to 1951.

Poverty by itself does not provide verification of the Sereni–Bonelli hypothesis. In fact, there are only two plausible conditions under which it might hold – significant scale economies in the production and distribution of manufactures and no access to export markets. In the absence of these two, even a limited demand would be sufficient for industrial production to get underway and, once begun, supply would create its own demand. Were these two conditions present in Italy?

The tentative answer is no, but much more research is required before a definitive response is possible. Although there are no studies devoted specifically to estimating the extent of scale economies, information on technology and firm behaviour in consumer goods industries would seem to rule out the existence of massive scale economies. On the other hand, economies of scale may have been substantial in the production of capital goods. As for exports, Italian manufacturers had become competitive internationally by the 1890s (Capanna and Messori 1940), initially in textiles, but after WWI, in a wide range of goods, including some, mostly low-tech, engineering products. It would be easy to enrich this account since Italian trade statistics are detailed and reliable but, to date, no one has attempted to do so.

5.6 The Italian peninsula was very poorly endowed with minerals. It had rich deposits of sulphur (Italy held a world monopoly until the 1900s), valuable mountains of marble, and some iron and zinc, but it had almost no coal.[6] As a result, Italians were forced to import coal or to find alternative energy sources. Neither option was entirely satisfactory. Imported coal cost twice as much in Italy as it did in the UK, while water power, the best alternative in the early post-unification years, was scarce and unreliable, aside from a relatively restricted area in the foothills of the Alps. Italians did use less energy per unit of GDP than nationals

[6] The low-quality coal deposits in Sardinia were exploited only in the 1930s as part of the autarkic economic policies of the fascists.

of other advanced countries, but ever since the *Inchiesta industriale* of the 1870s (Are 1974) the high cost of energy in Italy has been viewed as a major obstacle to the development of modern industry (Toninelli 1999). For a short while in the first decade or so of the twentieth century, hydroelectric power seemed to offer a solution to the problem. Production of 'white coal', as it was then called (Nitti [1905] 1966), grew astonishingly fast, and its use as an energy source for industry spread rapidly. And yet Italy never did manage to achieve self-sufficiency. Until the 1920s, electric power lacked the flexibility of steam and thus was not a perfect substitute for it in most industrial processes. In the post-WWII period, growth in demand for energy outpaced the productive capacity of hydroelectric firms to supply it. Moreover, local monopolies and inadequate interconnections at the national level fostered technological inefficiencies and high distribution costs in the electric industry (Giannetti 1985). Electrical companies responded to this situation by offering low-cost electrical energy to big consumers. Italy ended up as a pioneer in the development of energy-intensive technologies such as the electric furnace for steel production (Giannetti 1986).

The differential in energy costs between Italy and other better-endowed countries is difficult to measure because it varied with location, industry, and possibly size of plant.[7] As a result, it is equally difficult to assess its effect on industrial development. Bardini (1997, 1998b), in an attempt to circumvent the measurement problem, has tried a different approach. He first compares Italy with the United Kingdom, the most steam-intensive country in the world, on the eve of WWI. He finds, first, that Italy consumed less steam per unit of value added; second, that steam-intensive industries in Italy such as heavy machine construction and steel making were smaller than in the United Kingdom; and, finally, that all industries used proportionally less steam. On its own, specialization along lines of comparative advantage should not affect the rate of technical progress or the level of GDP. Bardini, however, assumes that the high cost of steam power in Italy did slow the rate of technical change because, until the

[7] In one of the few attempts at measurement, Fenoaltea (1983) comes up with surprising results. Fuel cost per unit of traffic was indeed between 2.5 and 3.5 times higher in Italy than in France or Germany, but it accounted for only 13 per cent of total costs.

1920s, steam was the main general purpose technology, that is, innovations tended to cluster in steam-intensive industries and production processes. The assumption, crucial to the author's argument, receives relatively little attention in his work. Were this promising area of research to be pursued, the assumption would require elaboration.

5.7 Many scholars argue that the lack of capital, like the high cost of energy, acted as a serious constraint on industrialization. The argument is at best debatable. In its simplest form, it is meaningless since financial capital is scarce and must be allocated efficiently everywhere. As we show in more detail in the next chapter, Italians were great savers (relative to their income), and, in any case, capital could always be imported. Many companies financed their expansion by reinvesting profits (see, for example, Crepas's study (1992) of Legler, a cotton textile firm) and there is reason to believe that profits grew, at least from the 1890s, because productivity growth exceeded the increase in industrial wages (Zamagni 1989; Del Monte 1977). On the other hand, ploughing back was not a viable option for new firms and/or for those that had to make large, lumpy capital commitments. Where did they find capital? Was the supply always sufficient to meet their needs or did the lack of capital prevent viable and promising enterprises from starting or prospering?

Investment capital came from four sources – direct foreign investment, bond and stock issues, informal networks of relatives, friends, business associates and private banks, and finally the formal banking sector. In principle, one would like to estimate the contribution made by each of these but, in practice, the most we can do is sketch the broad outlines of the process. While the relevant literature is indeed vast, it is also focused on a few issues (notably the role of universal banks), is qualitatively uneven and very short on data.

Stocks and bonds did not play a major role as a source of finance for industry in the past – nor does it today. The Italian Stock Exchange has always been small, opaque and highly speculative (Aleotti 1990). During boom years (the early 1900s or the early 1920s), capital flowed into the stock market but subsequent busts led to vast losses and discouraged long-term commitments by investors.

Peter Hertner (1981) has made a thorough study of foreign direct investment in Italy between 1883 and 1914. He estimated, on the basis of a painstaking investigation of all foreign joint stock companies active in Italy during this period, that, in total, their capital amounted to some 730 million lire, that is, about one-seventh of the total capital of all joint stock companies in 1911.[8] The share was sizeable, perhaps, but not overwhelming. However, foreign investments were concentrated in the 'modern' sectors (railways and trams, electricity, banks and so on), to which they brought valuable new technology and industrial know-how. There is no similar study for the later period.

Although we have good reason to suspect that informal networks were important sources of funds, our information on them is slight. Loans from other businessmen, friends, and/or relatives are often singled out in company histories as the primary (or the only) source of capital, especially in the company's early stages. This experience was not limited to small firms in light industries; both FIAT (Piluso 1999) and Pirelli (Bigazzi 1981; Confalonieri 1982) relied initially on private capital and tried to remain independent from banks. A systematic collection of this sort of material would certainly help to illuminate the contributions made by private financing, but we are unlikely to come up with a satisfactory quantitative estimate of the role it played. Such information is, by its very nature, elusive.

Banks were a major source of capital for industry, even if the total amount they supplied cannot be measured with precision. The liabilities of the banking system grew more than twelve times in real terms from 1870 to 1939 and accounted for a growing share of the total financial liabilities (see table 5.2 (a) and (b)). The Italian banking system was a complex patchwork of institutions which, for simplicity, can be grouped into four major categories (Polsi 1993): the central banks, the *società di credito ordinario* (joint stock banks), the *casse di risparmio* (savings and loan banks), and the *banche popolari* (cooperative banks). As indicated in table 5.2, cols. (c)–(f), the percentage share of total liabilities of the four groups fluctuated widely over time with no

[8] The estimate is subject to conflicting biases, as it does not take into account the increase in capital or the dissolution of joint stock and other types of companies.

Table 5.2. *The size of the banking system and its structure*

Year	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1870	15.3	NA	68.1	11.0	18.5	2.4	NA
1881	31.3	18.1	36.2	20.0	37.4	6.4	NA
1895	57.8	24.7	31.1	13.8	47.1	8.0	1.8
1914	113.9	31.2	25.9	19.0	45.4	9.7	10.0
1920	79.2	NA	33.4	31.3	27.3	8.1	16.0
1929	167.2	34.3	17.2	41.5	32.5	8.8	13.8[2]
1936	209.6	33.7[1]	15.8	34.4	44.2	5.7	

Note: (a) Total liabilities of the banking system in real terms (1911 = 100); (b) share of banks in total financial liabilities; (c)–(f) shares of different categories of banks in total assets: (c) banks of issue, (d) joint stock banks, (e) saving banks, (f) cooperative banks, (g) share of the two universal banks.

[1] 1938.

[2] 1925.

Source: (a) Ciocca and Biscaini-Cotula (1982) (deflated with wholesale prices from ISTAT 1958); (b) Goldsmith and Zecchini (1999); (c)–(g) Ciocca and Biscaini-Cotula (1982) (deflated with wholesale prices from ISTAT 1958). These figures are preferred to the revised estimates by Cotula and Garofalo (1997) because the latter start in 1890 and omit the banks of issue. The differences between the two sets of data are, however, small and never exceed 10 per cent.

clear trend, aside from the steady decline in the share held by the central banks.

Three of the four types of banks were restricted, at least in principle, to supplying short-term credit, mainly by discounting commercial bills or through overdrafts. This was true by law for the central banks which, until the 1936 Bank Reform Act, made loans to the public. It should have been true as well for the cooperative and the saving banks, which expanded rapidly in the North, but the rules, it seems, were made to be broken (Conti 1996, 1999). Long-term assets were, in principle, restricted to government bonds and loans to local authorities but short-term loans to business often became long-term through repeated renewals. There is also evidence that these banks supplied capital, at least in the north, in growing amounts to industrialists in the first decade or so of the twentieth century (Confalonieri 1982; Conti

and La Francesca 2000), although the extent of such loans is unknown. Few of the official histories of these banks deal with lending strategies (apart from casual observations or the odd quote from the old statutes) or examine the effects of their behaviour on the local economy.

The right to supply long-term credit to industry and to utilities was, at least on paper, the prerogative of the joint stock and private banks. In the first thirty years of the new nation, these banks, as a result of their remarkable taste for high-risk lending and for stock exchange speculation, were subject to violent swings in fortune. Thus, from January 1870 to June 1873, 135 new joint stock banks were established, with a four-fold increase in total capital in the sector (Polsi 1993). Few survived. And in 1893–4, the two largest joint stock banks, the 'Società Generale di Credito Mobiliare' and the 'Banca Generale' collapsed, after having lent huge sums to real-estate speculators in Rome and Naples (Pantaleoni 1895). Their ignominious fall and the ensuing financial crisis seems to have so tainted their reputation that historians for a long time were reluctant to study them. Given their importance, this was most unfortunate. In the last few decades, however, Confalonieri (1974–6) and, more recently, Polsi (1993) have tried to fill in the blanks.

In 1894, two new banks, the Banca Commerciale and the Credito Italiano, were established with German capital and know-how. Their success was instantaneous but also long-lived. By 1929, they accounted for one-sixth of the total liabilities of the entire banking system (table 5.2, col. (g)). Gerschenkron (1962) singled out these banks as the major cause underlying Italy's first big industrial spurt. In fact, they provided financial support and managerial advice to the major companies, especially in modern sectors such as steel, heavy engineering, electricity, shipping and so on. According to Gerschenkron, their contribution depended more on the quality of their services and their industrial affiliations (Cohen 1967) than on their relative size.

As one might expect, Gerschenkron's hypothesis has generated much debate and research. The single most important work on the subject is the awesome seven-volume tome by Antonio Confalonieri on banks and industry (1974–6, 1982, 1992, 1997). He was given complete access to the rich archives of the Banca Commerciale and, on the basis of these, he brought to light

extensive information on banking practices and policies. The core of his work, however, deals with the investment policy of the universal banks, in particular the Banca Commerciale. Confalonieri's research does not provide support for Gerschenkron's hypothesis, at least for the period prior to 1914. He stresses instead the continuity between the new German banks and their French predecessors and makes an effort to distinguish between the ideal of the universal bank and the actual practice of the Italian ones. They were, he maintains, more concerned with normal banking activities than with crafting an overall industrial strategy. They lent money on a project-by-project basis not as part of some larger development scheme, with the possible exception of the electric power industry. Sometimes the mixed banks did help firms in financial difficulty, but usually at the request of the government and with its backing. Last but not least, the banks, prior to WWI, avoided permanent ownership of industrial companies. They accepted shares only as collateral for loans and subscribed to new issues with the intention of selling the shares afterwards to their clients. These practices foundered in the early post-war period, not because of a change in policy but because the economic crisis of the period made it impossible for many companies to repay their debts. As a result, the universal banks became large stakeholders in a wide array of firms, especially among those engaged in the production of capital goods. When the Great Depression struck, the entire system collapsed and both the banks and their industrial clients had to be salvaged by the state. Confalonieri argues that the expansion of the 1920s represented a dangerous and ultimately fatal departure from the more prudent and effective practices of the pre-war years. Although Confalonieri's scepticism has failed to convince all scholars (Mori 1992), recent research seems to confirm his views.

Vasta and Baccini (1997) show, through the use of cross-membership on supervisory boards of joint stock companies (interlocking directorates), that the universal banks did not play a prominent role in the business networks. Their technique, however, may be misleading because the universal banks were often represented on the boards of industrial companies by managers, the so-called *fiduciari*, who were not themselves members of the board of the banks (Pino 1991).

