



BANCA D'ITALIA
EUROSISTEMA



1861 > 2011 > >
150° anniversario Unità d'Italia

Quaderni di Storia Economica

(Economic History Working Papers)

Italy, Germany, Japan:
From Economic Miracles to Virtual Stagnation

by Andrea Boltho

October 2011

number

14



BANCA D'ITALIA
EUROSISTEMA



Quaderni di Storia Economica

(Economic History Working Papers)

Italy, Germany, Japan:
From Economic Miracles to Virtual Stagnation

by Andrea Boltho

Paper presented at the Conference "Italy and the World Economy, 1861-2011"

Rome, Banca d'Italia 12-15 October 2011

Number 14 – October 2011

The purpose of the Economic History Working Papers (Quaderni di Storia economica) is to promote the circulation of preliminary versions of working papers on growth, finance, money, institutions prepared within the Bank of Italy or presented at Bank seminars by external speakers with the aim of stimulating comments and suggestions. The present series substitutes the Historical Research papers - Quaderni dell'Ufficio Ricerche Storiche. The views expressed in the articles are those of the authors and do not involve the responsibility of the Bank.

Editorial Board: MARCO MAGNANI, FILIPPO CESARANO, ALFREDO GIGLIOBIANCO, SERGIO CARDARELLI, ALBERTO BAFFIGI, FEDERICO BARBIELLINI AMIDEI, GIANNI TONIOLO.
Editorial Assistant: ANTONELLA MARIA PULIMANTI.

KUP'44: 3/82: ; "print+
*KUP'44: 3/82; 9"*qprkg+!"*

Italy, Germany, Japan: From Economic Miracles to Virtual Stagnation

Andrea Boltho*

Over the last six decades, economic developments in the three countries that were defeated in World War II look strikingly similar. First came rapid reconstruction. Then followed the economic miracles of the Golden Age. The years that went from the first oil shock to the mid-1990s still saw fairly robust, and relatively similar, economic developments. Finally, during the last 15 years, the three countries held the dubious record of having the lowest output growth rates in the OECD area. The paper looks primarily at Italy, using the examples of Germany and Japan to search for parallels and contrasts. Among similarities, the main one lies in overall macroeconomic trends. The main differences are in economic policies (where Germany and Japan followed a much more orthodox stance than Italy), in institutional set-ups (with Italy much less efficient than Germany and Japan), in labour market relations (with much greater conflict in Italy than in the other two countries), and in regional developments (where Italy was handicapped by the presence of the *Mezzogiorno*, while Germany and Japan were hardly touched by regional differentials, at least until unification in Germany. Indeed, had Italy's government institutions, labour market relations and regional differentials been less problematic, Italy's growth performance might well have been superior to that of both Germany and Japan.

JEL Classification: N1

Keywords: Comparative economic history

Contents:

1. Introduction	5
2. Reconstruction	5
3. The Golden Age	8
4. Slowdown	14
5. Stagnation	17
6. The Regional Problems	21
7. Conclusions	25
Tables and Figures	27
References	41

* Emeritus Fellow, Magdalen College, University of Oxford

1. Introduction¹

Most papers in this conference place Italy in an international context by looking at how the country fared relatively to the rest of the world in a number of areas. The present one takes an even more openly comparative approach by directly contrasting Italy's overall macroeconomic experience since World War II with that of Germany² and Japan (for the sake of brevity, the three countries are often called IGJ in what follows). The most obvious reason for this choice is the course of economic history since 1945. The three countries were defeated in war, enjoyed rapid growth in the reconstruction period, experienced "economic miracles" in the so-called Golden Age of the 1950s and 1960s, were faced by sharp decelerations in the two decades that followed the first oil shock, and have recorded the slowest growth rates seen in the OECD area since the mid-1990s. Other countries have, of course, shared some of these trends; none, probably, have had quite so similar developments through time. Confirmation of this is provided by Table 1 which shows, for per capita GDP, an IGJ performance that is well above that of comparable economies in the first two periods and well below in the last one.³

There are, of course, many other similarities, as well as glaring differences in the economic structures and histories of IGJ. Among the former, one could list high household savings, a bank-centred financial system, ownership set-ups that, however much they may differ from each other, differ even more markedly from the Anglo-American paradigm (Carlin 1996; Barca *et al.* 2001), etc. Among the latter are very different inflation histories, trade union behaviour, patterns (and speeds) of integration into the world economy, importance of regional problems, etc. In what follows an attempt will be made to look at many of these issues, primarily from an Italian standpoint, with Germany and Japan being used as illustrations of how differently, or similarly, structures evolved or policies reacted to exogenous events. It should be noted that the approach is largely descriptive and many of the conclusions are based on subjective judgments.

The Paper is organized along (boring) chronological lines. Section 1 looks at the reconstruction years (1945-53); Section 2 at the Golden Age (1953-73), Section 3 at the post-oil shock period (1973-95); Section 4 at the more recent years of semi-stagnation (1995-2011); Section 5 then examines the specific issue of within country regional differentials while the Conclusions, predictably perhaps, try to (briefly) conclude.

