

## Chapter 10

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### Italy

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‘Clio is not a tidy housewife’

(A. Gerschenkron)

#### **ALEXANDER GERSCHENKRON ON THE ECONOMIC DEVELOPMENT OF ITALY**

Italy takes an important place, second only to that of Russia and possibly Austria, among the individual countries specifically investigated by Gerschenkron within the framework of his general approach to European industrialization during the nineteenth century. To the Italian case he devoted three important papers (Gerschenkron 1962:52–89, 90–118, 1968:98–127) and the effort of constructing an *ad hoc* index of industrial production (Gerschenkron 1962:367–421).

To use his own words, Gerschenkron ‘approached the Italian material with a series of historical questions or expectations in mind’ (Gerschenkron 1962:73) reflecting his own generalizations about the features of the industrialization process in a relatively backward European country. Typically, he expected to find a ‘big push’ of considerable intensity and length favouring the ‘output of producers’ goods as against that of consumers’ goods’ (Gerschenkron 1962:73) and inducing various forms of industrial concentration. Moreover, he expected these ‘basic features of delayed industrialization to be reinforced by the use of specific institutional instruments, such as the investment policies of banks and various policies of the state’ (Gerschenkron 1962:73).

In order to test the consistency of the Italian case with his general view of European industrialization during the nineteenth century, Gerschenkron set out to build his own index of industrial growth covering the period 1881 to 1914. This was, at the time (1955), a pioneering work and a very welcome addition to the paucity of quantification in Italian economic historiography. The results allowed Gerschenkron ‘to locate the period of great push between the years 1896 and 1908’ and to see that it was, as he expected, characterized by a rapid increase in the share of producers’ goods in total output (Gerschenkron 1962:77). At the same time, comparing Italy’s performance with that of other

countries during their own 'spurts', Gerschenkron found that 'the industrial growth in Italy, while free from any severe setbacks, seems to have proceeded in a less uniform and more jerky fashion, denoting perhaps a more delicate state of public confidence and greater entrepreneurial uncertainties and hesitations' (Gerschenkron 1962:79). The reasons listed for Italy's relatively poor industrial performance are: (a) inept government policies, (b) a supposed time inconsistency between railroad building and the 'spurt' (c) a political situation around the turn of the century 'not propitious to quiet economic growth' (Gerschenkron 1962:85), and (d) 'the absence of any strong ideological stimulus to industrialization' (Gerschenkron 1962:86). On the other hand, 'if one were to look for a single important factor that succeeded in offsetting at least some of the great obstacles to the country's industrialization, one could not fail to point to the role performed by the big Italian banks after 1895' (Gerschenkron 1962:87). Gerschenkron is therefore able to conclude that 'in this respect at least, the Italian case fits well into the general pattern of European industrialization in varying conditions of economic backwardness' (Gerschenkron 1962:89).

This chapter discusses Gerschenkron's appraisal of Italian industrialization before the First World War in the light of the later literature. The first section deals with measures of Italy's backwardness relative to other European countries, and is followed by a section reviewing the existing indices of industrial production. The role of such 'agents of industrialization' as the German banks, the state and ideology are then discussed. The last part of the chapter is devoted to a summary of the main points and to some general conclusions.

## **THE BACKWARDNESS OF THE ITALIAN ECONOMY**

When asked about the operational value of the concept of backwardness Gerschenkron replied that no precise answer was possible because one could define the degree of backwardness in several ways and, while granting that 'this might seem discouraging and clumsy', he added that 'it was true of 19th-century Europe at least that, whatever measures used, individual countries were fairly easy to arrange in order of backwardness' (Rostow 1963:385).

Gerschenkron's well-known concern with index number problems made him reluctant to suggest per capita output as a fully operational measure of backwardness. He also suggested that, in any event, information deriving from output levels should be used together with other parameters—such as literacy or the prevailing ideology—that 'would involve asking to what degree a country at a certain moment had developed the preconditions for subsequent economic development' (Gerschenkron 1962:43).

How backward was Italy, in Gerschenkron's eyes, around the middle of the nineteenth century? The most important suggestion comes from the following passage:

Few would disagree that Germany was more backward than France; that

Austria was more backward than Germany, that Italy was more backward than Austria and that Russia was more backward than any of the countries just mentioned. Similarly, few would deny England the position of the most advanced country of the time.

(Gerschenkron 1962:44)

Does research carried out in the last quarter of a century confirm at least this ranking? Measures of economic backwardness explicitly related to Gerschenkron's hypotheses were first provided by Barsby (1969). Relying on Colin Clark's pioneering work, he sees Italy's GNP per capita around 1890 to be equal to that of Russia and less than one-fourth that of Britain.

Subsequent work has considerably revised Colin Clark's estimates. We may refer directly to Crafts (1983) since this article takes into account the most relevant previous contributions (particularly Bairoch 1976), producing the least unreliable estimates of nineteenth-century per capita product to date. They are reproduced in Table 10.1 for the countries mentioned by Gerschenkron and for Spain. As regards Italy in the third quarter of the nineteenth century, Gerschenkron's appraisal of Italy's relative position seems to be confirmed for 1910 but not for 1870, when Austria displays a per capita income approximately equal to that of Italy. What is striking, and somewhat puzzling, in Table 10.1 is the relatively high level of Italy's income at about the time of its political unification, as well as the stagnation in the subsequent thirty-odd years which resulted in its slide down the rankings.