Fohlin (1998, 1999) uses matching samples of attached and unattached companies in 1911 to explore two ways in which attachment to the Banca Commerciale may have influenced firms' behaviour. She finds that universal banks tended to attach themselves to large, established companies instead of providing venture capital to promising small ones. This would seem to refute the notion that the bank pursued a well-conceived strategy to develop new industries. She also finds that attached firms did not invest more than the unattached ones, a point confirmed by Battilani (1995) for a sample of cotton firms in the 1920s. In other words, association with the Banca Commerciale did not necessarily eliminate financial constraints for sound investments; nor did it facilitate excessive capital expenditures in second-rate foreign technology, as was argued some years ago by Farina (1980).

5.8 The key input for Italy was labour, or, as Marxist historians of the 1960s and 1970s liked to say, the success of Italian industry rested on the ruthless exploitation of labour (Merli 1976). In more conventional economic terms, it is usually argued that the elasticity of supply of unskilled labour was very high, if not infinite, for much of Italy's first century (Toniolo 1990; Romano 1992). On the other hand, there is ample evidence of shortages of skilled workers, especially during the early stages of industrialization. Italian firms, as a result, often resorted to foreign specialists, a necessary if not always felicitous arrangement. A number of scholars blame the educational system for this deficiency – insufficient access to technical training, too few faculties of science and engineering, too theoretical preparation and so on (Vasta 1999a). The problem was eventually eased by massive on-the-job training and by growth in the number of technical high schools. Thus, in 1911, the rate of attendance at these schools was second in Europe only to Germany (Zamagni 1993b).

Prior to the 1950s, industries in the North were able to recruit workers locally. As a result, the industrial boom of the first years of the century coincided with the historical peak in emigration from the South. This said, we actually know relatively little about fundamental features of the labour market in Italy before 1950 – about patterns of recruitment, turnover, labour mobility, demand for and supply of skills, and so on. In the 1980s, in a number of path-breaking studies, historians made use of company payrolls to

show that in many northern cities the market for skilled labour was reasonably efficient (Federico 1985). However, since the sample of firms used in these studies was small and unrepresentative of industry as a whole, we cannot speak with confidence about labour markets generally. This approach has since fallen from fashion but there are other sources of information on the labour market.

Federico (1985) used the 1911 population censuses, which list population by birthplace, to show how internal mobility and the pattern of industrial settlement differed according to industrial specialization. There were a few company towns, such as Terni, home of a big steel mill built in the 1880s, but not many. Instead, most capital goods industries – chemicals, steel, engineering – were located in big cities and employed mostly skilled male workers. These industrial cities grew quickly, primarily through the inflow of peasants from the surrounding countryside coming in search of work. They found jobs initially in construction and services where their lack of skills was less of a handicap; good industrial jobs, on the whole, went to second-generation migrants.

Light industry, notably silk and cotton textiles, was, instead, scattered among the hundreds of villages and small towns that dotted the southern foothills of the Italian Alps. These industries employed almost exclusively young women and girls who continued to reside with their still rural families. The opportunity to work in industry reduced dependence on agriculture, probably led to increases in household incomes, and may have facilitated modest accumulation (Cafagna 1989). At the same time, industrialists gained access to a competent and compliant labour force, and, quite often, to water power at a low price. There were, of course, potential drawbacks to this dispersion – transport costs were almost certainly higher than they would have been otherwise and new entrants could easily bid up the price of labour. The success of the model, however, suggests that the benefits outweighed the costs.

Most scholars today acknowledge the important contribution this type of decentralized industrialization – *industria diffusa* – made to Italy's economic development, in part, at least, because these same areas are among the most prosperous in Europe and remain the country's industrial heartland. Thanks to the work of

Cafagna (1989), it is now generally accepted that the silk industry was a prototype for the *industria diffusa* and an ideal training ground for both workers and entrepreneurs. And yet we know surprisingly little about how the system actually worked and how it affected the economic development of these areas. Dewerpe (1985), in his massive book *L'industrie aux champs*, provides a map of settlement based mainly on censuses and a sketchy description of the behaviour of peasants/workers. He uses as a framework for his analysis the concept of proto-industry and, in doing so, misses the originality of the Italian case. In fact, the concept refers to household production for distant markets with traditional techniques. Such a process was indeed widespread and may have prevailed at the beginning of industrial development in the area but the unique feature of decentralized industrialization was the use of the factory system in a rural environment. It was pioneered in silk reeling in the 1830s, and later spread to cotton, wool and other consumer goods. The best economic analysis of this phenomenon, particularly of its agrarian roots, remains Serpieri's (1910) field research on the area north of Milan.

The market for labour was typically very local, with demand and supply determined by the dominant industry in the area – silk, for example, unlike cotton, had a distinct seasonal pattern – by population density, the characteristics of local agriculture and proximity to big cities. Such an approach fits well the current search for the historical roots of Italy's well-known 'industrial districts'. Corner's work on the Comasco, a traditional silk-producing area, now the world's leading producer, is inspired by this quest. His books (Corner 1993; Corner and Cento-Bull 1993) provide a comprehensive, refreshingly accessible account of the long-term changes in industrial specialization and of the response by local households to new opportunities and challenges. The works, unfortunately, lack a sound empirical base. Colli (1999b) explores social interactions within an 'early' district (the metal working area around Lecco, in Lombardy). The topic continues to appeal to scholars (Fontana 1997), and important new results can be anticipated.

5.9 It is widely believed that the state played a key role in Italian industrialization (Federico and Giannetti 1999). Zamagni (1994, p. 154) argues that the state in Italy ranked alongside that of Japan

and Germany as among the most interventionist of the advanced countries. This intervention, identified by Gualerni as a 'symbiosis between industry and the Civil Service' (Gualerni 1982, p. 1), is described imaginatively as 'state capitalism' (Bonelli 1979), 'political capitalism' (Amatori 1997, p. 258), and 'an industrial State'. During the so-called 'liberal' period (roughly from the 1880s to the early 1920s), the state supported industry through protection, purchases of its output, and the occasional bail-out of ailing companies. Under the fascists, the state enriched its diet of intervention with heavy-handed regulations of the markets for labour and some commodities. In the 1930s, it enacted one of the most massive bail-outs in European history.

The best Italian economists, from Pareto to Einaudi, were critical of all industrial policies – they created distortions and wasted resources that a poor country such as Italy could ill afford. It would have been much wiser to stick with laissez-faire and to allow market forces to dictate the nature and pace of industrial development. Very few, if any, historians share this view. On the other hand, while most regard intervention as useful, perhaps even necessary, to overcome structural weaknesses in industry, there is strong disagreement about the impact of the actual policies. The vigour of the debate has, however, not been matched by an equally energetic effort to produce empirically meaningful results.

After two decades of free trade, Italy approved its first modest tariff on manufactures in 1878. It was, however, the tariff of 1887, approved jointly with the duty on wheat, that afforded real protection to industry. The tariff, which lasted with some modifications until 1921, protected primarily steel and textiles. A new tariff in 1921–3 extended protection to engineering and chemicals. Trade policy is the most controversial topic in Italian economic history. Scholars such as Zamagni (1993a), Sapelli (1992) and Pescosolido (1998) stress the positive effects of protection. Unfettered foreign competition, they argue, would have stifled the development of many industries, notably capital goods, which were central to Italian industrialization. Others are much more critical. Gerschenkron (1962), while acknowledging that, in principle, some protection might have helped, was severely critical of the government's choice of industries to protect. Textiles were

an 'old industry with limited possibility of technical progress' (Gerschenkron 1962) and steel was unsuited to a country without coal. A duty on labour-intensive engineering or on technically advanced chemicals would have made much more sense. Fenoaltea (1973) contends that, without a duty on steel, Italian engineering would have started an export-led industrial boom sixty years earlier than it did. A pioneering article by Toniolo (1977) explores the effects of substituting the duty on steel with an equivalent subsidy. The counterfactual engineering output in 1906–8 would have been substantially higher, but this 'would not have significantly altered the course of Italy's growth' (Toniolo 1977, p. 71). He further argues that the development of engineering (and its competitiveness on the world market) was hindered by the 'technical and organisational backwardness of the sector' more than by the duty on steel.

Even if historians disagree on the effects of trade policy, they agree on one point: protection shaped the pattern and timing of Italian industrialization. Federico and Tena (1998, 1999) challenge this view, relying on the first comprehensive estimate of nominal and effective protection rates. They stress that the effective rate of protection on most industrial goods was, at most, low, with the conspicuous exception of steel products and, perhaps, cotton textiles before 1890. Many manufactures, including machinery and chemicals, received negative effective protection. Based on these findings, the authors argue that the effects on industry were probably modest. This hypothesis is confirmed by the result of a CGE estimate of the effect of free trade (Federico and O'Rourke 2000a) for 1911. This policy would have reduced the output of the steel and heavy engineering industries by 15 per cent, and would have boosted that of textiles by a third. Other industries, which accounted for over 80 per cent of industrial value added, would have been hardly affected. The changes would have balanced each other, so that the overall share of industrial value added would have increased by a whisker. There is one caveat. Since protection in 1911 was close to the historical trough, these results may underestimate the effects of trade policy. On the other hand, the authors argue that the effect would have been more or less the same with the much higher 1897 duties. The impact of trade restrictions was to increase dramatically in the 1930s, when

the Fascist regime, in an attempt to make Italy and its colonies self-sufficient, introduced its autarkic policies.

A careful study by Fenoaltea (1982) revealed that public procurement for the railways was less important than many believed.[9] From 1861 to 1913, it amounted to only 10 per cent of total value added in engineering and metal working. Most of the money went instead to construction, which was important from a macroeconomic point of view but was hardly a leading industrial sector. There is no comparable analysis for the other public procurements, which consisted mainly of warships and other weapons. In 1911, the total purchases by the state (including railway rolling stock) added up to less than 5 per cent of industrial gross output (Federico and O'Rourke 2000a). The figure is somewhat misleading because the purchases were distributed unequally across industries. They accounted for 40 per cent of the gross output of steel firms, shipyards and rail car producers, and, within this group, for an even larger percentage of sales for a small number of private companies, including Ansaldo. In short, they formed a veritable 'military–industrial complex', whose survival depended on state purchases.

There is no comprehensive history of bail-outs, but useful information is available in a number of related studies (Confalonieri 1982, 1997; Forsyth 1993; Cianci 1977). Three features stand out. First, the policy was very selective. Only companies within the 'military–industrial complex', could count on state help, either directly, as happened with the Ansaldo rescue in 1921, or indirectly, as occurred when banks received government assistance in 1931–3 to save firms in the complex. Firms in textiles or other non-military sectors were allowed to fail without remorse. Second, whenever possible, the government preferred to act behind the scenes, using the clout of the Bank of Italy to compel the large commercial banks to mount rescue operations. In this way, costs to the state were reduced and its involvement was less visible. Third, bail-outs were always viewed as temporary expedients. State ownership through the IRI (see chapter 7)

[9] Railways were nationalized in 1905, but even before that they were strictly controlled by the state. From 1882 onwards, they had to purchase Italian rolling stock if its price did not exceed that of imported goods by more than 5 per cent – the percentage increased later (Fenoaltea 1972).

became permanent in 1937 only because it was impossible at that time to find buyers for the banks and industrial companies that had been saved from drowning in a sea of debt four years earlier.

No attempt has been made to estimate the costs and benefits of these bail-outs. The task presents formidable challenges to the researcher since it would require the measurement of intangible benefits such as the preservation of technical expertise and of the indirect costs associated with the misallocation of resources. On the other hand, the pay-off of the research could be large and, given the on-going tendency of governments to help industrial 'friends', of more than just historical interest.

Italy's political and economic elite believed that a 'military–industrial complex' was essential if the country was to join the ranks of the great powers. This meant, among other things, that the country had to have the capacity to meet its own military needs during wartime. Italy's military–industrial complex successfully passed its first test during WWI. The country was self-sufficient in the production of railway rolling stock in 1915 and, by the end of hostilities, weapons' production matched the needs of the military. By its own standards, then, the industrial policies of the 'liberal' state were successful. By more conventional economic measures, the benefits may have been very small indeed. Labour productivity among firms in the 'military–industrial complex' in 1911 exceeded the all-industry average by 85 per cent (Bardini 1998a), but the gap is modest for capital-intensive industries. A number of other sectors, including paper, printing, chemicals and milling, in fact did substantially better and received no special treatment from the state. Furthermore, from 1911 to 1936, the Italian military–industrial complex lost ground in terms of productivity to comparable sectors in the United Kingdom. Why the lacklustre performance? It is tempting to speculate that it was due to insufficient competition and the warm and fuzzy environment created by the over-protective state. For Ansaldo 'the political dominance of the market and a substantial increase in its productive potential seemed the only effective strategy' (Dewerpe 1997, p. 284).

Historians who believe that the military–industrial complex was essential for economic growth are unlikely to be persuaded by these statistics. For instance, Amatori (1997, p. 255) states that

'the word industrialisation was synonymous with the word steel'. This statement would, perhaps, be true if it could be shown that the military–industrial complex provided dynamic advantages, such as technological spillovers and external economies. There is no quantitative support for these potential advantages, nor has anyone who accepts the argument tried to produce corroborating archival evidence.