2. Reconstruction

In Italy, but also in Germany and Japan, reconstruction turned out to be a much smoother process than had initially been feared given the post-World War I experience of a brief boom

¹ The author is grateful to Wendy Carlin and Marcello De Cecco for helpful comments.

² Germany stands for West Germany until 1991 and for the whole country thereafter.

³ As with any periodization, issue could be taken with the particular time spans here shown. While any choice of terminal years is, inevitably, somewhat arbitrary, it is felt that for present purposes it reflects a not unreasonable compromise given the histories of the three countries here considered.

soon reversed by recession, inflation and, even, hyperinflation (Armstrong *et al.* 1991). The amount of war-time destruction had, of course, been more limited in Italy than in the other two countries (*ibid.*). Hence Italy returned to the pre-war levels of output already by the late 1940s/early 1950s, somewhat earlier than the mid-1950s of Germany or Japan, but in all the three countries recovery was remarkably speedy.

Some of the reasons for why reconstruction turned out to be so much more successful than after World War I are common to all the major belligerent OECD countries. They have to do, *inter alia*, with a different domestic policy stance in Western Europe and with a different external policy stance in the United States (Boltho 2001a). Turning more specifically to IGJ, a number of similarities and, more importantly, differences, are worth noting. One striking similarity was the inflation and subsequent price stabilization experience. Inflation was rampant initially, but was then curbed by a sharp monetary squeeze in Italy in 1947, by a major currency reform in Germany in 1948, and by a very restrictive fiscal stabilization plan in Japan in 1949. And in all three countries, but especially in Germany and Japan, the demand shortages arising from these policies were greatly relieved by the outbreak of the Korean War and the economic boom that ensued.

A more important similarity was the early solution given to the uncertainties about the post-war institutional set-up. Such uncertainty was widespread in the late 1940s, given strong worker militancy everywhere (Armstrong *et al.* 1991) and the threat, particularly felt in Europe, of encroaching Soviet power. While a shift to a centrally planned economy was not really on the cards, countries such as Britain or France were engaging at the time in large scale nationalizations and indicative planning. The presence of US troops in IGJ made such policy shifts much less likely, but, initially (and in Italy and Germany at least until the 1948 elections and currency reform respectively), the business world felt unsure about its future role. In the end an open and liberal market system was chosen in all three countries, but there was no certainty of this at the outset.

One much discussed longer-run consequence of the reconstruction period has been the destruction wrought on what have been called “distributional coalitions”, particularly in Germany and in Japan (Olson 1982). Subsequent growth, it has been argued, was greatly helped by the purge of pre-war elites and by the destruction of cartels, lobbies and other pressure groups whose rent-seeking activities sap the vitality of an economy. Yet this factor does not seem to have been important. A recent survey of the evidence, for instance, showed that there is little support for the Olsonian hypothesis in Germany or Japan (Heckeleman 2007); similar studies of Italy are not available, probably because “Mancur Olson did not attract much interest” in the country (Da Empoli 1993, p. 81).

In other words: “Although the war may have disturbed the earlier constellation of institutional arrangements and interest groups, it did not prevent them from being rapidly reconstituted” (Eichengreen 2007, p. 54). Thus, in Germany, the main distributional coalitions “re-emerged [...] with ideas, ideologies, practical purposes and personnel that were in full continuity with Weimar times” (Paqué 1996, p. 97). In Italy too, there is little evidence of a breakdown of pre-war structures. Indeed, one of the main economic achievements of Fascist

Italy, the creation during the Great Depression of the large state-holding company IRI, was preserved (despite initial US resistance) with virtually the same management (Barca and Trento 1997). It was probably only in Japan that some changes turned out to be growth-promoting: *zaibatsu* dissolution raised intra-industry competition and allowed junior managers to achieve power much earlier than would otherwise have been possible (Kosai 1986); land reform stimulated agriculture; labour reform raised incomes and encouraged demand growth (Nakamura 1981). But all these changes resulted from US reforms, not from a breakdown of the pre-war system.⁴

Even if an Olsonian bonfire of distributional coalitions did not occur, the reconstruction period provided a window of opportunity for the adoption of radical changes in the three countries' institutional set-ups. The opportunity was not fully seized, but, arguably, more was done in Germany and Japan than in Italy, in part because of US behaviour. Thus, Germany and, especially, Japan, were tightly supervised by the occupation authorities, while Italy was left broadly in charge of its reconstruction process. This, in turn, influenced the nature of the reforms that took place. In Italy, an old liberal tradition managed to reassert itself. The controls of the Fascist economy were dismantled relatively quickly (by the standards of what was happening elsewhere in Europe) and a return to free trade, in particular, was rapidly achieved (Graziani 1972). Reforms in Germany and Japan, if in different ways, went beyond this. Thus, both countries saw some purging of top management and a policy of cartel busting, with Japan, in addition (and as already mentioned), eliminating the pre-war family control of major corporations through *zaibatsu* dissolution. None of this occurred in Italy (Barca *et al.* 2001).