These data rest on two assumptions: (a) that we accept Kravis's (1982) purchasing power parities and relative income levels for 1970, and (b) that we

*Table 10.1* Crafts' estimates of per capita national product (US dollars of 1970)

	1870	1890	1910
Great Britain	904	1130	1302
Germany	579	729	958
France	567	668	883
Northwestern Italy			(810)
Italy	466 (513)	466 (513)	548 (603)
Austria	466	664	802
Spain	391	554	547
Southern Italy			(450)
Russia	252	276	398

*Source:* Crafts (1983:389, 394).

Italian data in parenthesis derive from the recent official upward revision by 10% of current (1980s) GNP estimates and their backward extrapolation, according to Crafts' methodology. Italian regional estimates from Zamagni (1978).

Northwestern Italy includes Lombardy, Piedmont and Liguria.

Southern Italy includes the former Kingdom of Naples plus Sardinia.

believe long-term growth rates implicit in the existing historical national accounts statistics.

The second of these assumptions, i.e. the reliability of historical national accounts statistics, may prove difficult to accept in the case of Italy. The existing estimates—ISTAT (1957) and Fua's (1969) revision thereof—date back at least twenty years. Their validity has always been questioned at least on the basis of the authors' parsimony in the disclosure of their sources and methods. Recent work by Fenoaltea on industrial production shows that this distrust is not misplaced. The existing figures underestimate both the level of industrial production in 1911 and the attendant long-term growth rates.<sup>1</sup> Should these upward revisions be confirmed in the case of other industries, our overall view of the time-pattern of Italy's development would be in need of thorough reconsideration. The relevance of this point for the issues addressed by this chapter, and indeed for the entire economic history of modern Italy, can hardly be overstated. Nevertheless, the ranking of Italy with the countries in Table 10.1 is not likely to be altered substantially.

In view of Italy's pronounced economic dualism, any appraisal of her backwardness is likely to be incomplete without some kind of regional breakdown. According to Zamagni (1978), in 1911 the GNP per head of Italy's richer region (the northwest) was slightly lower than that of the whole of France (and therefore much lower than that of the richest comparable French areas). In the same year, per capita income in the south turns out to be only 15 per cent above that of Russia. The gap between north and south is likely to have widened as a result of industrial growth which took place mainly in the former region but it surely existed at the time of unification and much before then. Adopting a strict Gerschenkronian logic, therefore, one could expect a smooth industrialization along French lines in the northwest—where the institutional and cultural winds from across the Alps blew strong—and a state-driven spurt in the south. It is indeed possible to find some traces of these potentially divergent patterns in the first half of the nineteenth century (a market-driven growth of the textile, particularly silk, industry in the northwest, neo-mercantilistic attempts to create industry from above by the Bourbons in the south).

Backwardness, according to Gerschenkron, could not be measured by GNP taken in isolation. Most experts on economic development would agree with this proposition. Indeed, the current literature on economic development offers a number of standard-of-living indicators other than GNP. Among those, we have selected the so-called physical quality of life index (PQLI) devised by Morris (1979). The PQLI recommends itself on two grounds: (a) it is based on data that, when available, are rather accurate for nineteenth-century Europe, (b) it embodies an indicator (literacy) that Gerschenkron considered particularly relevant and two others (infant mortality and life expectancy) that are taken into account by the most recent historical research on standards of living.

The PQLI is an unweighted average of: the literacy rate of the population aged 15 years and older, infant mortality in the first year of life and life expectancy

at age one. 'For each indicator the performance of individual countries is placed on the scale of 0 to 100, where 0 represents an explicitly defined "worst" performance and 100 represent an explicit "best" performance' (Morris 1979:41). The three indicators are equally weighted. Such weighting is no more arbitrary than any other, and tests with different weights show that the *ranking* of individual countries in a large 1970 sample does not change significantly with changing weights.

In adapting the PQLI to nineteenth-century Europe, we made as few changes as possible to the definition of variables and to the parameters used by Morris. Two adjustments, however, were unavoidable. The first concerns the definition of literacy which, in our cases, was measured as the percentage of the population aged 6 or over to which most of our sources referred. The second adjustment relates to the scale (or 0–100 range) employed to index infant mortality and life expectancy. In both cases we had to widen the range in order to avoid negative values.<sup>2</sup> Data for infant mortality were taken from Mitchell (1975); five-year moving averages were preferred, given the large swings in yearly data. Literacy comes from Flora (1983) and from various contemporary Italian sources. When data were not available, literacy was estimated from the percentage of people who signed wedding documents, through regression analysis. In most cases, life expectancy at year one had to be estimated from mortality tables and other demographic material from each individual country. Because of such data limitations, Table 10.2 covers a much more limited range of countries than Table 10.1.