Intervention in the markets for labour and goods is the hallmark of industrial policy in the 1930s. As early as 1926, the fascist regime had officially outlawed strikes and (non-fascist) trade unions. In the late 1930s, it imposed tight restrictions on population movements within the country to prevent peasants from leaving the countryside for the city. The regime encouraged cartelization and in the 1930s it started to regulate industrial investments, allegedly to prepare the country for war. In the 1960s–70s, there was a lively debate among historians over the nature and inspiration of fascist economic policies, motivated, at least in part, by disagreements over the degree of continuity between the liberal and fascist states (Federico and Giannetti 1999). There is now a general consensus that the policies were mostly the outcome of a compromise between different lobbies, and a reaction to short-term crises (Toniolo 1980; Cohen 1988).

The impact of fascist industrial policy is much less controversial than that of the liberal one. Most scholars agree that the state wasted large sums of money and encouraged the gross misallocation of resources (Grifone 1945). Rossi and Toniolo (1992, p. 552) identify 'Fascist economic policies of the 1930s [including the agrarian policy] as the most likely candidate for the role of the villain in the long-run performance story'. Fascist policy failed even if measured by its own yardstick. Its objective was to turn Italy into an efficient war machine. Instead, the performance of Italian industry during WWII was decidedly poor. The shortage of raw materials, caused by the alliance with Germany, constrained the growth of output, the organization of production was chaotic and the quality of Italian weapons was poor (Zamagni 1997). The few dissenting voices usually argue that fascist policies were not harmful because they were not implemented. Regulations may have slowed down but did not impede internal migrations (Ipsen 1997; Treves 1976). Planning restrictions were easily circum-

vented, especially by big firms (Gualerni 1982; Petri 1990). Only Gregor (1979) and Petri (1997b, 1998) argue that autarky and the war production had positive spillovers. It stimulated technical progress, encouraged the development of new production facilities and increased the country's technical capabilities, all of which contributed to the post-war 'economic miracle'. The authors rely, however, on a few case studies, such as that of the polypropylene industry, with no detailed analyses of the costs and benefits derived from the new technologies. The dynamic externalities had to be very large indeed to offset the welfare losses caused by the misallocation of resources.

6
Macroeconomic policy, institutions, and the balance of payments

6.1 The unification of Italy in 1861 caught almost everyone, both in Italy and abroad, by surprise. The task ahead, summed up by the famous observation, 'Italy is made, now it is necessary to make the Italians' (D'Azeglio), was immense. The states of the peninsula, many independent since the collapse of the Roman empire, had to be integrated into a single entity with a unified civil service, a consistent legal framework and a single currency. The country's social overhead capital, inadequate and unevenly distributed, was in dire need of attention. There were, for example, only 2,404 km of railway lines, the nineteenth-century measure of modernity, in the entire country – i.e. 0.096 km per inhabitant – vs. 0.251 in France, 0.295 in Germany and 0.734 in the United Kingdom (Schram 1997, tables 2 and 3). About 40 per cent were in Piedmont, while the South as a whole had less than 10 per cent. The patrimony of roads, ports and other public facilities was equally unimpressive and skewed regionally.

In spite of the challenges, the overall mood was sanguine. Italy, many believed, had been mismanaged. With freedom, unity and sound economic policies, the new nation would thrive and would at least be able to narrow, if not close, the gap between it and the more advanced countries of Europe. The Italian ruling class – a small elite of (mostly) landowners – set to the task with great energy and enthusiasm. Within a few years, all basic governance institutions were created – and were to last, with minor adjustments and exceptions, for at least a century. As a general rule, the easiest option – the extension to the whole country of the French-inspired institutions of the Piedmont – was the preferred one. Piedmont (and thus Italy) was officially a parliamentary mon-

archy, but the king wielded considerable power, especially in foreign and military affairs. The parliament consisted of a senate, appointed by the king, and an elected house. A mere 2 per cent of the population – literate males who either paid substantial taxes or fell into specific categories such as university graduates, clerks and civil servants – had the right to vote. Suffrage was enlarged in the 1880s, but it was only in 1912 that all males obtained voting rights. It took another thirty-three years for this to be extended to women. All political rights were, of course, suspended during the fascist period.

The state was highly centralized to counter threats to its unity. Although local authorities were often given important and expensive responsibilities, such as the provision (until 1911) of primary schooling, they were granted very little autonomy. For example, until 1888 (and even later for the smaller villages), mayors were appointed by the prefects who were, in turn, appointed by the central government to be its local representatives. Centralization was strengthened under the fascists and remained the basic organizing principle until the creation of regional governments in the 1970s.

Most economic institutions reflected their Piedmontese origins. The Piedmontese lira, equal under gold parity to one French franc, became Italy's official currency. The low Piedmontese tariff regime was extended to the entire country at unification. Taxes, after a brief time lag, were harmonized, in most cases extending to the whole country the local, pre-unitary, state system in order to maximize revenues. A new civil code, approved in 1865 (Teti 1999), contained strong protection for property rights, a principle that was reaffirmed in subsequent revisions. Vigorous defence of these rights (in the narrowest meaning of the word) guided practice, often at the expense of democratic principles. The army, for example, was routinely used to break strikes, until 1901, when the government decided to abstain from intervening against economically motivated strikes. This decision was hailed as a breakthrough for democracy, which was to be short-lived. Strikes were forbidden during WWI and outlawed under the fascists.

The only exception to the rule of centralization was, ironically, in the central bank. After an intense political debate, the six regional note-issuing banks were allowed to remain independent,

even if one of them, the (Piedmontese) Banca Nazionale assumed a dominant position because of its size (Sannucci 1989; Ripa di Meana and Sarcinelli 1993). These institutions differed from a modern central bank in two important respects. First, much like the Bank of England in the eighteenth century, they were profit-making organizations, so that their policies were guided more by the bottom line than the social good. Second, they had very little autonomy from the treasury in setting monetary policy. The system worked poorly, and, in the wake of a major political scandal in the early 1890s associated with the collapse of the Banca Romana, one of the six, it essentially fell apart. In 1893, three of the six were merged to create the Bank of Italy (Hertner 1998) which along with the Bank of Naples and the Bank of Sicily retained the right of note issue. Over the next few decades, the Bank of Italy increased its power and autonomy, through the strong leadership of its governor, Bonaldo Stringher. In 1926, it gained the exclusive right to print money, and in 1936 it was given responsibility for supervising the entire banking system. However, it was to gain full independence only in the 1980s (Polsi 2001).

As one might expect, it took longer to build up the country's infrastructure than to organize its institutions. The main long-distance railway lines were laid in the 1860s and early 1870s with the addition of some 6,500 km of track; local networks followed in the 1880s and early 1890s (Schram 1997). Although the lines were privately owned until 1884, they were heavily dependent on state subsidies and even then required two massive interventions to prevent bankruptcy before the whole system was nationalized in 1905. In spite of these and other investments in infrastructure for both civilian and military purposes including, for example, an expensive system of fortifications around Rome, Italy's social overhead capital compared unfavourably with that of other European countries. As just one example, in 1913, per capita railway mileage was one-half that of France and Germany and about two-thirds that of Britain.

6.2 Did this modernization effort contribute to long-term growth, and how much did it cost? It is, of course, difficult to measure the costs and benefits of institutional change even with perfect information, and in Italy data are far from perfect. We begin with a review of government revenue and expenditures.

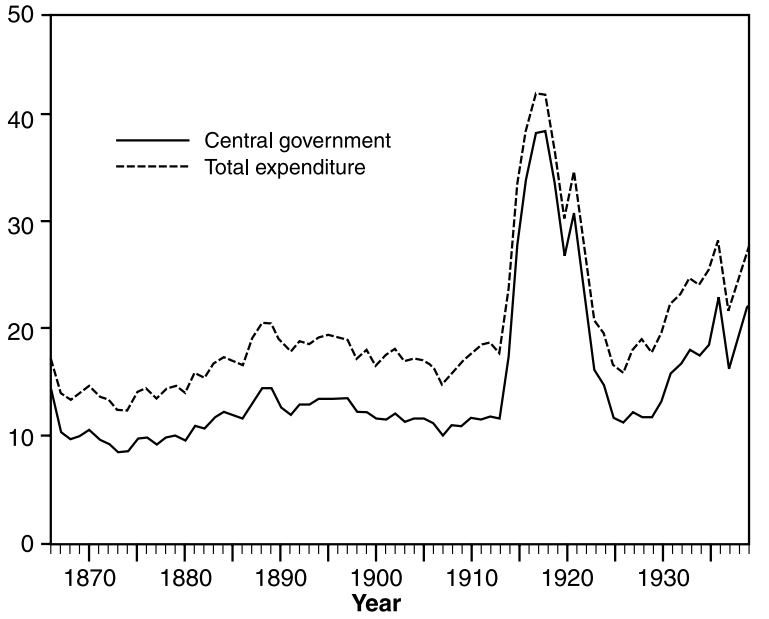

Figure 6.1 Expenditure/GDP rates.

Data on expenditures at the local level are missing for several years, while the budgets of the central government are confused and often unreliable. Three different sets of data on expenditure and revenues of the central administration exist: those of Repaci (1962), the Ragioneria Generale dello Stato (1969) and Brosio and Marchese (1986). The series differ at times (notably during WWI) but in the long run the series tell the same story. In real terms, expenditures grew slowly, with some fluctuations, from the 1860s to the eve of WWI. They shot up during the war, decreased in the 1920s, then rose almost to the earlier peak in the late 1930s. With few exceptions, expenditure growth tracked the development of the economy. As figure 6.1 shows,[1] the ratio of state expenditures to GDP fluctuated widely, with peaks in the 1860s, the late 1880s, the 1930s and, of course, during and just after WWI.

[1] The source is Brosio and Marchese (1986), the only one that also reports local expenditures. GDP at current prices is obtained by extrapolating backwards the data of Rossi, Sorgate and Toniolo (1993) according to ISTAT (1957).

Although the ratio exceeded the British one, it was close to that of France and, after 1890, Germany. In this respect, then, in spite of the impression given in the economic policy literature reviewed earlier in this volume, Italy was not an outlier in Europe in the nineteenth to early twentieth centuries. Even if we were to add expenditures by local authorities, total state spending still accounted for less than a fifth of GDP. In Italy, as in the rest of Europe, the size of the state expanded dramatically only in the 1960s–70s.

Most of the money went for the army and navy and for servicing the public debt. Of the remainder, the two largest categories (excluding wartime) were education and public works. The latter fluctuated widely (Brosio and Marchese 1986), while outlays on education rose steadily from unification to WWI both as a percentage of total state spending (from about 3 per cent to 7 per cent) and as a percentage of GDP (from 0.5 per cent to 2 per cent). Italy's laws on compulsory schooling were among the most advanced in Europe. Primary school attendance, for example, was made obligatory in 1859, but the results failed to match the regulations (Zamagni 1993a; Vasta 1999a). As late as 1931, in some southern regions up to half the total population was illiterate. The effort was perhaps a case of too little if not too late.

The most controversial aspect of public works spending was the construction of Italy's railway network. After an initial wave of enthusiasm, the poor economic results of most lines prompted many people, including several members of parliament, to become more critical. The local lines built up in the 1880s were seen by many as a waste of money, undertaken just to please local politicians. More recently, Gerschenkron (1962) has argued that the main lines were built too early. Domestic industry lacked the capacity to meet the demand for lines and rolling stock which, instead, was satisfied by imports. Fenoaltea (1983) has shown that both claims are flawed. As for the first, according to his estimates, the net returns on minor lines were not inferior to those of main lines outside the Po valley, which were subject to competition from coastal navigation. In the second case, the difference between actual and potential demand – including imports – was indeed substantial for metal goods, especially before 1895, but quite

small for engineering products. Moreover, it is unlikely that the additional demand could have been satisfied without reducing the output of other goods, even if Fenoaltea (1972) argues that these indirect effects were small.

On the whole, then, the microeconomic effects of these growth-enhancing expenditures were small but positive. It is likely that more money spent on education would have improved Italy's long-term productivity growth, but it is difficult to say by how much.

6.3 Macroeconomic history research has flourished of late. The Bank of Italy has sponsored the publication of two major series, one of research (Ricerche – studies of specific macroeconomic issues) and the other of documents (Documenti – collections of original documents on the bank's activities and related macroeconomic topics). The substantial introductions to these latter constitute a mini-history of Italian monetary and banking policy (Bonelli 1991; Caracciolo 1992; Cotula and Spaventa 1993; De Cecco 1990, 1993; De Mattia 1990; Guarino and Toniolo 1993; Negri 1989; Ricossa and Tuccimei 1992; Toniolo 1989).