Germany, just as Italy, also saw a return to a long-standing liberal tradition which contributed to monetary reform and rapid decontrol. Interestingly, however, Germany's liberal instincts were tempered by the search for a "third way" (Abelshauser 2004) which, already at the time, began laying the ground for what became known as the *Soziale Marktwirtschaft*. No doubt encouraged by the US occupation authorities who were strongly influenced by the New Deal experience, some of the participants in the German discussion at the time advocated "liberal interventionism" and a "strong state" (ivi, p. 95), so as to moderate the social costs of unfettered markets.⁵ The outcome was a gradual adoption of measures, such as welfare provisions and co-determination, that may well have helped in fostering social consensus. Nothing of the sort happened in Italy. On the contrary, a polarization between a conservative business class and an antagonistic, left-wing trade union movement (polarization that in milder

⁴ A further important legacy was, of course, the American imposed Constitution under which Japan renounced war and curtailed its military spending. Avoidance of that burden may well also have contributed to the country's subsequent growth (Kosai 1986), more so probably than was the case in Germany or Italy which also sheltered under the US security umbrella. Over the 20 years to 1973, defence expenditure amounted to just over 1 per cent of GDP in Japan, as against figures of 2.7 and 3.4 per cent in Italy and Germany respectively.

⁵ Actual implementation of these ideas took time, of course. The 1949 Constitution vaguely referred to the principle, legislation on social housing came in 1950, on co-determination in 1951-52 (even if co-determination was practiced in parts of the coal and steel industries already in 1947) (von Prollius 2006), but a significant reform of the pension system had to wait until 1957. Still, even this came well before similar measures in either Italy or Japan.

form had already existed before World War I) became entrenched in these years (Magnani 1997).

Japan's pre-war liberal tradition had been much weaker than those of Italy or Germany. Hence, there was little demand in the country for a quick removal of controls and "the system that emerged after reform was by no means a truly market-based system; instead it was characterized by a substantial degree of government intervention" (Teranishi and Kosai 1993, p. 15), especially in areas such as foreign trade and financial markets. This would leave a legacy for later years. A further important legacy came from land reform. This not only contributed to subsequent agricultural growth, but also led to much greater income and wealth equality (Kosai 1986), an outcome that may have helped later economic success. Italy's efforts in this area were much more timid and less successful.⁶

The reconstruction period, in other words, may have opened an institutional gap between Italy on the one hand and Germany and Japan on the other. The latter two countries, whether of their own volition, or under American pressure, adopted some fairly radical reforms which, in different forms, almost certainly paved the way for a subsequent degree of social consensus that was much greater than what had existed before the war. Italy's reforms were less far-reaching and the country reverted to the non-consensual pre-fascist liberal order. Had Italian reformers been more audacious, or had the US been more influential or assertive, the course of subsequent economic developments in the country might well have been different and, arguably, welfare enhancing.

3. The Golden Age

The contours of the period that goes from the end of reconstruction to the first oil shock are well-known and broadly similar in all the three countries. Growth was exceptionally rapid and also very smooth, despite a US-induced slowdown in 1958 and brief, home-grown, recessions in 1964-65 (Italy), 1965 (Japan) and 1967 (Germany). The period also recorded rapid employment growth (indeed, Germany and Japan enjoyed virtual full employment most of the time), witnessed sharp rises (if at different speeds) in export market shares and saw the extension to the whole population of welfare state provisions (if of different generosity). Not for nothing, the experiences of IGJ in these years were often referred to as "economic miracles"⁷ even if (blot on the picture) there was also a move from near price stability at the outset to high inflation by the early 1970s.

All three countries faced, of course, a world economy which itself grew at unprecedented rates. In addition, international trade was liberalized (with Italy and Germany also joining a

⁶ Rough estimates suggest that Italy's land reform in the early 1950s transferred between 6 and 10 per cent of total acreage from large landowners to small farmers, of which less than half was expropriated (Graziani 1972; Ciocca 2007). In Japan, by contrast, close to 40 per cent of total acreage was, *de facto*, confiscated in the late 1940s and transferred to the erstwhile tenants (Kawagoe 1993).

⁷ The words "miracolo economico" and "Wirtschaftswunder" appear almost automatically when the period is mentioned in the Italian and German literature. The Japanese are less given to hyperbolae and refer to these years under the more neutral words of "kōdō seichō jidai" or era of high economic growth.

preferential trade area), and the terms of trade moved in their favour. Between 1953 and 1972 (rather than 1973, when import prices soared because of the first oil shock), the ratio of export to import prices rose by as much as 2 and 1½ per cent per annum in Japan and Germany respectively (Italy saw a more modest 0.3 per cent annual improvement).