Table 10.2 confirms that, in 1870, Italy was an unmistakably backward country. Backwardness was still very visible in 1910 when Italy lagged more than a generation behind the most advanced European countries in terms of standards of living. At the same time, the data in Table 10.2 allow us to appreciate the considerable progress made by Italy between 1870 and 1900, during a period in which existing historical statistics see practically no increase in per capita incomes. Comparisons with countries less developed than those in Table 10.2 show that

*Table 10.2* PQLI: Selected European countries and three main Italian regions, 1870–1910

Year	Country				Italian regions		
	England & Wales	France	Belgium	Italy	North-west	North-east	South & islands
1870	62.9	62.2	na	26.9	40.5	27.1	17.6
1880	70.8	64.4	na	36.9	47.0	41.2	28.4
1890	71.3	67.7	65.5	na	na	na	na
1900	78.9	73.7	75.9	56.7	66.8	62.1	46.0
1910	na	84.0	82.4	62.0	70.5	68.9	49.4

*Methods and sources:* see text.

infant mortality in Germany and Austria was higher than in Italy throughout the period. Relative to the same countries, however, Italy had a lower percentage of enrolment in primary school for the population aged 5–14 years.

The regional breakdown in Table 10.2 is consistent with income estimates referred to above. By 1910, the northwest was lagging behind the most advanced countries in Europe by about fifteen years, and Italy as a whole lagged by forty. The south was thirty years behind the northwest, despite the rapid progress made after the unification, particularly in life expectancy. These data provide one of the few aggregate indicators of the time-pattern in the welfare *gap* between large Italian regions. Its magnitude and its persistence over time make it difficult to discuss Italy's backwardness meaningfully in aggregate terms. At the beginning of the century, the area of the so-called Milan-Turin-Genoa 'triangle' (the northwestern region in Table 10.2) was larger than Belgium and had a per capita income and, to a lesser extent, a basic standard of living not much lower than the French averages. The south was more similar to Russia than to the northwest in terms of both variables.

## INDICES OF INDUSTRIAL PRODUCTION

Gerschenkron's interpretation of Italy's industrialization rests pretty much on his own index of industrial production covering the years 1881–1913. Over the whole of this period the index yields an average annual rate of growth for Italian industrial production of 3.8 per cent (using value-added weights) resulting from a rather good performance during 1881–7 (4.6 per cent per annum), which was followed by a serious crisis that caused virtual stagnation until 1895. Italy had its 'big spurt' in 1896–1908, characterized by a rate of growth of 6.7 per cent. The index shows that during the 'spurt' the production of investment goods grew more rapidly than that of consumers' goods, a pattern consistent with Gerschenkron's expectations derived from the historical experience of other backward European countries.

The construction of Gerschenkron's index in 1955 was certainly a major breakthrough in Italian economic history. Nonetheless its technical pitfalls are quite serious. This is not the place to review them in full: it is enough to point briefly to some of the index's weakest features. Gerschenkron uses twenty elementary series but five of them account for 85 per cent of the index behaviour. Some of them are rather poor proxies for the underlying industries.<sup>3</sup> The index is, therefore, very sensitive to changes in the basic series and in the sample of industries they are supposed to represent.<sup>4</sup> Besides, Gerschenkron derives his weights from a highly questionable source, a survey of 1903 which is a partial and unreliable revision of enquiries undertaken in the 1880s and 1890s (Missaggia 1988). The index is, therefore, based on start-period weights. A reconstruction of Gerschenkron's index using 1911 weights yields substantially higher growth rates for the years 1881–8 (5.6 per cent against 4.6) and 1896–1908 (8.0 per cent against 6.7). This result, incidentally, contradicts the so-

called ‘Gerschenkron effect’ in index numbers. Finally, the index itself is a poor proxy for the omitted industries, which accounted for about one-third of total value-added in 1911. Most of them were slow-growing traditional ones (such as leather works and furniture), their exclusion is, therefore, likely to have raised the rate of growth.

Since 1955 three other indices of industrial production have been estimated: the first by the Italian Statistical Institute (ISTAT),<sup>5</sup> the second—still unpublished—by Carreras (1982) and the third by Fenoaltea (1983).<sup>6</sup>

The present wealth of indices makes interpretation of the overall pattern of industrialization more difficult rather than easier since they yield different results, while none of them is so clearly superior to the others from the point of view of data sources and of method as to recommend itself for acceptance.

According to ISTAT, industrial development was slow and fluctuations limited both in depth and length. Carreras sees an accelerating trend coupled with rather pronounced cyclical swings. Finally, the picture portrayed by Fenoaltea’s index of 1983 is similar to Gerschenkron’s: slow growth until 1878, rapid development in the 1880s, followed by a serious slump and by a long boom from the mid-1890s onward. Fenoaltea’s cyclical swings are, however, much wider than those of Gerschenkron.

None of these patterns seem to fit well with Gerschenkron’s interpretation of Italy’s industrial development. The most compatible with it is possibly the picture designed by ISTAT which shows a discontinuity with an acceleration of growth rates at the end of the nineteenth-century. But, then, the rate of growth is so slow as to make one wonder whether one might talk of a ‘big spurt’. In the index of Carreras, on the other hand, there are no points of discontinuity. Fenoaltea has both the highest rates of growth and the largest cyclical swings: a discontinuity could be found in 1879 rather than in 1896 (a timing much more akin to Romeo’s model). This interpretation, however, would conflict with Fenoaltea’s denial of the very existence of a big spurt and with his assertion that Italy’s industrial growth was cyclical rather than marked by discontinuity (Fenoaltea 1973a, 1988c). His view seems closer to the one

*Table 10.3* Indices of Industrial production, 1861–1913 (annual average rates of growth in real terms)

<i>Period</i>	<i>Gerschenkron</i>	<i>ISTAT</i>	<i>Fenoaltea</i>	<i>Carreras</i>
1861–1913	na	1.95	3.42	2.51
1881–1913	3.78	2.26	4.18	3.19
1896–1908	6.68	5.21	7.87	5.00

*Sources:* Gerschenkron (1962), ISTAT (1957), Fenoaltea (1983), Carreras (1982).

put forward by Cafagna (1965:143) and shared by Bonelli (1978) and Federico and Chesi (1987).