The most significant contribution to the field is, however, a book by two economists, Michele Fratianni and Franco Spinelli, first published in Italian in 1991 (Spinelli and Fratianni 1991), and then, in a much abridged version in English[2] (Fratianni and Spinelli 1997). Although the book, as its title, *A Monetary History of Italy*, suggests, was inspired by the Friedman and Schwartz classic (1963), the authors show that the Italian case differed profoundly from the American one. Changes in the money supply in Italy were dominated by the needs of the state (fiscal dominance). Italian governments were too weak and/or too eager to please their constituency to pursue a sound budgetary policy. The state could and did finance its deficit by issuing bonds, but it also resorted on a massive scale to the printing press. The treasury borrowed from the central bank(s) at a very low rate in exchange for the right to expand circulation (if necessary beyond the limit set by the amount of gold reserves). The banks of issue were

[2] In the English version of the book, the time span has been extended to 1992, but the historical part (1861–1939), that we deal with here, has been cut from about 250 to 100 pages.

legally obliged to comply, and, in any case, were able to profit from the increased circulation by expanding their loans. The authors' conclusion is significant if not, as they fully acknowledge, entirely new: 'public finance is at the root of the (relatively) high Italian inflation' (Fratianni and Spinelli 1997, p. 22). As Spinelli (1988) notes, a number of nineteenth-century economists reached similar conclusions. Fratianni and Spinelli, however, support their argument with more and better data and with more sophisticated quantitative techniques.

The book is a breakthrough in Italian economic history. The authors raise a number of important issues and employ a single, coherent model to tackle them. Tattara and Volpe (1999) deny the relevance of the model before 1913. They argue that the monetary base was (endogenously) determined by the demand for money; given the level of real income and interest rates, the latter set by world rates and country risk, any excess money would have flowed out of the country, without affecting prices. With this exception, the book has so far failed to receive the attention it deserves from economic historians. The literature, however, provides a lot of insights and information for a discussion of Fratianni and Spinelli's reconstruction.

Few historians seem to share Fratianni and Spinelli's preoccupation with the parlous conditions of the budget and the threat of inflation. Some would even argue that deficits were justifiable in some situations – in the 1860s, for example, when the needs of state building prevailed over other considerations (Zamagni 1992a). Moreover, deficits may have helped shore up aggregate demand during economic crises. This argument has been put forward for the 1880s (Barone 1972) and, more plausibly, for the exit from the Great Depression in the 1930s (Toniolo 1980). Moreover, Mattesini and Quinteri (1997) argue that the restrictive monetary policy of the early 1930s, aimed at defending an overvalued exchange rate, seriously worsened the crisis. On the other hand, spending on rearmament and colonial expansion, while perhaps priming the pump, may not have been the best way to stimulate demand in a still backward country (Federico 1998).

The conventional wisdom can also be seen to raise doubts about the accusation of fiscal laxity. A case in point is the policy of the

Destra Storica (Conservative) governments from 1867 to 1876 (Zamagni 1992a). Between 1861 and 1867, budget deficits soared, peaking at 7.5 per cent of GDP in 1866 during the war with Austria. As a result, the reputation of Italian bonds declined sharply. To counter the slide, the finance minister, Q. Sella, adopted a tight-fisted budgetary policy, which included a massive sale of land (partly seized from the church) and a doubling of taxation. This policy of *lesina* (stinginess) led to a balanced budget in 1876, and caused the party of the right to lose power in the same year.

Left-wing historians have traditionally accused Sella of pursuing policies that favoured the interests of the rich at the expense of the poor (Sereni 1947). Most additional revenue came from consumption taxes (which included a particularly regressive levy on milling), while a substantial part of the proceeds was used to pay the interest on the public debt, held by Italian and foreign rentiers. In recent years there has been a substantial revision of this interpretation. Marongiu (1995), in his history of Italian fiscal policy, praises the fiscal policy of the Destra Storica as an example of the willingness of the ruling elite to sacrifice its own narrow interests for the good of the country. In support of his argument, he points to the increase in the land tax and to the introduction of the *ricchezza mobile* (a tax on non-landed wealth). It should be noted that neither critics nor defenders of the Destra Storica buttress their arguments with an economic analysis of the effects of tax policies on the distribution of income.

None of these arguments touch the core view of Fratianni and Spinelli that fiscal exigency determined the money supply and the rate of inflation. However, it is possible to cast doubt on its validity by looking at the data. Fratianni and Spinelli seem to suggest that the Italian state was always on the brink of financial disaster. The authors' own data do not sustain this position (Fratianni and Spinelli 1991). In fourteen out of the seventy-seven years from 1862 to 1939, the budget was in surplus, and in most of the remaining sixty-three the deficit was small. The deficit exceeded 3 per cent of GDP (to use the EMU percentage) in only twenty-four years, concentrated in three periods: the 1860s (four years), the war and its aftermath (1913–22) and the late 1930s (from 1933 to 1939). After a big increase in the 1860s, the state's debt as a

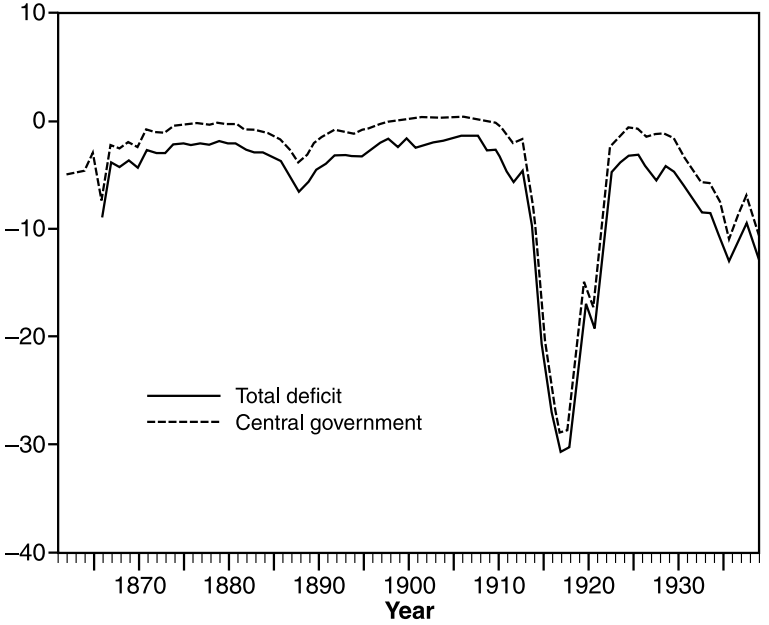

Figure 6.2 Deficit/GDP rates.

percentage of GDP shows a saw-like pattern (figure 6.2), with successful reductions in the 1900s and 1920s (Zamagni 1998).[3]

Local authorities seem to have behaved with less financial restraint, with an average deficit exceeding 2 per cent of the GDP and with no years of surplus (Brosio and Marchese 1986). However, the figures overstate local deficits since they fail to include revenues from sources other than taxation: for example, from rents. Furthermore, the local authorities could not resort to the printing press and thus were compelled to borrow to finance their expenditures.

The causal relationship between monetization of the deficit, money supply and inflation is less strong than Fratianni and

[3] The big drop in 1926 reflects the settlement of inter-allied debt. Italy obtained a huge reduction in its total debt and was able, given a large share of German reparations, to repay the subsequent instalments on the residual debt. Both payments were suspended in 1931. Thus, the foreign debt practically disappeared.

Table 6.1. *Money supply and state deficit*

	(a)	(b)	(c)	(d)
1862–1913	4.44	0.47	0.82	0.65
1914–1920	22.72	1.18	0.38	21.10
1921–1937	3.27	0.04	−0.43	0.06

Note: (a) annual percentage change in money supply (notes, coins, bank and postal deposits); (b) increase in monetary base by the treasury as a ratio to the total growth in monetary base (average of yearly figures); (c) increase in monetary base by the treasury as a ratio to deficit; (d) inflation rate
Source: Fratianni and Spinelli (1997 tables 1.3, 1.4 and 2.1).

Spinelli would have us believe. Table 6.1 reports some key data from their book.[4]

Two points stand out. First, 'fiscal dominance' was a relevant issue during the gold standard period (until 1913) and, to some extent, during the war years. In those years, the creation of the monetary base by the treasury did account for a substantial part of the total increase (col. (b)). But, as column (c) shows, the monetization provided most of the resources the state needed only before 1914. The Italian war effort was financed by domestic and foreign indebtedness (Forsyth 1993). Monetization of the deficit was irrelevant during the inter-war years. Second, inflation was high during WWI, but failed to materialize in other periods. War years apart, Italian price history did not diverge significantly from that of fiscally more responsible countries (Bordo and Kydland 1996; Craig and Fisher 1997). Fratianni and Spinelli (1997, table 1.2) manage to identify differences with the 'rest of the world' by selecting as a benchmark the country with the lowest price increase among the big three – France from 1862 to 1913 and the UK, 1913–45. Had they chosen the USA as the yardstick for the years before 1945 as they do for 1945 onwards, the differences would have disappeared completely in the 'gold standard' years and would have been much smaller in the period 1914–37. It thus

[4] There are differences between Fratianni and Spinelli's series and others, notably those on debt (Zamagni 1998). They are, however, small and can be ignored.

seems difficult to argue that inflation was a serious problem for the Italian economy until relatively recently. Ganugi (1989), in fact, maintains that price stability was an important condition for the growth of investments during the *boom giolittiano*.

Summing up, there seems to be little empirical support for Fratianni and Spinelli's model in the period prior to 1940, however well conceived and impressive it may be. The case may be different for the 1970s or 1980s – the period in which the authors are clearly most interested. In those years, the government ran a much larger and more persistent deficit than it had in the past and Italy's rate of inflation was much higher than that of other advanced countries.

6.4 The previous discussion raises two important questions. First, why did inflation remain low in spite of the growth in the money supply? Second, what effect did bond issues, the alternate way of financing the deficit, have on long-run economic growth?

The results of recent research suggest three possible answers to the first question. First, money may not have been neutral – that is, the growth in the money stock may have led to an increase in output instead of prices. Fisher (1992) finds evidence of such an effect in the years 1880–1913, but his statistical methodology (the simplest form of Granger causality) is quite crude. Second, the excess supply of money may have been disposed of through the export of capital (Tattara and Volpe 1999). Third, in the long run, the velocity of circulation may have fallen. There is, in fact, compelling evidence that velocity did fall over time because of the relatively high income elasticity of demand for money in the region of 1.5 (Fratianni and Spinelli 1984; Craig and Fisher 1997; Muscatelli and Spinelli 1996; Ciocca and Rinaldi 1997). The Italian economy was becoming more sophisticated. Money exchanges pushed out barter transactions and paper replaced coins, especially after the adoption of the *corso forzoso* (forced circulation) in 1866 (Pittaluga 1994). Masi (1989) argues that the budget deficit actually boosted monetization in the early decades of the new kingdom, as the state guarantee on paper money and bonds reduced the investors' mistrust of these new instruments.

The use of bonds to finance the deficit may have done as much damage to growth as monetization if the bonds crowded out private productive investments. For this to have been the case,

three conditions had to be met. First, capital markets in Italy had to be reasonably efficient and unsegmented. In particular, state bonds and productive investments had to compete for the same pool of savings. Gerschenkron (1962) and Warglien (1987) argue that the market was segmented because the average investor in state bonds regarded private investments as too risky. Other scholars such as Bonelli (1968) and Confalonieri (1974–6) disagree, at least implicitly, since they identify the budget surplus in the first decade of the twentieth century as one of the causes of the economic boom. Toniolo (1980) makes a similar, if more tentative, argument for the 1920s. Since none of these authors produce much quantitative evidence to support their arguments, the issue remains unresolved.

Second, it had to be impossible for either the government or private borrowers to import capital at reasonable interest rates. This was almost certainly not the case before 1913 or during the war. Capital flowed freely in the world economy during this period (Obstfeld and Taylor 1997), and the Italian government, like many others, often sold its debt to foreign lenders. On average, from 1861 to 1913 about a fourth of the interest on the *rendita*, the main Italian bond, was paid abroad (Zamagni 1998).[5] During WWI, massive borrowing abroad brought the foreign-held share of Italian state debt by 1920 to an all-time peak of 53 per cent.[6] In addition to state debt held abroad, local authorities often borrowed on international markets (Asso 1993), while foreign firms made substantial direct investments in Italy (Hertner 1981). In principle, the total net inflows of capital should equal the deficit on current accounts in the balance of payments. According to the ISTAT series (1957), deficits were large in the 1860s, 1880s and, with few exceptions, from 1915 onwards, while Italy was a net exporter of capital in the 1890s and early 1900s. Unfortunately, these data are unreliable and internally inconsistent (Fenoaltea 1988a), but alternative estimates are available only for 1911 (Marolla and Roccas 1992) and 1919–31 (Falco 1995). While the

[5] The figure is an upper bound of the stock of *rendita* held by foreign investors, and hence of the share of state debt that had been financed by an inflow of capital. In fact, when the lira was under par many Italian owners of *rendita* sent their coupons abroad to be paid in gold.

[6] The war-time debts were settled in 1926, and Italy succeeded in paying only a small amount of its outstanding obligations (Toniolo 1980).

revised national accounts will permit us to make more definitive statements about the quantity of capital imports, it is safe to say that Italy was able to rely on capital inflows to offset the risk of crowding out.