Demand management was little used by IGJ through most of the period (indeed, in Japan, cycles may well have been policy generated) (Ackley and Ishi 1976). Yet, fiscal and monetary policies may still have helped capital formation by coordinating their stance in a growth-promoting way. In all three countries, fiscal policy was orthodox, while monetary policy was broadly accommodating. Budgets were, through most of the period, kept in broad balance or even small surplus (thereby adding to the supply of savings). Italy was a partial exception, but even here budget deficits were contained through most of the period to levels well below those of earlier or later eras. Money supply, on the other hand, was allowed to grow rapidly (thus facilitating investment), without this leading to inflation in view of the concomitant growth of demand for money in buoyant economies (Table 2). Even that paragon of anti-inflationary credibility, the Bundesbank, allowed broad money supply growth rates in the 1950s and 1960s of as much as 14 per cent per annum, as did Italy (while consumer price inflation remained negligible).

Behind these various factors, lies, of course, a further force common to all the three countries: catch-up. High growth and investment were fostered by a backlog of opportunities vis-à-vis the US and by the high profits made possible by elastic labour supplies (Kindleberger 1967). Though full employment was eventually achieved in the urban sector of the three economies, a reserve army of under-employed labour was still present until the very end of the period in the Italian and Japanese countryside, or in Southern Europe for Germany. And the rapid productivity growth which buoyant investment generated, together with the low wage settlements which elastic labour supplies permitted, was a further ingredient in the virtuous circle of high investment and high export growth. In fact, catch-up provides a compelling explanation for the Golden Age story both for IGJ and for the rest of the OECD area. Figure 1 shows how even an extremely simple specification of the convergence hypothesis throws a good deal of light on the 1953-73 differential growth experience. Indeed, it will be seen that both Italian and German growth can be almost fully “explained” by their relative backwardness at the outset. It is only Japan (together with Ireland) which stands out as a partial exception.

Backwardness provided the opportunity. Social capability then exploited it (Abramovitz 1986). And social capability may have differed. Defining, let alone measuring, the concept is, of course, impossible. What can be done is to look at selected socio-economic aspects of a country which can, plausibly, be thought of as important in facilitating the exploitation of a catch-up potential. Three will be looked at in this context: educational achievements, the presence of cooperative institutions, and the pressure of competitive forces. Educational achievement is easiest to quantify. Table 3 presents estimates of the educational attainment of the total and of the adult populations. Both at the outset and through the period it is Germany and, especially,

Japan that stand out. This factor might well have facilitated, *inter alia*, the exploitation of foreign technologies.⁸

Turning to the possibility of institutions fostering cooperative behaviour which, in turn, could enhance growth, two, not mutually exclusive, approaches are worth noting: i) the idea that trade union structures are important in directly determining inflation/ unemployment outcomes and in indirectly influencing macroeconomic ones (Calmfors and Driffill 1988), and ii) the alternative view that it was particular institutions and policies encouraging cooperative solutions, present in some, but not in all, West European countries, which greatly helped in securing moderate wage settlements and high investment rates (Eichengreen 2007).

Calmfors and Driffill suggest that highly centralized, all-encompassing national unions, or highly decentralized, enterprise unions, are preferable to intermediate, or sectoral/industrial unions, and place Germany and Japan in the first and second category respectively, while relegating Italy to the third. Further refinements have, for instance, argued that Japan is, in fact, a country in which centralized co-ordination between unions and employers federations dominates (Soskice 1990), but the ultimate conclusion has seldom been put in doubt. The evolution of unionism, largely dictated by history, could thus be one explanation for the two countries' better performance relative to Italy's.

Eichengreen's view is that implicit work force-enterprise bargains secured faster growth in some European countries than in others. Germany fits this hypothesis better than Italy. Germany had institutions and policies, some going back to Weimar days, others developed early in the period (e.g. co-determination) that could plausibly be seen as having encouraged cooperation. Similar institutions and policies, on the other hand, are hardly mentioned by Eichengreen in the case of Italy and it is, indeed, difficult to see much evidence for them. Japan is not covered by Eichengreen, but there is sufficient circumstantial evidence suggesting that the country's labour force was ready to forego immediate wage claims in exchange for higher investments and, therefore, higher real incomes, in the future. After all, the practice of "life-time employment", even if only applied in large-scale firms, and the large share of compensation accruing in the form of bonuses, would both have worked in favour of longer-term commitments.⁹ All of the preceding suggests that for complex historical and institutional reasons, Germany and, especially, Japan were in a more favourable position than was Italy in exploiting relative backwardness with less social strife and conflict.

A not dissimilar conclusion may be drawn from an alternative viewpoint that stresses not so much cooperation as the forces unleashed by competition. IGJ all moved away from the controlled pre-war economies, but did so at different speed. Of the three, Germany embraced

⁸ The data shown in the table cover only the formal educational system. This, almost certainly, understates the achievements of Germany and Japan. In the former country, a large share of the young obtain apprenticeship qualifications after leaving school; in the latter the same result is achieved by widespread provisions of on-the-job training.