The above-mentioned aggregate indices are actually the sum of three different sectorial patterns. The production of investment goods (engineering, chemicals, iron- and steel-making) shows higher growth rates than that of consumers' goods during both the so-called 'Giolittian era' (1896–1913) and the 1880s. The 1888–92 slump was characterized by a much more rapid decline of the former than of the latter industries. In fact, the whole pattern depends to a certain extent on the huge cyclical swings of the engineering industry (Fenoaltea 1973a; Warglien 1985). Traditional industries such as textile and food-processing industries developed rather slowly with no major cyclical swings. Most 'new' products, such as electric power, rubber and some branches of the chemical industries, started late and showed a high growth afterwards.

### THE ROLE OF BANKS IN PROMOTING INDUSTRIAL DEVELOPMENT

At the beginning of the 1890s, Italy experienced a serious banking crisis. It resulted in the failure of one of the six banks of issue (Banca Romana) and the collapse of the two deposit banks (Credito Mobiliare and Banca Generale) which had been established after unification on the model of the French *Crédit Mobilier*. The void was filled in 1894 and 1895 by two new banks (Banca Commerciale and Credito Italiano), established by German and Swiss capital with German management. Gerschenkron sees the crisis of 1893 almost as a *felix culpa* of the Italian economy—and policymakers, in as much as they were responsible for it—since it brought to an end the existing banking system tailored as it was by the French, and made possible the importation 'of the great economic innovation of German banking in its most developed and mature form' (Gerschenkron 1962:88). The main feature of such innovation consisted in turning investment banks into real 'department stores' in the field of banking. Their virtue, in a situation of relative backwardness, was to provide—to use Gerschenkronian terminology—efficient substitutes for missing prerequisites of industrialization. In particular, German banks, unlike their French counterparts, are seen as supplying not only long-term credit but also a good deal of entrepreneurship, a factor of production supposedly even more scarce than capital.

Gerschenkron was by no means the first to attribute an important role to the large banks in the development of Italy.<sup>7</sup> Gerschenkron's original contribution to Italian economic history, was to see the role of German banking in a framework in which the industrial development of the country appeared as just one case in the pattern of European industrialization. In the 1950s this was a seminal idea that gave new stimuli to discussion and research. Opinions varied from Cohen's strict Gerschenkronian orthodoxy (Cohen 1967:382, 1972:89) to Webster's (1974:325) and Hertner's (1984) more shaded

judgements, and to the decisively negative opinion of Farina (1976, 1980). The latter blames the 'German' banks for having distorted resource allocation in favour of capital-intensive industries and techniques, thus increasing 'dualism' and contributing to the oligopolistic nature of Italian development.

The analysis of quantitative aggregate trends is not of much help in elucidating the role of the mixed banks. An assessment of the time-path of aggregate financial variables carried out along Goldsmith's lines puts Italy's financial intermediation ratio at 0.38 in 1881 and at 0.47 in 1914 (Biscaini and Ciocca 1979:92–7). Financial deepening did occur but the gap between Italy and the most advanced European countries remained unchanged. During the same period, the share of financial liabilities held by banks grew from 0.19 to 0.29. This positive trend, however, did not exhaust its momentum in 1913. The fact that banks retained an overwhelming importance in financial intermediation at least up to the 1960s is a well-known peculiarity shared by the Italian economy with the Japanese. There is little in these aggregate trends that will confirm or invalidate Gerschenkron's hypothesis.

In fact, Gerschenkron's hypothesis is mainly based on the stimulus provided by the mixed banks to a limited number of 'strategic' firms or industries. Therefore, a proper test of the hypothesis may come from careful archival research on the actual behaviour of the banks. A real breakthrough in this field of research was made by the monumental work by Confalonieri (1974–6, 1982). His conclusions may be summarized as follows: (a) long-term industrial financing came mostly as a result of other banking operations, (b) it resulted from normal scrutiny of clients' demand and from a desire to monopolize the entire range of their banking operations rather than from an autonomous initiative of the banks, (c) the latter, therefore, did not possess much of an *industrial* strategy of their own which was, perhaps, more pronounced in their predecessors of the 'French type', (d) the main novelty of the 'new' banks consisted in underwriting as part of a *banking* strategy directed 'plus à des affaires qu'à des entreprises' (Confalonieri 1974–6:469). The early long-term involvement of the banks in the electric power industry is singled out by Confalonieri as an exception in their operations. Moreover, the operations of the French-type banks do not seem to be so different from those of the later German-type banks. The former not only financed the construction of the railways of the 1870s but, what matters more in a Gerschenkronian framework, played a prominent role in the rapid industrial growth of the 1880s.