Last but not least, even if we were to accept the highly implausible assumptions that the domestic capital market was perfect and no capital was imported, massive crowding out was still unlikely for the simple reason that Italians have been and remain very thrifty people. The savings/GDP ratio never dropped below 5 per cent, between 1861 and 1939 and averaged 12 per cent.[7] Total domestic savings have consistently exceeded by a large margin the government's budget deficits, with the exception of the four years 1916–18 and 1920. In the period 1861–1939, in two years out of three the budget either was in surplus or the deficit absorbed less than a quarter of total domestic savings.

In the light of these observations, the probability is very low that government bonds crowded out potentially productive investment. This conclusion is buttressed by the results of a very recent analysis of the portfolio of the banks (Cotula and Garofalo 1997, table 5). From 1894 to 1926, state bonds accounted for only one-quarter of total assets of commercial banks. If the central banks are included, the figure increases to about a third.

6.5 Italy was (and still is) a small country and, for most of the period, its economy was almost perfectly open – capital movements were controlled only during WWI and from the 1930s onwards. As a result, domestic macroeconomic economic policies must have affected external balance, conveniently summarized by the movements of the exchange rate (figure 6.3).

After unification, Italy adhered to a (bi-)metallic standard, but it succeeded in maintaining full convertibility of the lira only until 1866, and later for a few years in the 1880s. For the rest of the period, Italy was officially off the gold standard, but the lira shadowed gold closely, and its depreciation never exceeded 15 per cent. From the outbreak of the war to 1926–7, the lira, like other European currencies, floated freely, losing about four-fifths of its pre-war value against the dollar and the pound. In 1927 the lira

[7] The savings ratio is computed as 1 less the ratio of private consumption (Ercolani 1969, table 4.1.A). The ratio to net disposable income was somewhat higher, in the region of 14 per cent (table 4.4).

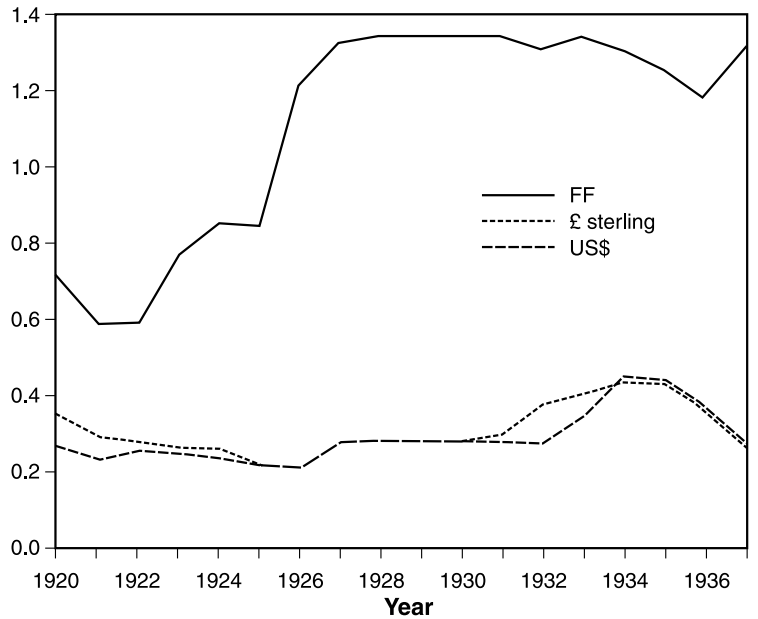

Figure 6.3 Exchange rate of the Italian lira: (a) against the pound sterling, 1861–1913; (b) against the pound sterling, the French franc and the US dollar, 1920–1937 (1911 = 1).

returned to a fixed exchange rate: the new parity, known as *quota novanta* (90 lire to a pound) amounted to a 25 per cent revaluation (Cohen 1972). Italy was one of the last currencies to leave gold, in 1936, even if by that date, if not earlier, conversion was practically impossible because of concrete restrictions.

Historians have focused, for the most part, on the period before 1913, the years of the 'classical' gold standard. Until the 1980s, the prevailing view was broadly Keynesian (Bonelli 1979; Cafagna 1989). It was assumed that exports were totally exogenous, determined by core country demand for Italian primary products, while imports depended on Italy's GDP. In this scenario, the trade balance was seen as highly sensitive to the domestic rate of growth; if the rate exceeded some threshold level, the balance would be plunged into deficit. In the short run, this deficit could be financed by selling reserves or by importing capital, while in the medium run, devaluation could provide some relief. However, devaluation was at best a stop-gap measure, since prices were inelastic. The only effective solution to balance of payments problems was a lower growth rate.

This conclusion seems implausible. Although import price elasticities were low because imports were composed mainly of foodstuffs and raw materials, Italy exported 'luxury' primary products, such as silk, and low-quality manufactures, for which demand must have been quite elastic. Moreover, devaluation would have increased Italy's market share at the expense of its competitors; cross-elasticities of industrial demand for silk of different provenance, for example, were quite high (Federico 1997). Unfortunately, the existing estimates of aggregate import and export demand functions (Balloni 1969; Glazier, Bandera and Berner 1975) are too plagued by methodological shortcomings to help resolve the issue.

Since the mid-1980s, this traditional Keynesian approach has been turned upside-down. It is now assumed that the driving force was capital flows, and that the balance of trade and services adjusted to them. When capital flowed in, for whatever reason, the balance of trade was in deficit; when Italy exported capital, the balance of trade was in surplus. The question, then, is: what drove capital flows? The recent literature puts forward two different, but not mutually exclusive, answers. Fratianni and Spinelli (1984)

and, more explicitly, Spinelli (1988) focus on the difference between actual and desired money supply in the framework of the monetary theory of the balance of payments (MAPA). Italy exported capital (and the lira depreciated) when the money supply (driven up by the state deficit) exceeded the desired one. Fenoaltea (1988a) stresses the role of the decisions by British investors about the profitability and risks of domestic and foreign investment. When, as in the 1880s, they preferred investing abroad, the world capital market was awash with liquidity, and all peripheral countries (including Italy, but also the United States) imported huge quantities of capital. The amount of capital imported into each country depended on the so-called country risk, that is, on the subjective assessment by investors of future trends in exchange rates and/or the probability of default. All these authors buttress their models with econometric tests, whose results are, unfortunately, not conclusive. There is no explicit non-nested testing of competing hypotheses, and, above all, the quality of the data is too poor.

The discussion is less arcane than it seems. First, these models imply a different apportioning of the 'blame' for not having maintained the parity with gold. Fratianni and Spinelli place it entirely on the government; had it not run deficits (or had it financed them totally by issuing bonds), Italy would not have had any balance of payments problem. Tattara (forthcoming) implicitly blames the government. He shows that country risk had an adverse effect on the exchange rate, and it is well known that investors' calculations of country risk were strongly influenced by fiscal and monetary policy. Fenoaltea shares this view in part, but he also points to an exogenous factor, the independent decisions of British investors. These arguments contrast sharply with the traditional Keynesian one in which movements in the exchange rate depend on the balance of trade and hence on largely exogenous forces, such as the endowment of natural resources or trends in the world market.

Second, balance of payments adjustments may have affected long-run growth. Each model implies a different set of causal connections. In the 'monetary' approaches, favoured by Fratianni and Spinelli and Tattara, currency depreciation and country risk raised the cost of capital relative to the gold standard countries.

The average yield of 5.3 per cent on the *rendita* in 1861–1913 was indeed substantially higher than the 2.9 per cent earned on British consols, the standard risk-free bond at that time. It is likely that this differential extended to a whole range of interest rates. However, the depreciation accounted for only a part of this differential: Italy would have paid more for borrowed capital even if the lira had remained at par. According to Bordo and Rockoff (1996), in 1870–1914, currency depreciation cost Italy about half a percentage point of additional interest. The difference was not negligible, but far from decisive for long-run growth. On the contrary, in a Keynesian framework, balance of payments adjustments mattered a great deal. Italy was under a permanent external constraint, which it managed through fortuitous circumstances to escape on a number of occasions – in the 1860s, the 1880s and during World War One through capital imports; in the 1900s through emigrant remittances, and so on. The external constraint was, in fact, binding only in the 1920s–30s, when the situation of the balance of payments was of paramount interest to policy makers (Ciocca 1976; Gualerni 1982). However, the equilibrium was fragile and would have been jeopardized by any increase in imports; thus, a substantial growth in mass consumption, as proposed by Sereni, may have been unsustainable (Bonelli 1979). Finally, the balance of payments is also important in Fenoaltea's model, if for a totally different reason – international capital flows were the main causes of business cycles in Italy.

7
An economic miracle? Italy in the Golden Age, 1945–1960

7.1 Economic growth, more than any other feature, defined this period and shaped the literature. The reasons for this are easy to understand. Rates of growth of GDP, GDP per capita, total factor productivity, and output per worker were higher and more sustained than at any time in the country's history. It was as if, almost a century after unification, domestic and international economic conditions conspired to release the country's considerable economic potential.

The growth, moreover, was associated with dramatic structural change. In 1950, agriculture was still the dominant sector, accounting for over 40 per cent of total employment and 25 per cent of value added. By the early 1960s, agriculture no longer dominated the Italian economy – in terms of both employment and value added, industry and services were larger. As a result, Italy finally joined the league of industrial nations – and never looked back. Agriculture during this period was itself transformed. Output grew rapidly but, of greater importance, the growth of labour productivity was even larger so that the sector released labour even as its output expanded.

As Petri (1997a, p. 368) and others observe, inflation remained modest, certainly by Italian standards, throughout the period of rapid growth. This was the result of a conscious attempt by the Bank of Italy to moderate increases in the money supply and by the government to rein in budget deficits.

Rates of investment and saving were the highest in the history of modern Italy. By 1963, when the rate of investment peaked, it was averaging about 25 per cent of GDP. It is clear that government saving supplemented instead of crowding out private saving, in

part, perhaps, because government surpluses were the result of expenditure constraints not tax increases. International trade soared. Exports grew at approximately 12 per cent per year, substantially above GDP growth, and in the peak years 1958–63 exports were growing at close to 16 per cent per year. Although imports grew as well, the trade balance continued to improve throughout the period.

By the early 1960s the average Italian was better educated and healthier, lived longer, and was substantially richer than at any time in the country's history. Moreover, the country managed to reduce substantially the income and productivity gap between Italy and its wealthier northern neighbours.

In spite of these achievements, problems remained. The income gap between the North and the South was greater at the end of the period than it was at the beginning (Del Monte and Giannola 1978). The exodus of workers from the countryside, especially from the South, while largely in response to better opportunities elsewhere, was often accompanied by high personal costs (Rey 1982; Ginsborg 1990). Rates of unemployment remained high by European standards until the very end of the period. Italy failed to reform its public administration, to establish rules and regulations for its markets, to monitor effectively state-run companies, to rein in the power of vested interests, and to modernize labour relations (Rossi and Toniolo 1996; Rey 1998; Barca 1997). State support for research and development was woefully inadequate, universities were underfunded and overregulated, and the training of scientists, engineers and technicians was, on the whole, neglected (Giannetti 1998). We review in the final section of this chapter attempts by economists and economic historians to show that Italy's recent economic troubles (high inflation, slow growth, high unemployment) were rooted in the unfinished business of the 1950s and 1960s. We note, furthermore, that much of the post-war literature was written in the heat of policy debates and was thus shaped as much by politics as by dispassionate scholarship. But time has passed, the heat has dissipated, and historians are now entering the field. We can look forward to solid research and new insights.

7.2 As in most Western European countries, recovery was supported by American help through various programmes – the most famous being the European Recovery Program (ERP), better

known as the Marshall Plan. According to contemporaries, the Marshall Plan played a crucial role in Italy's reconstruction and subsequent growth. More recently, Milward (1984) has raised serious questions about the significance of Marshall Plan aid, maintaining that economic recovery was well under way prior to the introduction of the plan and, furthermore, that the amount of aid was relatively trifling. Zamagni (1988, pp. 490–3) concurs with Milward – the Marshall Plan lacked sufficient funds and the planners lacked a sufficient grasp of Italy's needs to be of much help in the country's recovery and growth. Casella and Eichengreen (1992), while in general agreement that the amounts were modest, note that the funds eased political conflicts. Mori (1994, p. 205), on the other hand, argues that the amounts in question, if Marshall Plan aid is combined with other funds flowing from the new world to the old, were significant, especially for large-scale firms that were the major beneficiaries of this largesse. Moreover, the plan accomplished its political objectives – it helped the Christian Democrats to win the 1948 election, to marginalize the communists, and to entrench American values in Italy.

As it happens, recovery was remarkably swift, in part, perhaps, because wartime destruction of plant and equipment was relatively light (Rossi and Toniolo 1996; Rey 1982; Mori 1994), in part because the opportunities to profit from rapid reconstruction were so great. GDP grew at approximately 7 per cent per year between 1946 and 1951 (in one year alone, 1947, it jumped 14 per cent). By the latter date, output had returned to 1938 levels. Associated with the growth explosion, however, was an alarming acceleration in the rate of inflation. Most observers (Zamagni 1988) concur that inflation was bad for the economy and society and needed to be controlled.[1] It inhibited saving and investment, encouraged goods and labour hoarding, created balance of payments difficulties and threatened social peace (Hildebrand 1965; Castronovo 1975). There was (and still is) much less agreement about the steps that needed to be taken.