⁹ Few, in any case, would doubt that Japan possessed at least some of the characteristics of "co-ordinated capitalism" that Eichengreen (1997, p. 3) considers crucial: "solidaristic trade unions, cohesive employers associations, and growth-minded governments".

competitive forces most vigorously. It opened itself fully to the rest of the world, going as far as adopting unilateral tariff reductions in the 1950s (with trade union approval). It also passed robust anti-cartel legislation at home. Italy largely matched Germany's opening to external competition, but was much less ready to thwart domestic anti-competitive forces. Monopolies or oligopolies had been widespread in pre-war Italy and not much was done to dismantle them in the reconstruction period (Rossi and Toniolo 1996; Barca 1997). This was particularly true for the state-owned corporations that dominated a number of sectors, notably banking and large scale industry (de Cecco and Giavazzi 1993). On the surface, Japan looks as having moved least in the direction of increased competition. The liberalization of foreign trade was slow and patchy until the mid-1970s (or even beyond), and, according to most observers, the anti-monopoly legislation adopted at home lacked teeth. Yet, interestingly, most observers would also argue that domestic competition in industry was fierce, as the large *keiretsu* conglomerates fought for market share (Tsuru 1976; Yamamura 1982).

An upshot of this brief discussion would suggest that Germany's policies were first best, while Italy and Japan, if in different ways, were held back in establishing vibrant and competitive economies, in one case by the pressures of domestic vested interests, in the other by lingering mercantilist attitudes. Yet, arguably, Japan's combination of competition within the country and protection vis-à-vis the rest of the world, may have been superior to Italy's opposite set of policies. A comparative look at the two countries' international performance shows large market share gains in both cases (as it also does, of course, for Germany) (Figure 2), but also points to a significant difference in specialization patterns. In the early 1950s, Italy and Japan shared comparative advantage in broadly similar lines of activity; over time, however, divergence set in, as shown by the evolution of revealed comparative advantage indices (Boltho 2001b). Italy's specialization changed only very slowly and the country remained committed to, admittedly increasingly sophisticated, consumer goods; Japan moved into more high-tech activities and this process was almost certainly helped by the protection its capital-intensive industries enjoyed. Active in a sheltered, but still intensely competitive environment, Japanese firms invested massively, slid down their average cost curves as domestic demand grew, and were eventually able to enter the world market, a process that has been aptly called "import protection for export promotion" (Krugman 1984).

Such a sequence of events would suggest that Japan's growth was not export-led, but that it was its exports that were "growth-led"; an experience not of demand-pull, but of "supply-push". The issue is important not only for Japan, but also for Germany and Italy, if only because it is often thought that all the three countries grew thanks to exports, at least in the Golden Age. Surprisingly, perhaps, this question has not been investigated as much as might have been expected. For Italy, some studies have suggested that growth was, indeed, export-led (Stern 1967; Graziani 1998), others have argued the opposite (Ciocca, Filosa and Rey 1973); most statements on Germany suggest or state that exports did play a leading role (Michalski 1970; Hennings 1982; Giersch *et al.* 1992), but provide little supporting evidence; for Japan, one study, using five different tests, rejects the export-led growth hypothesis (Boltho 1996a).

One obvious channel of transmission that could have favoured export-led growth would have been through the exchange rate. If, at the outset of the Golden Age, the lira, Deutschmark

or yen had been pegged at very competitive rates, this could, in a fixed exchange rate regime, have started a virtuous circle of rising exports, investment and growth. Qualitative statements on whether the exchange rates that were chosen in 1949-50 were undervalued, suggest that this was not the case. The lira's rate in 1950 is seen as "realistic" (Ciocca 2007, p. 238); Germany's rate as broadly appropriate (Hennings 1982; Giersch *et al.* 1992); Japan's as "about right" (Yoshikawa 1995, p. 112). Looking at the relationship of the post-war (dollar) exchange rate relative to the pre-war one in terms of the evolution of the GDP deflator or of wholesale prices, suggests that, of the three countries, it was only Germany that could claim to have gained a substantial advantage. Evolutions in the 1950s and 1960s, show, if anything, mild appreciation in Germany and Japan, but some depreciation in Italy (Boltho 1996a, 1996b).

Two further pieces of evidence can be added. The replication of a simple test (Caves 1971)¹⁰, are presented in Table 4. These suggest that it was only in Germany that prices and quantities moved in the same direction, thus hinting at the presence of export-led growth. Neither the Italian nor the Japanese data show the same pattern. Alternatively, one can look at whether IGJ had an initial specialization on goods and/or on markets that subsequently experienced rapid growth. *Caeteris paribus*, this would have facilitated an export-led stimulus since (in the presence of elastic domestic supplies), buoyant demand abroad would have provided the trigger. The existing evidence suggests that this was definitely not the case for Japan which, initially, and at least through the 1950s, was specialized in goods and markets whose demand grew relatively slowly (National Institute 1963; Panić and Rajan 1971). Italy and, especially, Germany were in a somewhat more favourable position (Table 4). Overall, if a conclusion can be reached, it is that Japan clearly did not benefit from export-led growth, that Italy probably did not, while for Germany the verdict remains open. More broadly, what would seem indisputable is that Japan's experience was particularly remarkable. In barely two decades, the country redirected its export from slowly growing developing countries to the much richer developed markets and changed its export structure from cheap consumer goods to high quality durable or investment goods.