If reliable, these findings would contradict Gerschenkron's hypothesis. If German-type banks did not provide relevant supply-side stimulus to investment, if they were as a rule not particularly interested in managing industrial enterprises, if they did not hold in their portfolios for long periods of time large quantities of industrial equities, then it is not easy to grant them the role of sole or main 'agents of industrialization'.

A few years ago, Hertner (1984) attempted to redress the balance in favour of 'Gerschenkron's approach which remains a very fertile research hypotheses, even

though it requires some revisions and qualifications' (Hertner 1984:159). His qualifications regard primarily the role of German capital and men in the Banca Commerciale and Credito Italiano which he sees as 'the first example of successful foreign direct investment in Italy in the banking sector'. The early withdrawal of the original German capital was not followed by a repatriation of the banks' top management, which was a crucial factor in maintaining strong links with the international banking world and, thus, assured stability for the two institutions. In general, he sees the two banks as concentrating mostly on the Italian domestic market, thereby giving 'a decisive contribution to the country's industrialization' (Hertner 1984:155). Ongoing and yet unpublished research carried on at The Historical Archives of Banca Commerciale seems to indicate that, by 1913, the latter had established strong personal links between its own management and that of the industrial firms to which it supplied credit. These results are likely to stimulate new debates and research on the role played by the two German-type banks during the industrial growth of the period 1896–1913.

## ECONOMIC POLICIES AND INDUSTRIAL DEVELOPMENT

Inept government policies seem to be, according to Gerschenkron, the single most important cause of the 'disappointingly low' rate of industrial growth during Italy's big spurt (Gerschenkron 1962:78). The tariff of 1887 'must be viewed as the real *pièce de résistance* of those policies' (Gerschenkron 1962:80).

The 1887 tariff marked a real turning point after fifteen years of free trade and ten years of moderate protection to a limited number of industries (Prodi 1965–6; Sereni 1966; Del Vecchio 1978). Italy's tariff policy is criticized by Gerschenkron on three grounds: (a) for subjecting 'the tender plants of industrial growth to the rigors of a protectionist climate in agriculture' (Gerschenkron 1962:81), (b) for the attention given to cotton textiles, 'an old industry with a moderate rate of modern technological progress and accordingly relatively limited possibilities in a backward country on the European continent' (Gerschenkron 1962:81), and (c) for neglecting the most promising industries such as chemicals and engineering, the latter being put at a disadvantage also by protecting its main inputs, iron and steel.

This judgement implies the counterfactual hypothesis of a more rational tariff and, therefore, is a much welcome disentanglement from the typical nineteenth-century debate of free trade versus unqualified protection. And it is unfortunate that most Italian economic historians have been unable to follow Gerschenkron along the lines of an assessment of the impact of the tariff on growth in terms of effective protection. Despite the vast literature on the subject, therefore, there is a lack of serious quantitative research on the specific points raised by Gerschenkron. Even the average nominal rate of protection is not precisely known: the only aggregate figure—18 per cent in 1888 declining to 7.5 per cent in 1913 (Capie 1983)—probably underestimates the actual level.

Federico (1984) has put the average rate of protection for Italian wheat at 52 per cent in 1895. Increasing world prices reduced it thereafter to 33 per cent in 1913. On average, these rates are higher than those computed by Gerschenkron. Looking at the rather fortunate period of free trade, 1915–25, one is inclined to agree with Gerschenkron that ‘Italy’s agriculture had at its disposal methods of adjustment that were not available to an equal degree north of the Alpine wall’ (Gerschenkron 1962:81) and that its comparative advantage outside the Po Valley was not in wheat. However, one must pay attention to Italy’s social conditions, which Gerschenkron sees as one of the weakening factors in its process of industrialization. The late 1880s and early 1890s, to be sure, witnessed unprecedented social unrest in the countryside that the abolition of the duty on wheat would no doubt have made even more serious.

The cotton industry had already undertaken a process of import substitution under the shield of the 1878 tariff. This process was boosted by the higher duties introduced in 1887. By the end of the century Italy was a net exporter of cotton goods. Fixed capital formation proceeded at such a high rate that by 1907 the sector was burdened by excess capacity and had to resort to *dumping* exports. During the years of the Gerschenkronian spurt, therefore, no ‘infant industry’ argument could be invoked to justify duties on textile products.

The subsequent development of the Italian manufacturing industry leaves no doubt as to the importance of the chemical and engineering sectors. The demands of the former for adequate protection were met only by the tariff of 1921 (Zamagni 1991). The dynamic effects of the earlier lower duty are difficult to assess given the lack of research in the field. It is likely, however, that chemical production could have benefited from ‘infant industry’ protection. As for engineering, Toniolo (1977) has shown that its effective protection was negligible, due to the high import duties imposed on its main inputs, iron and steel. At the same time Toniolo has estimated that the most favourable alternative policy (i.e. a subsidy to iron- and steel-making) would have resulted in a 7 per cent increase of value-added by manufacturing in the period 1906–8 (upper bound estimate). The rate of industrial growth during 1896–1908 would have been 7.0 per cent a year against Gerschenkron’s 6.7, hardly a dramatic change in Italy’s economic history.