[1] It is worth noting that Rey (1998), Spinelli and Fratianni (1991), and Gualerni (1991) contend that inflation was tolerated at least for a while because it allowed relative prices to readjust after years of administered prices. It also created forced saving. Omiccioli (2000) is less certain that the authorities used inflation so strategically.

The two main sources of inflation were, on the whole, beyond dispute. First, serious shortages of industrial raw materials, foodstuffs and fuel created the possibility of excess demand and inflationary pressure. This was resolvable in one of two ways – increases in aggregate supply or suppression of aggregate demand. Italy, with some help from the USA, was able to boost output and, as trade recovered, to increase its imports and exports. Second, the huge monetary overhang built up during the war and the early post-war years generated intense inflationary pressures (Zamagni 1988; Spinelli and Fratianni 1991). Casella and Eichengreen (1992) view these as proximate and attribute the impetus behind the monetary overhang to distributional conflicts. The challenge was to find a way to eliminate the excess supply of money (or the distributional conflict) without choking off economic recovery (Rey 1998; Gelsomino 1998; De Cecco and Giavazzi 1993).

The monetary problem was not unique to Italy. The English relied on goods rationing and price controls to check inflation, the Belgians and the French froze bank balances, the Germans introduced a new currency, and the Japanese rationed foreign exchange. Einaudi, the man responsible for Italy's stabilization programme, was an orthodox liberal economist.[2] He opposed rationing of all sorts and was unwilling to wipe out bank balances because of its negative impact on small savers (Omiccioli 2000). His solution, instead, was conventional (Castronovo 1975) and, as it turned out, effective (Hildebrand 1965; Bottiglieri 1984). He raised the discount rate and imposed reserve requirements on commercial banks. Excess reserves were eliminated, the expansion of bank credit slowed and inflation dropped dramatically.[3] For Casella and Eichengreen (1992), it was the Marshall Plan, announced in 1947, that increased the size of the pie to be distributed and thus eased the struggle between groups for their fair share. Others (Zamagni 1988, p. 478; Mori 1994, pp. 196–7; Ruffolo 1974) maintain that the orthodoxy of Einaudi was

[2] In 1948, Einaudi became deputy prime minister and was replaced as governor of the Bank of Italy by Menichella. They were in complete agreement about the appropriate monetary policy for Italy.

[3] See Hildebrand (1965) for the best discussion in English of the stabilization policy. Daneo (1975) and Gelsomino (1998) provide thorough accounts in Italian. For a more critical view of the stabilization policy, see De Cecco and Giavazzi (1993).

tempered – tight monetary policy was offset by an expansion of government expenditures and a clear commitment to step up the contributions of the state to promote economic expansion.

Although some continue to argue that Einaudi's stabilization policy had a prolonged depressing effect on growth (De Cecco 1968; Sassoon 1986; De Cecco and Gavazzi 1993), the data on industrial production and GNP (Zamagni 1988; Hildebrand 1965; Rey 1998; Rossi, Sorgate and Toniolo 1993; Petri 1997a; Spinelli and Fratianni 1991) suggest that growth slowed from October to February 1948 and that, for the most part, was that. Zamagni (1988) attributes the rapid recovery to the suppression of imports and the jump in exports; Mori (1994) attributes it to the initiatives of the state; and others attribute it to the positive impact that the bundle of stabilization policies had on expectations (Spinelli and Fratianni 1991) and the 'animal spirits' of investors. Moreover, Italians of all political stripes applauded. In fact, the real discomfort among most dissenters was not with the pace of growth but with its market-driven nature.

As indicated above, the Italian government was criticized at the time (Hirschman 1948) for its decision to pursue deflationary monetary policy to stabilize the lira and kill inflation (Petri 1997a; Mori 1994). It is important to recall that the attempt to end inflation coincided with the start of the ERP. Since the purpose of the plan, among other things, was to hasten recovery from the war, Italy's decision to fight inflation at the risk of slowing recovery seemed foolhardy at best. Unemployment was very high and poverty widespread, especially in the South. It was, many felt, time to prime the pumps, not turn off the water. In retrospect, we know that Einaudi's gamble paid off. The problem, according to some (Castronovo 1975; Ginsborg 1990; Sassoon 1986; De Cecco 1968), is that it seemed to commit Italy to a course of development based on the imperatives of the market not state planning, on wage moderation not redistribution, and on trade liberalization and the pursuit of comparative advantage not import substitution. The objective, moreover, was to weaken labour so that reconstruction could proceed with labour peace and moderate wage demands.

A key feature of the approach of Einaudi (and Menichella) was a commitment by Italy to the West, and, more particularly, to trade liberalization. Italy became a signatory to the Brettons Wood

agreement, joined NATO, and the OEEC (OECD). The potential benefits of increased trade were substantial. With access to a much larger market, Italian firms could specialize and thus reap the benefits of scale economies and dynamic comparative advantage. Domestic producers exposed to international competition were compelled to modernize. What were the costs?

Italy, it is argued, lost its ability to pursue an independent development policy – one, for example, that would have favoured public over private consumption, employment over efficiency, high wages over profit maximization, and was, instead, constrained by the dictates of the market. According to Graziani (1972) and others the international division of labour in fact offered Italian firms little more than the opportunity to specialize in low-technology, labour-intensive industries, for which growth prospects were at best limited. Italy's dependence on imported raw materials and intermediate goods created a chronic balance of trade problem and compelled the government to restrict domestic demand at substantial cost to the poor consumer. Although it is difficult to assess the consequences of such alternatives, the experience of import substitution in other countries in the 1950s and 1960s was disappointing. Moreover, as Zamagni (1988, 1992c) argues, it is unlikely that Italy would have benefited from a policy that kept it out of a united Europe – assuming that such a policy was politically feasible. The balance of payments problems turned out to be non-existent, not because domestic demand was suppressed but because Italian exports were so competitive. According to Barca (1997), Lutz (1962) and Ranci (1983), the very real and persistent problems of dualism were the consequence of too little trade, not too much; of excessive government intervention to protect vested interests, not too much international competition. Zamagni (1988, p. 494) and others note that, until 1968, Italy was the most protectionist country in the EEC.

7.3 In the 1950s and 1960s, it was generally accepted that rapid expansion of aggregate demand was the engine of economic growth and structural change. The big question was: which demand component – exports, domestic consumption, or government investment – powered the engine? A number of authors maintain that Italian growth was export-led, although there is less agreement on exactly how exports drove the growth process. In

one version, an increase in international demand for goods in which Italy had a comparative advantage induced producers to increase investment in plant and equipment and to expand output. As a result of the enlarged market, they achieved scale economies and remained competitive internationally. With slack in the economy, at least initially, it may have been possible to increase output with no increase in costs or prices. Boltho (1996) argues that Italian exports benefited from an undervalued exchange rate. Although this does not establish a causal link between exports and growth, it does mean that Italian exports may have been more competitive internationally than they otherwise would have been. Some have argued that since the import content of domestic production was large, exports had to grow to facilitate domestic expansion. Otherwise, Italy would have faced a balance of payments problem that eventually would have choked off domestic expansion. Since this did not occur, it is presumably correct to conclude that exports led growth. Note that, in fact, this argument does not rely on export-led growth but simply on the ability of Italian firms to sell abroad.

The case for export-led growth has fared poorly. Ciocca, Filosa and Rey (1973) argue that, among other things, the timing is wrong. The very rapid expansion of exports post-dates the first phase of the high-growth period by almost a decade. Even among those products that experienced very rapid export growth for much of the period, such as textiles, rubber goods and transportation equipment, the share of exports in total sales increased only for transport equipment. They argue further that Italy did not face a balance of payments constraint, since the growth of international trade was matched by the growth of internal demand for domestically produced goods and services.

The situation may have changed after 1958 with the creation of the EEC. Trade liberalization accelerated, export growth exceeded even the blistering pace set by GDP expansion, merchandize exports outstripped tourism and emigrant remittances for the first time, and investment in machinery and equipment surpassed capital accumulation in agriculture and construction (Ciocca, Filosa and Rey 1973). While interesting, these trends fail to establish a causal link between exports, investments and growth (Zamagni 1992c, p. 209).

As a result of the Depression, the war, and the scarcity of the early post-war years, there was substantial pent-up demand in Italy, much as in the rest of Europe, for consumer goods, especially consumer durables, and for housing (Carré, Dubois and Malinvaud 1975; Abramovitz 1994; Rossi and Toniolo 1996; Rey 1998). The demand for these goods was fed as well by the massive migration of families from the countryside to cities (Rey 1998, Zamagni 1992c). Ginsborg (1990), for example, reports that nine million people moved inter-regionally between 1951 and 1964. Rossi and Toniolo (1996) note that the income elasticity of demand for consumer goods was large; as disposable income rose with recovery and growth, so did the size of the domestic market. An expanded market encouraged producers to enlarge plants and extend production runs, and allowed them to realize scale economies. On the other hand, as a number of authors observe, significant unemployment and underemployment held down the rate of increase of real wages. In spite of this, Zamagni (1992c, p. 198) notes that private consumption doubled in the fifteen years from 1948 to 1963 compared with a growth of one-third in the previous eighty-seven years. Nevertheless, since GNP per capita grew more rapidly than per capita domestic consumption through most of the period (Petri 1997a), it is unlikely that the latter led the former (Rey 1998; Gelsomino 1998).

It is argued by many that government demand was the engine of growth especially in phase one (1950–7) of the high growth period. On one level, the case appears compelling. Ciocca, Filosa and Rey (1973) estimate that investment, promoted more or less directly by the state through subsidies, soft loans, grants, bail-outs, tax incentives and direct investments, accounted for 51 per cent of total gross fixed investment in 1951 and 56.3 per cent in 1958. Funds were earmarked for small and medium-sized firms, for the South, for agriculture, housing, infrastructure, and for investment in state-owned enterprises in basic industries such as engineering and iron and steel. Petri (1997a, p. 364) notes that the various subsidies provided by the state in the years 1951–60 reached 12.5 per cent of the value added of industry. While the increase in government spending passes the first test – it did not consist merely of transfer payments – the problem of crowding out remains.

Although Hildebrand (1965) observes that data limitations make it impossible to determine the extent to which government expenditures crowded out private spending, there are reasons to presume that it was minor. Interest rates remained low during much of the period (Rossi and Toniolo 1996; but see also Rey 1998) and the government's budget was in balance. The issue, however, remains open and would repay further investigation.

7.4 We now turn to the supply side features of Italy's economic miracle. There are, in the literature, the broad outlines of a model of growth for the early post-war period to which most would subscribe (Rey 1998; Rossi and Toniolo 1996). It goes something like this. A key feature of the period was the very high rate of capital accumulation. The growth of the capital stock had a number of positive spin-offs. First, it led to a rapid increase in the capital–labour ratio, which, in turn, pushed up labour productivity and total factor productivity. Second, it reduced the age of the capital stock, thus bringing Italian firms closer to the best-practice frontier. Third, it facilitated the shift of labour from low- to high-productivity activities. Another prominent feature of the period was wage moderation. According to Rey (1998), wages increased at roughly 2 per cent per annum in real terms. As a result, productivity increased more quickly than real wages – with a number of important consequences. Profit rates went up, making investment attractive. Firms were able to finance much of their capital formation out of retained earnings without recourse to the capital market (Rossi and Toniolo 1996; Mori 1994). While this would have been an insignificant consideration in a world of perfect capital markets, most would argue that the capital market in Italy was inefficient and inflexible (Giannetti 1998). Thanks to wage moderation, declining transport costs and commodity prices, and a stable macroeconomic environment, inflation was held in check. With the added bonus of a slightly undervalued exchange rate (Boltho 1996), Italian firms remained highly competitive in international markets. Trade liberalization guaranteed access to world markets, encouraged specialization and facilitated realization of scale economies, further pushing out the long-run aggregate supply curve. There was also the possibility of technological catching up, that is, the possibility for Italian firms to adopt and adapt off-the-shelf technology developed elsewhere. This

reduced both the time and cost of introducing new products and processes and accelerated the rate of technological change (Abramovitz 1994; Rey 1998; Rossi and Toniolo 1996; Ranci 1987; Zamagni 1992c). Key features of the model include an elastic supply of labour and wage moderation, high profits and rapid capital formation, and, finally, opportunities to realize scale economies and engage in technological catching up. We review each of these in turn in the remainder of this section.

Rates of unemployment were high throughout most of the period (Rey 1982, 1998; Petri 1997a; Mori 1994). The growth of labour productivity in both agriculture and industry offset to some extent the growth in output so that the rate of job creation continued to lag behind the numbers looking for work. Many argue that the excess supply of labour held wage demands in check and ensured wage moderation. It was only in 1962, when the economy bumped up against a labour constraint (Barca 1997), that we begin to see real wages rise more rapidly than labour productivity for the first time. Although Rey (1998) suggests, following Eichengreen (1996), that labour may have agreed to moderate its wage demands for some part of the period, Barca (1997) explicitly rejects this possibility. A number of authors (Lutz 1962) have argued that Italy, in fact, had a segmented labour market. Workers employed in the large-scale, export-oriented firms were well paid and experienced pay increases in line with productivity growth, while those working in small-scale, inefficient firms geared to the domestic market were poorly paid. While it is clear how such segmentation (if it existed) would have affected comparative rates of pay, it is less clear from this literature how it would have affected average real wages as the labour market tightened.