A controversial conclusion could follow from this experience: the relatively protectionist policies which Japan adopted gave the country an international specialization pattern that turned out to be more favourable than did the relatively liberal policies followed by Italy. Germany also followed such liberal policies, but was from the beginning already strongly established in investment goods and high-tech products. Had Italy followed a Japanese path, its longer-run performance might have been more favourable (de Cecco 1971). Two arguments, however, militate against this thesis. First, Italy's free trade choice was politically inevitable. It would have been virtually impossible for a defeated country to refuse the open hand of cooperation offered by the European integration efforts of the 1950s. And even if it had, implausibly, shunned this open hand, it is difficult to see how Italy could have embarked on a successful industrial policy in view of the limited competition prevalent on the home market and the much

¹⁰ "Relatively simple price-quantity data should often suffice to show whether the growth of exports conveys a foreign disturbance to the economy or rather results from the expansion of domestic capacity. If disturbances arise predominantly from external demand, price and quantity changes should be positively correlated, if the disturbances arise from shifts in domestic supply, the correlation would be negative" (Caves 1971, pp. 426-427).

greater political interference that prevailed in economic policy-making (Gros-Pietro 1990; Prodi and De Giovanni 1990).

Overall, looking at Italy's Golden Age experience in the light of those of Germany and Japan, an impressionistic judgement would be that Italy broadly matched those countries' growth rates, and this despite some less favourable pre-conditions. If shortfalls there were, these lie not so much in macroeconomic performance, but in the labour market and social policy areas. Italy did not achieve full employment, as did Germany and Japan, largely because of its pronounced regional differentials. Italy also faced a wage shock at the end of the 1960s. So did Germany, but its wage increases were not accompanied by the wave of strikes that were an integral part of the *Autunno caldo* movement,¹¹ nor did they bring about lasting changes in labour market regulation, as was the case in Italy. The Italian literature tends to lay the blame for this episode on the whole development process since the war: "In some sense the social conflicts of those years were an almost natural response to the speed and complexity of Italy's economic development. In a relatively short time-span, the country had moved from a mainly agricultural structure to one of widespread industrialization, with extraordinary migration flows ... and with a huge increase in the rate of urbanization" (Signorini and Visco 1997). More specifically, the intensity of strike activity in 1969-70 has been attributed to the productivity gains and unemployment that were imposed on the work force following the 1964-65 recession and to the very poor working and living conditions which faced the huge number of migrants who arrived in the North of the country (Valli 1977; Castronovo 1995; Graziani 1998).

There is a clear contrast here with Germany and Japan. Both these countries also saw large productivity gains, but without strikes, probably because co-determination in Germany and cooperative industrial relations in Japan facilitated their acceptance by the work force. Nor were urbanization and migration uniquely Italian phenomena. Both Germany and Japan had seen, just after the war, the immigration of 10 million or so refugees from Eastern Europe, or the repatriation of 5 or 6 million nationals from the erstwhile empire. Despite the fears of the time, their incorporation into the labour force was relatively smooth. Both countries then saw further migration during the Golden Age (Japan's almost certainly larger than Italy's), as agricultural employment dwindled.¹² Germany, in addition, received some 6½ million foreigners. The 3½ to 4 million Southern Italians who moved to the Centre-North between 1955 and 1973 were not an impossible number to manage.

In other words, where Italy appears to have failed (at least in relative terms) was in its inability to accompany rapid economic change with parallel changes in social welfare and in the provision of infrastructure (other than the motorways demanded by the car industry). This inability, in turn, led to an over-reaction. The late 1960s and early 1970s saw the hasty adoption of generous welfare provisions and the beginning of indiscriminate hand-outs for business,

¹¹ According to ILO data, the number of working days lost in strikes in 1969-70 averaged over 29 million in Italy, as against only 170,000 in Germany.

¹² In Japan, gross internal migration into the richer areas averaged 1½ per cent of those regions' population between the early 1950s and 1973, in Germany and Italy the figure was 0.8 per cent (net migration from "poor" to "rich" was, however, smaller in Germany than in Italy; no comparable figures were found for Japan).

measures that gave the politicians much greater scope for interfering with economic policy-making. Many of the fiscal problems encountered in the 1970s and 1980s have their origin in the belated and misguided responses to the late 1960s crisis. Both migration and welfare reform were clearly managed more smoothly and successfully by Germany and Japan.