Gerschenkron’s criticism of the Italian tariff *structure* during the years of rapid industrialization is well taken and its validity has been confirmed by subsequent quantitative research. If the 1887 tariff succeeded in fostering the development of some industries (Zamagni 1984:14) the price paid by the whole economy in terms of misallocation of resources was probably high. It is difficult, however, to judge how high that price was. And we still ‘wonder how much importance one should in general ascribe to tariff policy in the history of European industrializations’ (Gerschenkron 1962:89).

According to Gerschenkron, ‘another weakness of the Italian industrialization of 1896–1908 may have derived from the fact that by that time the great period of Italian railroad building was largely a thing of the past’ (Gerschenkron

1962:84). This point was debated with Romeo who held, on the contrary, that the building of railways was a prerequisite for rapid industrialization (Gerschenkron 1968:98–127).

A general equilibrium model of investment in railways (Fenoaltea 1973b) yields rather discouraging results about the likely magnitude of domestic demand generated by investment in railways, even on the most favourable exchange-rate conditions. Direct estimates (Fenoaltea 1983) show that railway expenditures were a minor component of the demand for engineering goods, which depended to a much larger extent on the building trade, an industry that Gerschenkron did not consider. Moreover, the increasing trade deficit accumulated by the engineering sector during 1896–1908 is clear evidence that its problems consisted of supply rigidities (bottlenecks) rather than inadequate domestic demand. However, the wave of investment in railways which followed nationalization in 1905 took place at a time when, after the 1907 crisis, the rate of growth of domestic demand fell sharply and it therefore provided a timely anticyclical support.

Adding military expenditure to that for railways (Zamagni 1981), a likely guesstimate may be that the state provided about one-third of the total demand for products by the engineering industry during the years 1896–1908. According to recent estimates (Brosio and Marchese 1987) total public expenditure (including that by local authorities) oscillated between 15 and 20 per cent of GNP over the pre-1913 long run. These ratios are higher than those for most other European countries and indicate that, at least in the aggregate, state demand was a relatively more important factor in Italy than elsewhere.

Historians have discussed at length the likely overall effects of fiscal policy on Italian economic development. It has been suggested that deficit spending had a positive macro-economic effect (Barone 1972). Gerschenkron (1962:82) hinted that state bonds crowded out private investment. Several scholars have stressed the unfavourable redistributive effects (among regions, industries and social classes) of the combination of regressive taxation and high state expenditure on defence and interest on state bonds. At any rate, during 1896–1907, monetary and fiscal policy favoured private investment (Toniolo 1990) so that, all things considered, it is difficult to accept an entirely unfavourable judgement on the role of economic policy during the years of the ‘big spurt’.

Finally, Gerschenkron sees in the social situation of the ‘Giolittian era’ another reason for the weakness of the Italian ‘spurt’. The coincidence in time of the ‘spurt’ with improvements in the workers’ standard of living—so the argument runs—shifted resources from investment to consumption. Moreover, ‘had the industrial upsurge in Italy taken place one or two decades earlier, in all likelihood it would have been much less disturbed by industrial strife’ (Gerschenkron 1962:86). Three remarks are possible on this subject: (1) While it is true that real wages improved during 1896–1908 (Zamagni 1984), it is likely that product per man in manufacturing grew faster so that the ratio of profits to value-added increased, as did that of gross investment over GNP. (2) The strike figures

given by Gerschenkron, according to whom 'between 1901 and 1913 there was only one year when the number of days lost by strikes remained below the million mark' and the number exceeded three million in some years of the period, do not indicate any unbearable loss in production. They include strikes in agriculture and, therefore, should be seen in the context of a labour force totalling about 10 million members, with 2.5 million engaged in industrial production. Even assuming an average of two million days of work lost by strikes in industry alone, the loss in physical output would amount to less than one-third of one percentage point. (3) Contrary to what Gerschenkron thought, 'had the industrial upsurge in Italy taken place a decade earlier' it would have been met by a much larger and widespread working class unrest and discontent. In all likelihood 'Giolitti's conciliatory statemanship' (Geschenkron 1962:85) was, on balance, a bonus for the economy itself.

### THE IDEOLOGICAL STIMULUS

Gerschenkron's opinion on the absence of an ideological stimulus to industrialization is widely shared by Italian scholars. Baglioni (1974) describes a ruling political class coming either from the landed gentry or from the liberal professions. Most entrepreneurs were bound to traditional social and cultural values while, with few exceptions, they shied away from the political arena. The recent business-history literature seems to confirm that most entrepreneurs were bound to the traditional social and cultural values and that their political demands were confined to such issues as tariff protection, subsidies, fiscal policy and, more broadly, to the maintenance of law and order. Some authors (e.g. Hunecke 1982) go as far as saying that most industrialists were reluctant to move their factories from the country to the town for fear of upsetting the existing 'social order'. Generalization is always difficult in these matters. There is, however, a growing literature that seems to indicate that in the 1860s and 1870s Italian entrepreneurs could not prosper without at least the indirect support of local politicians and large landowners. In fact, a number of industrial activities originated directly from the latter. There was, therefore, nothing like a swift emerging of a 'new' entrepreneurial class with an entirely different set of values that enabled it to create and impose its own ideology of industrialization.