It is important to note that no one relies on the excess supply of labour story on its own to explain rapid growth. As many observe, Italy had high rates of unemployment and underemployment for much of the twentieth century without the explosive growth of the post-war period. It is viewed instead as a permissive factor: one that facilitated but did not cause a high rate of capital accumulation (Rossi and Toniolo 1996; Kindleberger 1967).

It is surprising to discover almost nothing in the literature on the link between human capital formation, growth and productivity

change. Rossi and Toniolo (1996) observe that Italy was well endowed with a reasonably skilled and disciplined labour force which meant that it had the social capability to absorb new technology from abroad. Giannetti (1998) notes that Italy, perhaps because of its deficiencies in facilities to train engineers and experimental scientists, performed poorly as an innovator – at least as measured by patents. He also notes that the North had a much larger share of post-secondary educational institutions than the South, although no attempt is made to tie these differences to economic growth in the two regions.

There is disagreement about interest rates in the literature. According to Rossi and Toniolo (1996, p. 442), the government, thanks to its control over the banking system and international capital movements, was able to keep rates artificially low and thus promote rapid capital accumulation. Rey (1998, p. 29), on the other hand, argues that real interest rates were relatively high (at least until 1958) compared with those in other industrialized countries and in light of the relative stability of prices. The fact that financial markets were segmented, credit was rationed, and the government provided subsidized loans lends support to the Rossi and Toniolo position. Large firms appear to have had much greater access to government largesse and to credit from intermediate and long-term lenders than medium-sized and small ones. The latter two groups were forced to rely instead on local or regional banks, family and community organizations for their financial support (Barca 1997; Giannetti 1998). Firms in the North were not unduly handicapped by these arrangements but those in the South, because the network of local credit institutions was so sparse, did suffer (Conti and Ferri 1997).

On the whole, however, most contend that the official cost of capital and the imperfections in the capital market – for example, a poorly developed equities markets – were relatively unimportant, because firms were able to rely on retained earnings to fund capital formation. These earnings were substantial during the high-growth period, not only because productivity growth exceeded the rate of wage increases, but also because effective tax rates were low (Rey 1998). Firms, both large and small, received various forms of tax relief, while small firms in particular were particularly adept at tax evasion – in large part, it seems, because it was accepted (if not

condoned) by the state. According to Barca (1997) and others, the government's tax policy was the quid pro quo for the low expenditures on infrastructure and the lack of regulations that raised the cost of doing business.

Retained earnings generated by large profits and low taxes may have worked in the short run but were unsatisfactory as a long-run solution to the problem of industrial finance. First, new ventures, especially small, high-risk start-ups and/or capital-intensive ones, were likely to have difficulty finding support (Giannetti 1998). There is still very little venture capital available to Italian entrepreneurs. Second, tolerance of tax evasion legitimized corruption and encouraged costly efforts to disguise taxable income (Ginsborg 1990; Barca 1997). Third, any pressure on retained earnings – an increase in real wages, an increase in taxes – reduced the ability of firms to fund new projects, even if the expected rate of return remained attractive. Finally, any attempt by the government to get its fiscal house in order would have to be at the expense of investment.

The rapid increase in labour and total factor productivity in Italy during this period is usually attributed to three factors: structural change, economies of scale and technological change (Zamagni 1992c; Rossi and Toniolo 1996; Giannetti 1998). Structural change was a feature of growth in a number of European countries including Germany and France, but the scope for the reallocation of labour from low- to high-productivity activities was much greater in Italy than elsewhere (Abramovitz 1994; Abramovitz and David 1996; Zamagni 1993a). In the most ambitious attempt to quantify the components of growth in Italy in the post-war period, Rossi and Toniolo (1996) find that structural change accounted for a significant share of the increase in productivity. As late as 1951, Italy still had close to 40 per cent of the labour force employed in agriculture compared with 25 per cent in Germany and around 30 per cent in France. Between that date and the early 1960s, however, the change in the structure of employment was dramatic.

A number of authors maintain that the Italian economy, in spite of the substantial structural changes, retained a large number of inefficient small and very small firms, especially in the South. Had they been eliminated, productivity and real wages would have

been higher and overall growth more rapid (Petri 1997a). Thus, in spite of the substantial gains associated with increased scale and specialization, particularly for scale-intensive activities such as steel making, chemical production and oil refining, large chunks of the economy remained unchanged and inefficient. Most attribute this to a combination of non-traded goods that provided a kind of natural protection and conscious policies on the part of the ruling Christian Democrat party who viewed small-scale business people as a major source of political support (Bottiglieri 1984; Barca 1997). According to Rossi and Toniolo (1996), public administration served as the employer of last resort for the lower middle class.

While it is certainly true that in many areas – commerce, finance, public administration, telecommunications – domestic producers faced little competition and were inefficient, in others, small may have been beautiful. Small firms were a major source of new employment during the high growth years (Rey 1982). Small and medium-sized firms may have been more innovative than large ones (Giannetti 1998), and small firms embedded in industrial districts may well have been the engines of growth in recent decades.

Everyone seems to agree that the opportunity for technological and productivity catching up played an important role in Italy's rapid post-war growth. The gap between Italy and the technological leader, the USA, was large and the capital–labour ratio in much of the economy relatively low. The potential for rapid productivity growth was substantial. Potential, however, is only one part of the equation – the other is the capacity to realize it. Italy had a reasonably skilled and disciplined labour force, a government committed to an open, competitive economy, a new constitution that guaranteed protection of private property and the rights of individuals, and a strong tradition of community support for business initiatives, especially in the North and Centre. As noted earlier, wage moderation, trade liberalization and a stable macroeconomic environment helped promote a high rate of investment. Finally, Giannetti (1998) notes that Italian firms, because they were so skilled at adopting technology developed elsewhere and adapting it to Italian conditions, were major beneficiaries of the large technological backlog.

7.5 Massive bail-outs in the 1930s left the post-war Italian state with a huge stake in the country's financial and industrial system. The state owned all the large commercial banks, the railway, the shipping lines, the telecommunications system, much of the country's capacity for making steel, ships and other heavy industrial equipment and some substantial interests in the oil and chemical industries (Rossi and Toniolo 1996; Barca 1997). Although some favoured liquidation of these holdings at the end of the war, the private capital market lacked the capacity to absorb them (Rossi and Toniolo 1996; Mori 1994; Gelsomino 1998). Moreover, during the next two decades, through the creation of new holding companies such as ENI, FIM (later EFIM) and ENEL, the state added a monopoly of the newly discovered oil and gas deposits, more engineering firms and the bulk of the electrical power industry to its industrial patrimony (Bottiglieri 1984; Petri 1997a). What impact, if any, did this pattern of state ownership have on the economy's performance? Did it affect the rate, the nature, and/or the location of investment? Were public-sector firms at least as efficient as those in the private sector?

According to Posner and Woolf (1967) public enterprise investment grew more rapidly than the national average over most of the high-growth period (350 per cent vs. 140 per cent between 1954 and 1962). It also increased as a percentage of total fixed investment in plant and equipment (from 17.4 per cent in 1957 to 26.5 per cent in 1962) (Posner and Woolf 1967, table IX, pp. 146–7 and 100; Sassoon 1986; Zamagni 1993a; Federico 1999). It is, therefore, perfectly reasonable to presume that public-sector firms made a substantial contribution to Italy's high rate of capital formation.

One caveat is necessary. A number of economists have observed that investment decisions by public-sector firms were often based on notions of public interest or loss minimization, neither of which would ensure an efficient use of scarce capital (Posner and Woolf 1967, pp. 35, 104, 118). If this is true, then it may be correct to argue that, while public-sector firms did contribute to high rates of capital formation, a reallocation of investable funds from public- to private-sector firms would have increased the rate of economic growth.

This said, some would argue that there may have been a positive externality associated with investments by public-sector firms.

Hildebrand (1965), for example, argues that investments by public-sector firms were less sensitive to short-run fluctuations in profit expectations and thus more stable than investments by those in the private sector. In this respect, government investment may have crowded in instead of crowding out private investment, and promoted macroeconomic stability. Although neither Zamagni (1993a) nor Posner and Woolf (1967) find this argument compelling, no one has attempted a formal test of the hypothesis. It should be noted that moderate cycles were a feature of French and German growth where public ownership was much lower than in Italy (see Sicsic and Wyplosz (1996) on France and Carlin (1996) on Germany).

Some have argued that public-sector firms had a greater tolerance for risk than private ones and were prepared to undertake larger-scale projects (Posner and Woolf 1967, p. 119). On the positive side of the ledger, public-sector firms, especially in the early post-war period, were often willing and able to take on potentially profitable projects that were, it would seem, beyond the reach of private ones. Thus, the modernization of steel production in the late 1940s, a resounding success, was carried out by firms controlled by the Istituto per la ricostruzione industriale (IRI) and this might not have been done had it been left to the private sector. On the negative side, there were obvious dangers associated with such behaviour since public-sector firms, because they could socialize losses, may have been prone to underestimate risks and exaggerate rates of return (Hildebrand 1965; Ginsborg 1990). Moreover, mistakes by public-sector firms were difficult to correct – in most cases, they simply added to the government's deficit (Posner and Woolf 1967, pp. 28–30). The list of such mistakes, especially in the 1960s and 1970s when political considerations came to dominate economic ones, is very long (Posner and Woolf 1967, p. 108). Federico (1999) argues that there is every reason to believe that profitable ventures would have found willing investors, Italian or foreign, and did not require government intervention.

7.6 Italy's economic achievements were indeed impressive, but problems remained. The biggest one, arguably, was the North–South income gap. It could, perhaps, be neglected immediately after the war, when reconstruction topped the agenda, but by the

late 1940s, with social and political unrest on the rise, the economic problems of the South could no longer be ignored. It was generally accepted that the market was unlikely to resolve the problem – massive state intervention was required. In 1950 the Fund for the South (Cassa per il Mezzogiorno or CASMEZ) was created with a mandate to invest in public-works projects to facilitate estate improvement, land reform and private industrial initiatives (Petri 1997a). In 1957, again after extensive debate, policies were modified to include direct expenditures to promote industrial growth in the South. A key role had to be played by public-sector firms. They were required to make 40 per cent of their total investment and 60 per cent of investment in industrial plant and equipment in the South. Other institutions provided low-cost loans and outright grants for industrial investments in the South and there was a dramatic increase in the share of industrial investment in the South.

In spite of CASMEZ expenditures, land reform and other forms of state intervention, the income gap between the North and the South actually increased between 1950 and the early 1960s. While many find this a troubling outcome, it is worth noting that, in absolute terms, southern growth was far above pre-war trends. Moreover, rapid increases in land and labour productivity in southern agriculture facilitated output growth and massive emigration by southern workers to higher paying jobs in the North or abroad. Although migration often entailed serious personal hardship, overall, workers were better off as a result.

Two questions have dominated the literature. Could the government have done more to promote growth and structural change in the South? Could it have spent its money more effectively?

Lutz (1962) argues that the fundamental decision by the government to promote industrialization in the South was incorrect. Everyone would have been better off had the state simply facilitated emigration and left the allocation of investment funds to the market. From this point of view, it was too much, not too little, intervention that caused problems. Lutz's faith in the market's ability to resolve the problems of the South is not shared by most Italian economists.

The second question is more controversial. Many (Del Monte

and Giannola 1978; Ranci 1983) point out that much of the investment had little pay-off for the South and may have been counterproductive. Infrastructural investments failed to create permanent employment and northern not southern industry benefited from the increased demand, while the improved infrastructure had the perverse effect of eliminating non-tariff protection for southern enterprises. Attempts to promote small-scale, local initiatives were, on the whole, unsuccessful (Ginsborg 1990; Saraceno 1974; Bevilaqua 1993). The bulk of the funds earmarked for industry ended up instead supporting large-scale, capital-intensive projects (*cattedrali nel deserto* in the Italian jargon), with little or no benefit for the overall economy. Moreover, instead of promoting social and economic change, the huge inflow of funds to the South merely led to the creation of a new political caste, the state bourgeoisie (Graziani 1972), and a new set of client–patron relations (Bevilaqua 1993). While perhaps correct, many of these arguments are based on anecdote and minimal qualitative evidence. This is an area that would amply reward serious economic history research.

7.7 Most would agree that sectoral imbalances in the economy became more marked during this period (Ginsborg 1990). Put simply, some firms were efficient, dynamic, technologically up to date and internationally competitive, while others were inefficient, lethargic, backward and uncompetitive. There is, however, much less agreement about the causes of industrial dualism and even about its characteristics.