The experience of the late 1960s thus points to a major, Italian problem. Relative to Germany and Japan, administrative ability (by both politicians and the civil service) seems to have been in short supply and this must have affected economic performance, be it because of more pervasive rent-seeking activities, slower judicial procedures, worse infrastructure provisions, etc. Evidence confirming this judgment is not available for the late 1960s, but over the last 30 years indicators have emerged that put Italy into a much less favourable position than the other two countries, be this in the areas of an intrusive regulatory environment, the provision of law and order, the control of corruption, the existence of trust, etc. (Mauro 1995; Knack and Kiefer 1997). More recent World Bank investigations for 1996-2009 confirm this. In all but one of the governance indicators that are covered by that institution, Italy is significantly below Germany and Japan. And an even more damning picture is painted by survey evidence on overall infrastructure quality: in recent international comparisons of 125 countries, Germany was ranked 6th, Japan 16th and Italy 73rd (World Economic Forum, various years).

4. Slowdown

A bird's eye view of developments in this period (Table 1) suggests that trends (and also cycles) were not that dissimilar in IGJ. All three countries slowed down relative to the Golden Age largely because the potential provided by catch-up had greatly diminished. Yet, on average, they still managed to expand, at, or slightly above, the OECD's growth rate at the time. All three experienced the same number of recessions, two in the wake of the oil shocks of the mid-1970s and early 1980s and a third one in the early 1990s, and all three recorded strong upswings in activity in the late 1970s and in the late 1980s. The parallels, however, stop here as in most other respects, IGJ went into their separate ways. By far the most glaring contrast was probably in the area of macroeconomic policies, with Italy behaving in ways that were almost opposite to those of Germany and Japan.

The early years of the period were strongly affected by the oil shocks. Oil dependence in the three economies was similar. Yet, the wage (and therefore, price) responses of the three economies varied widely (Table 5). In Italy and Japan wage pressures surged in 1974-76, while German unions showed commendable restraint. The lesson was learnt in Japan where behaviour after the second oil shock was as prudent as in Germany. Italian unions, on the other hand, went on oblivious of the consequences for the country's real disposable income of the sharp terms of trade deterioration that had occurred.

The most glaring difference between the three countries was in macroeconomic policies, particularly so in the fiscal domain (Table 6). In Italy, the budget deficit averaged some 10 per cent of GDP for 20 years and the public debt/GDP ratio rose to 120 per cent by 1995. Public debt also rose in Germany and in Japan, but this happened only late in the period, in response to the costs of unification in one case and the recession induced by the bursting of a speculative

bubble in the other. In Italy, the reasons for fiscal incontinence are to be found instead in the politicians' aim to buy social peace. "Frenetic activism" (Arcelli and Micossi 1997, p. 280) was the defining characteristic of a policy that was used to raise pensions, improve health provisions, boost public payrolls, subsidize industry, etc. Political expedience rather than economic rationality ruled decision-making: "The struggle for income shares was shifted from the factory floor to the state's budget" (Maier 1999, p. 281). Conversion to a more orthodox stance came only late in the period, as the deadline for entry into European Monetary Union (EMU) approached.

Monetary policy was permissive in the second half of the 1970s, but was tightened in the early 1980s. An indirect indicator for this is provided by the level of real short-term interest rates (roughly measured by using an ex-post deflator). These were virtually identical to those of Germany and Japan (and significantly higher than Germany's in the years 1981-90) (Table 6). Two events were important in the monetary policy conversion to greater orthodoxy: entry into the EMS in 1979 and a first step towards granting more independence to the Bank of Italy, by freeing it from the obligation to buy Treasury bonds, in 1981 (Basevi and Onofri 1997). Interestingly, however, real long-term rates, while positive,¹³ remained below those of the more prudent Germany and Japan (and were probably even lower than here shown if a more appropriate "expected inflation" indicator had been used to deflate the nominal rates). Clearly, having a large pool of domestic savings greatly facilitates public sector financing, as also shown by Japan's experience in more recent years.

Yet, surprisingly perhaps, in the light of relative monetary tightness, Italian inflation remained in double digit until the mid-1980s, significantly outstripping the inflation rates of Germany and Japan. One reason for this may have been the lack of competition that prevailed in the economy, particularly in many service sectors (Ciocca 2007) (the same was probably true in Japan, but much less so in Germany). A second one had to do with the attitude of the largest trade union confederation which opposed any form of incomes policy until as late as 1992 (*ibid.*). German and Japanese unions were much more conscious of macroeconomic constraints. And a third one can lay blame on the public sector's continuing increases in employment, in wages, and in income maintenance transfers (Arcelli and Micossi 1997). On the other hand the hope that joining the EMS would have had favourable expectational effects on wage bargaining, now that the country's monetary policy was, *de facto*, in the hands of the Bundesbank, did not materialize (Egebo and Englander 1992).¹⁴ Partly as a consequence, sharp nominal depreciation, led to no real depreciation (Table 6); indeed the opposite was the case until 1993. Between 1973 and 1992, while the nominal rate fell by two thirds, the real one rose by 20 per cent. It was only following EMS ejection and much tougher macroeconomic policies that Italy finally gained a significant competitive advantage.