Moreover, the Church, which retained a powerful influence on the majority of the population, drastically opposed the new liberal state both for its agnostic stance on religion and, more deeply, for its occupation of the territory of the Papal States. In these circumstances, at least until the death of Pius IX, the Church fought against all attempts at 'modernization' that came from the most far-sighted among the members of the liberal ruling class. With the advent of Leo XIII, the Church took greater interest in social and economic matters, as witnessed by the encyclical *Rerum Novarum* and by the creation of *Opera dei congressi*, an organization that was aimed at spreading

the 'social doctrine' of the Church and at promoting engagement by Catholics in such fields as cooperatives and workers' organizations. In principle, the Catholic ideology opposed both capitalism and socialism. In practice, bishops and priests were tolerant of capitalism but resisted rapid changes that would undermine traditional social and moral values. They were, therefore, particularly concerned with keeping their flocks in the countryside. The growth of towns, emigration and large enterprises were seen as major evils.

The Socialist Party, established in 1892, remained in practice hostile to the capitalist system (Satta 1986). The party's propaganda spread among workers the expectation of a new social and economic order and consequently opposition to the actual industrialization process.

There were, therefore, considerable weaknesses in the ideological foundations of Italy's industrialization. Nevertheless, the picture is not as clear-cut as Gerschenkron saw it. The split between the old agrarian ruling classes and the emerging industrial interests was not always very clear. Behind several success stories in industrial entrepreneurship one may detect the financial help of landowners and sometimes the support of local politicians (e.g. Castronovo 1977; Fiocca 1984). Moreover, in the late 1880s and in 1890s the picture began to change from the point of view of the 'ideological stimulus to industrialization' as well. In a most interesting book, Lanaro (1979) has examined the ideology emerging with the rank and file of entrepreneurs, far from the most prestigious academic and cultural circles. A careful examination of pamphlets, speeches and articles in local newspapers had led him to conclude that the protectionist drive was backed by a strong nationalist ideology based on the assumption that, without channelling major resources to industry, Italy could not reach the status of a European power. At the same time, nationalists maintained that given the backwardness of the country only the state had the allocative power needed to promote rapid industrialization. It had, therefore, to be made more efficient by a strong and uncompromising leadership. Nationalists formed an intellectual movement with fuzzy ideological boundaries and multifarious followers rather than a political party.

An industrial ideology was, then, actively present in Italy during the longest period of its pre-war industrial growth. It was based to a large extent on a modified version of German nationalism. It was certainly a minority movement—liberals, Catholics and socialists were contending in the same ideological arena—but, then, Saint Simonism was not the ideology of the French masses either. What matters is that, by the beginning of the twentieth century, a growing number of industrialists and engineers had broken away from traditional values and had developed their own *Weltanschauung* which looked with optimism and hope to the future of Italy as an industrial power. If confidence and moral justification were needed, nationalism was there to provide them.

## CONCLUSIONS

As far as Italy is concerned, in the mid-1950s, Gerschenkron's contribution was ahead of its time. A surprisingly deep understanding of the crucial problems in Italian history coupled with sound economic analysis enabled him to produce an elegant interpretation of the industrialization process centred around a limited number of relevant variables.

Backwardness proved to be a much more powerful and operational explanatory variable than others then fashionable such as 'agrarian-industrial concert', 'financial capitalism', 'foreign dependence' and the like. Gerschenkron's index of industrial production has been somewhat improved upon only in recent years. In analysing the likely impact of tariff policy he broke away from the muddling debate on advantages and disadvantages of free trade and set an agenda of research on effective protection that is far from being fulfilled. His assessment of the role of the German banks—possibly the most controversial part of his construction—contains a number of important insights into the working of Italian financial intermediation which are still providing fruitful research hypotheses. There is, therefore, little doubt that Gerschenkron provided a highly seminal contribution to the understanding of the industrialization process in Italy.

Italian historians, with few important exceptions, have been unable to capitalize on this wealth of historical and economic intuitions. It was particularly unfortunate that Gerschenkron's early quantitative seeds did not fall on fertile ground. We still know surprisingly little about a crucial period in the development of one of today's important industrial economies. Some good research has, nonetheless, been done in the field over the past twenty years. In the previous pages we have reviewed the results that seem to be more relevant in discussing Gerschenkron's hypotheses. To sum-up, the following points have emerged. (1) Gerschenkron was not off the mark in his ranking of Italy's backwardness relative to the other major European countries. (2) He was again quite right about the time-path of industrialization, although he underrated the importance of his own quantitative evidence about the industrial development that took place in the 1880s and possibly underestimated the magnitude of the 'spurt' of 1896–1908. (3) On economic policy, Gerschenkron's point about the tariff structure is particularly well-taken and deserves further quantitative analysis. (4) Subsequent research has come to some conclusions that are different from those of Gerschenkron, particularly as far as ideology and banking are concerned. Stress has been placed on the importance of the nationalist movement in providing an ideological climate favourable to industrialization, at least from the beginning of the twentieth century onward. The role of mixed banks as 'agents of industrialization' has been challenged by an analysis of their behaviour that seems to indicate that they were more interested in short-term banking (and profits) than in long-term planning of industrial development. Moreover, it has been argued that the distinction between French and German banks does

not stand close scrutiny in the Italian case. However, Italian banking history is developing and new outcomes, more in line with Gerschenkron's hypotheses, may not be ruled out.