In the 1950s and 1960s, it was quite common to argue (with an eye to the conditions in advanced countries) that small firms were less efficient than big companies. In one version of this analysis, Lutz (1962) argues that the success of small firms was due to the segmentation of the labour market, which permitted them to pay low wages and removed any incentive to increase the capital–labour ratio. The answer was more rapid growth and greater wage pressure. A number of economists and historians (Barca 1997; Castronovo 1975) have argued that small, inefficient firms, often operating in traditional sectors such as agriculture, textiles and construction, managed to survive thanks to government subsidies, acceptance of tax evasion, licensing requirements and so on. The

quid pro quo for government favours was political support. The problem, it would seem, was too much protection, the solution more competition.

More recently, the conventional wisdom, deeply influenced by later developments, has recognized the achievements of small-scale firms. Small and medium-sized firms, even in traditional sectors like shoe production and fruit growing, proved to be incredibly successful in the open, competitive environment ushered in by the Common Market. These firms, moreover, were the main sources of new employment. Of the one million jobs created in manufacturing between 1950 and 1961, 60 per cent were accounted for by firms with between three and fifty employees (Petri 1997a). Size and tradition, it turns out, were imperfect indicators of inefficiency (Brusco and Paba 1997; Conti and Ferri 1997; Bagnasco 1977).

7.8 There is no question that rates of unemployment in Italy remained high by international standards throughout the high-growth period. Had the economy grown more rapidly, the rate of unemployment would certainly have dropped more swiftly. Was faster growth possible? In principle, the answer must be yes, since the Italian economy itself grew more rapidly between 1958 and 1963 than it did between 1950 and 1957 and other countries such as Japan and Germany managed to exceed Italian rates.

What then were the impediments? More expansionary monetary and fiscal policies may have helped, but the authorities clearly believed, perhaps incorrectly as Petri (1997a, p. 355) implies, that they were incompatible with stable prices and external balance. There was vigorous debate at the time about this issue and there is little agreement even today (Rey 1998; Gelsimino 1998). Some would argue that the commitment to trade liberalization was the culprit because it required wage moderation, relatively high interest rates and compression of domestic demand. Less openness would have facilitated greater redistribution, more pump priming, more attention to agriculture and, perhaps, even to high-tech industries and a product mix more compatible with domestic needs (Graziani 1972; Sassoon 1986; Castronovo 1975; De Cecco 1968). The problem with this argument is that less trade would also have reduced the opportunities for scale economies, gains from dynamic comparative advantage, and the invigorating effect

of competitive pressures. The problem may have been too little trade liberalization, not too much.

7.9 The inability or unwillingness of the various post-war governments to reform public administration to make it more compatible with the needs of an open, industrialized economy is viewed by many as a major sin of omission (Rossi and Toniolo 1996; Zamagni 1993a; Rey 1998, 1982; Barca 1997; Bottiglieri 1984). It is of a piece with the failure by the government to help develop rules, regulations and institutions to facilitate efficient markets. Some examples may help clarify the concerns. The fiscal system remained a huge antiquated liability with an inefficient, ineffective system of tax collection, anachronistic budgetary processes and long lags between policy decisions and expenditure flows (Rey 1982). A lack of regulations on land use and building standards in urban areas at the end of the war and during the construction boom led to serious inefficiencies and inequities. There was no anti-trust (anti-combines) legislation, no safeguards for equity investors, no attempt to modernize labour relations (Barca 1997; Rossi and Toniolo 1996). The civil service was overstaffed, underpaid and more devoted to particular sectional or local interests than to the general public (Ginsborg 1990).

What explains this lack of action on the part of the government? Many argue that, for much of the high-growth period, the opportunities for growth through catching up and structural transformation were so great that the inefficiencies created by an unreformed state sector seemed insignificant (Rossi and Toniolo 1996). While this may have reduced the urgency for reform, it does not fully account for the inaction.

Barca (1997) attributes it to an inherent distrust of state intervention on the part of conservatives and hostility to the bourgeois state on the part of communists. Neither group wanted to empower the state any more than absolutely necessary. Furthermore, at the core of the Christian Democrats was a group which believed that public-sector firms would spearhead Italian industrialization and they thus regarded the ordinary business of the state as of little importance. Others (Ginsborg 1990; Mori 1994) attribute it to the very nature of the compromises required for the Christian Democrats to maintain control. Reform threatened vested interests and was thus anathema.

Whatever the causes, the long-run consequences were potentially pernicious. The supply of many public goods in Italy was inadequate, the quality poor and the costs very high. Corruption and rent seeking, as we now know, were widespread. And yet, in spite of these difficulties, Italy managed to achieve rates of growth well above the European average for most of the 1970s. Although it has fared much less well since then, the economy has shown a remarkable ability in the post-war period to respond to challenges. It would be unwise to count Italy out just yet.

8
Conclusion

8.1 Italy has managed, in spite of the odds, to become one of the world's richest and economically most advanced countries. However, until recently, the literature on this remarkable achievement has failed to do it justice. Enquiry was distorted by ideology, vague theorizing, and, at best, modest attempts at empirical analysis. The situation, thanks to the contributions of several well-trained Italian economic historians and a number of foreign scholars, has improved dramatically in recent years. Once almost moribund, the field is now alive and well and loaded with opportunities for exciting and important research. We would encourage you to brush up on your Italian and join us in this endeavour.

In the meantime, there seems to be emerging from the controversies in the literature a new view of the nature of long-run economic development in Italy. It has the following components. The performance of the economy in the nineteenth century, especially during the century's last decade and, more particularly, in agriculture, was better than the ISTAT series would have us believe. Industry was, on the whole (and over the long run), more competitive than once assumed. Moreover, robust industrial districts composed of highly efficient and competitive small and medium-sized companies are not, as many thought, the product of special features of the post-WWII economy, but instead have roots buried deep in Italy's industrial past. The supply of capital to industry was more complex and the links between mixed banks and industrial growth more attenuated than many have maintained. The economy was, for its entire modern history, well integrated into international capital and goods markets. Finally, although industrial policy did play a part in Italy's economic

ascent, it was neither villain nor saviour but, for the most part, a bit player. In the remainder of this chapter, we elaborate on these observations, explore their implications and signal areas for further research.

8.2 Although there are a large number of data series concerning national accounts, they are quite similar, in large part because they are all based on the same underlying numbers compiled by ISTAT and published in 1957. The message they convey is simple enough. Italy was unable to reduce the income gap between itself and its richer neighbours until the 1950s; aside from a few episodes of rapid expansion, growth was slow and halting. The message is changing. Preliminary results of the work on national accounts done by a team financed by the Bank of Italy indicate that growth may have been faster and smoother than the ISTAT numbers suggest. Much needs to be done, however, before the new series supplants the old. We need improved national accounts for the period 1860–90 (better still from 1820), new price indexes and better regional income estimates.

The new data show a more marked structural shift in the composition of output which, when combined with the slow exodus of workers from agriculture, makes the peculiarity of the Italian case all the more striking. If the new data are correct, the lag in agricultural productivity was even greater than previously believed. The cause was obviously lack of employment opportunities in other sectors, the consequence even slower growth.

Faster growth may have helped narrow the gap between the North and the South, although this does not seem to have happened in the high-growth years after 1950. In any case, current data (weak as they are) indicate that the gap widened between 1860 and 1953.

8.3 The conventional wisdom on agriculture runs as follows. Aside from a few episodes of fairly rapid expansion in the period before 1950, agricultural output grew very slowly, well below the rate at which the population expanded. This dismal performance was rooted in a reluctance (or inability) of both landowners and peasants to invest in agriculture. The question, naturally, is why. Landowners, it is argued, were either blindly conservative (risk-averse) or had more profitable or enjoyable ways to spend their money. Peasants suffered from the same conservative streak, often

lacked access to investment capital, and were, on the whole, hostile to the market. Retrogressive tenure arrangements did nothing to help the situation, while government policies, on balance, did more to inhibit growth than to promote it. The results of recent research are leading to fundamental changes in this account.

It is now believed that agriculture grew more rapidly than the ISTAT numbers indicate, especially in the 1870s and 1880s. New research has raised questions about the purported conservatism of landowners and peasants and about the negative effects of tenure arrangements. Lack of innovations appropriate for Italy's factor endowments, geography and climate, not poor attitudes and institutions, were to blame for the relatively sluggish technological progress. New technology, suited to Italian conditions – for example, improved seed varieties, chemical fertilizers – was adopted swiftly. Access to credit may have been a problem, especially in the South, but much more quantitative work is required before we can evaluate the impact (if any) of capital scarcity on investment decisions. Some government policies may, in fact, have helped agriculture – extension services, schools of agronomy – but others clearly hurt – the tariff on wheat, autarky under the fascists.

Low labour productivity (and low per capita income) remained a problem in the countryside – the result of too many people chasing too little good land. The source was a lack of compelling alternatives, aside, that is, from emigration. New work on emigration, on the other hand, may change the current picture of Italian development. It is conceivable that emigration alone may be able to explain the bulk of per capita income growth in the years before the USA closed its borders to new immigrants. Much work is required before this becomes the accepted view.

8.4 The current orthodoxy on Italian industrialization has the following features. Industrial firms in Italy came in two sizes, small and large. The former, located mostly in the North, specialized in traditional consumer goods, relied on cheap, unskilled labour, employed mostly labour-intensive technology, and operated in a highly competitive environment. The latter, instead, functioned as oligopolies, produced capital goods with fairly capital-intensive technology, and were dependent for survival on

subsidies, protection and government demand. Since large firms predominated – if not in fact, at least in the imagination of historians – industry in Italy was highly concentrated. Size, unfortunately, did not ensure innovation – Italy was a technological laggard until the post-WWII period. Industrial growth was relatively slow because of the high costs of energy – coal was particularly expensive – insufficient and costly capital, a lack of skilled labour and a limited domestic market. Finally, the state played a major role – for better or worse – in shaping the structure of industrial development.

New research results suggest the following amendments to this narrative. There has been a tendency on the part of researchers to focus on a few big firms and thereby to overlook the very many small ones. Recent estimates of concentration ratios indicate that Italian industry was, in fact, competitive. Moreover, many of Italy's most successful industries were made up of many small firms often situated in the countryside and grouped geographically to benefit from positive neighbourhood effects. Although Italian firms were never at the cutting edge of new technology, there is some evidence to suggest that they were reasonably skilled at taking innovations developed elsewhere and adapting them to local conditions. The high price of coal, because it was linked so closely to steam technology, may have slowed economic growth, but more research is required to confirm this hypothesis. The notion that Italy's small domestic market for manufactures limited growth is probably destined for the dustbin. Scale economies in many sectors were modest and exports were always a possibility.

Gerschenkron's argument that German-style universal banks played a key role in Italy's industrialization is, we now know, fatally flawed, primarily because the banks did not behave as Gerschenkron assumed. This said, we need to know much more about the activities of private and local banks and informal credit networks before we can evaluate the argument that costly capital slowed growth. Information on the supply of labour and its skill composition is equally scanty, but even at this point it seems reasonable to argue that firms were able, in a variety of ways, to resolve the problems of skill shortages.

There were three principal components of the government's industrial policy – tariffs, the military–industrial complex, and,

under the fascists, control of labour and goods markets. It is now argued that both admirers and critics of Italy's tariffs exaggerated their importance. Much of industry was simply unaffected by the duties. Efforts by the government to create and sustain a robust military–industrial complex through tariffs, subsidies and, where necessary, bail-outs led to a misallocation of resources and thus to a negative (if modest) impact on industrial growth. A definitive estimate of the net cost of this intervention must await further research. Fascist economic policies, to the extent that they were distinctive, were no more successful at promoting growth than the policies pursued by democratic governments.

8.5 Two features of macroeconomic policy and the balance of payments deserve mention. First, although there is little empirical support for the argument of Fratianni and Spinelli that a free-spending state and fiscal dominance explain Italy's relatively high rate of inflation for the years prior to 1940, the quality and sophistication of their analysis will almost certainly raise the level of discourse. Second, it was at one time generally accepted that Italy's balance of payments and the international value of the lira were determined by trade flows. In a number of recent articles, it has, instead, been argued that Italy's balance of payments and exchange rate were a function of international capital flows. If correct, the usual contention that Italy's rate of growth was constrained by balance of payments considerations is invalid. On the other hand, it does imply that the country's growth depended in part on the decisions of international investors over whom Italy had relatively little control.

As for the post-WWII period, most today would probably attribute Italy's remarkable growth to the high rates of capital formation, the result, on the whole, of stable monetary and fiscal policies, high rates of return on invested capital, favourable taxes and a open international environment. An elastic supply of labour was a permissive factor but not causal. The role of the state in the growth process was complex and much work remains to be done before the costs and benefits of government intervention can be fully assessed. On the other hand, the government's unwillingness or inability to reform the civil service, to establish rules and regulations for the market, and to invest adequately in advanced education and research are now seen as very costly errors of

omission. Some would argue that these and related problems are to blame for Italy's relatively poor economic performance in the 1990s and will continue to constrain its growth. And yet Italians have shown in the past an amazing capacity to overcome formidable obstacles, even self-imposed ones. Only time will tell if they still have this ability

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