In focusing his attention on 1896–1908, Gerschenkron was certainly selecting the most dynamic period in Italian economic history before the 1950s. However, his explanation of the 'spurt' suffered from a neglect of previous industrial growth as well as of some factors that, if taken into account, might contribute to a better understanding of the causes of the rapid growth in the years preceding the First World War.

Quantitative evidence on industrial growth during the 1860s and 1870s is far from satisfactory. According to the existing national accounts estimates, GNP grew in line with population (at the moderate annual rate of 0.7 per cent) leaving per capita income constant. Fenoaltea's (1983) and Carreras' (1982) indices feature a positive but low rate of growth in industrial production per head of population. The overall picture for the 1880s is better established: all the existing indices show that industrial output developed at a respectable pace. There is ample evidence of a wave of private investment, caused by the change in expectations produced by the industrial policy of the 'left', by the resumption of the gold standard in 1882, by substantial government orders to the steel-making and engineering industries, by urban-renewal programmes and by foreign investment (e.g. Toniolo 1990). The banking system played an important role in speeding-up the process of resource allocation to fixed capital formation in industry and building (Confalonieri 1974–6; Sannucci 1989). The lame duck was agriculture: production stagnated and incomes were affected by the fall in prices. During 1896–1908, in contrast, output and productivity grew rapidly in the agricultural sector.

A deep, long depression followed the upswing of the 1880s, characterized by a serious banking crisis. It is surprising that, after drawing so much from Hilferding, Gerschenkron never took into consideration the possibility of a depression transmitted from the financial to the real sector as a result of a combination of large industrial debts, generous lending to risky borrowers, and swift withdrawal of short-term capital (Warglien 1987). This is precisely the story of 1888–1893. In the event, the behaviour of French-type banks contributed to financial instability. But German-type banks were not likely to produce a less volatile financial environment, as witnessed by the inter-war crises in Central Europe. Overall financial conditions were much more stable during 1896–1913. External finance was not as large as it was in the 1880s, there was little foreign short-term capital around, and—last but not least—the embryo of a central bank had been established in 1893. The latter took upon itself the role of lender of last resort, thereby creating a more stable financial environment, as shown during the crisis of 1907 (Bonelli 1978).

Conditions in the world economy must be taken into account when discussing the industrial boom of the so-called 'Giolittian era'. International trade and factor mobility are likely to have affected the behaviour of a relatively

small and fairly open economy such as Italy through an export-led growth, particularly of primary goods (Cafagna 1973; Bonelli 1978) and a supply-push by foreign finance (Fenoaltea 1988c). Moreover, emigrant remittances, and to a lesser extent tourism, allowed growth to be free from balance-of-payments constraints.

A thriving agriculture, a stable financial setting, and a favourable international environment are factors likely to have made the industrial upswing of 1896–1913 more rapid and resilient than that of 1879–88. Such factors do not rule out the possibility that German banks played a role of their own as more or less important ‘agents of industrialization’. There is indeed much research still to be done on this period but, by now, we know enough to argue that, around 1900, the Italian economy was probably richer and more diversified than Gerschenkron supposed, so that several causes were at work in producing the ‘spurt’. This picture is more complex—and therefore intellectually less exciting—than that deriving from Gerschenkron’s elegant mono-causal explanation of growth: Clio, as he knew, is often a messy housewife.

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## NOTES

- 1 Fenoaltea’s estimates of value-added by mining in 1911 are 46 per cent higher than those of ISTAT (Fenoaltea 1988b:123); value-added by building and construction exceeds ISTAT’s by 82 per cent (Fenoaltea 1988b). Average growth rates (1863–1913) are 2.8 per cent and 3.3 per cent respectively (against ISTAT 0.6 per cent and 1.9 per cent).
- 2 In fact, the worst European performance (infant mortality of 307 per thousand for Germany in 1870) was ‘worse’ than the ‘worst’ one in 1970 for the sample of developing countries used by Morris (Gabon with 229 per thousand).
- 3 For instance, the production of raw silk is taken to represent silk weaving and a sizeable part of wool production; wheat consumption is taken as a proxy for the entire food-processing industry.
- 4 For instance, simply by substituting Gerschenkron’s estimates of silk production with Fenoaltea’s (1988a) estimates of value-added by silk industry (which includes throwing, weaving and dyeing) the rate of growth of the entire textile industry would rise to 3.9 per cent and the overall rate to 4.2 per cent.
- 5 The index is a by-product of the first reconstruction of Italy’s national accounts since 1861. Afterwards it has been incorporated without changes in the Fuà revision (Fuà 1969) and hence in all the international collections of historical statistics (Mitchell 1975).
- 6 Fenoaltea’s index was actually prepared in the mid-1960s and incorporated in his Harvard PhD dissertation. The author is now engaged in a major research aimed

- at producing a much more reliable estimate of industrial output from 1861 to 1913; partial results have been published in Fenoaltea (1982, 1984, 1985, 1987, 1988a, 1988b).
- 7 The acrimonious attacks on the Banca Commerciale in 1914–15, for instance, leave no room for doubt that its economic and political power was fully understood at the time by friends and foes alike. Moreover, such contemporary Italian economists as Pantaleoni, Einaudi, Barone, Bresciani-Turroni and Sraffa, if anything overstated the importance of large investment banks.

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