¹³ Long-term bond rates for the period as a whole averaged 4.0 and 3.3 per cent in Germany and Japan respectively, but only 1.8 per cent in Italy.

¹⁴ In the end, this was not so surprising. Earlier British and American experience had already shown that the effects on expectations of "regime changes" can be significant for financial markets but are hard to detect on labour markets. Paradoxically, this can raise the "sacrifice ratio" of disinflation manoeuvres that stress such expectational effects.

In addition, the country was also plagued by a host of tight regulations. Labour market rigidities were almost certainly more pronounced than in either Germany or Japan, be this in the area of employment protection or in that of collective bargaining, given the virtual absence of co-ordinated wage negotiations (Nickell *et al.* 2005). Capital and exchange controls were pervasive, as were price controls: it was estimated that at the end of the 1970s the government directly or indirectly controlled up to 30 per cent of the items in the consumer price basket (Arcelli and Micossi 1997). More generally, the Fraser Index of “Economic Freedom” (Gwartney and Lawson 2009), a measure which tries to quantify all the ways in which a government interferes with market forces, placed Italy significantly below both Germany and Japan in the 1970s and 1980s, even though Italy did make some progress from 1985 to the late 1990s (Figure 3).

Italy thus suffered in the period from constant macroeconomic mismanagement and from excessive microeconomic interference in much more virulent forms than either Germany or Japan. Normally, one would expect that this would have led to very serious economic difficulties. Conversely, the lesser regulations and controls of Germany and Japan, as well as their much more restrained fiscal and monetary policies, should have allowed both these economies to perform much better than Italy. Yet, a cursory look at Table 1 shows that, as far as economic growth went, there is not that much to choose between IGJ. And the same holds for employment and productivity growth, both of which rose more rapidly in Italy than they did in Germany, though not than in Japan. In other words, nominal developments in the three countries may have been very different, but real ones were not. Two possible (and not mutually exclusive) explanations for such a surprising outcome can be advanced: the first one could argue that the costs of fiscal profligacy and partial monetary accommodation are perhaps not as high as is often thought; the second one might point to other forces that, at least partially, offset Italy’s “wrong” policies.

For the earlier part of this period at least, there is some research that suggests that the policy mix chosen by the Italian authorities was not that sub-optimal after all (Boltho 1986; Giavazzi and Spaventa 1989). The latter authors, in particular, argue that initial monetary accommodation, especially of the second oil shock, allowed profits to remain high and therefore sustained later investment demand, even though monetary policy had by then turned restrictive. The inevitable output and employment disinflation costs were thus much lower than they otherwise would have been (and, in any case, much lower than those inflicted on the UK economy by the non-accommodating British policies of the time). Gradual, if only slow, disinflation through the 1980s was thus probably more growth-promoting (or less growth-retarding) than British shock therapy, or the unnecessarily strict policies followed by Germany throughout the period (Carlin 1996).

The second explanation would instead point to something that, arguably, went “right” in the Italy at the time: the employment shift from large to medium and small-scale firms (SMEs), particularly in manufacturing. This shift was neither unique to Italy nor to the period. It had been happening already in the 1950s and 1960s in Italy and in many other industrialized economies, in response to both taste diversification and technological improvements which were gradually reducing the importance of large-scale economies. It was, however, particularly

pronounced in Italy in these years, partly in response to the labour market rigidities introduced into large factories by the strike waves of the late 1960s. A rough proxy for this phenomenon (the importance of firms or establishments with 10 to 99 workers) is shown in Table 7. It will be seen that the rising share of these firms, while predating the *Autunno caldo*, was especially marked in the 1970s and 1980s, in contrast to much less noticeable changes in Germany or Japan. Indeed, it may be thanks to the added flexibility which these developments generated that Italy managed to hold its share of world manufacturing exports in these years (Figure 2), while Germany and Japan suffered pronounced losses (admittedly from much higher initial levels).

There are two possible interpretations of this period. According to one view, Italy suffered from prolonged macro- and microeconomic mismanagement and grew only thanks to its proverbial flexibility, provided by a dense and rising network of SMEs. Had it embraced orthodox policies with greater conviction, and deregulation and reform with more vigour, its performance would, surely, have been much more favourable. An alternative view, while accepting the importance of SME flexibility, might question the judgment about policy. Germany, after all, epitomized macroeconomic orthodoxy, yet its overall performance was below that of Italy.¹⁵ As for Japan, it went for financial deregulation with abandon and found itself first in a bubble and then in a bust whose consequences are still with the country today. Perhaps after all, high rates of inflation and large budget deficits are not as destructive of economic activity as the orthodox literature suggests; indeed, deficits may well have sustained demand (Salvati 2011). Italy eventually converged on the recommendations of that orthodox literature, but its gradual shift in that direction may have been preferable to a more immediately rigorous policy, given, in particular, that the country did not benefit from the wage bargaining institutions and implicit social consensus of Germany and Japan.

5. Stagnation

While IGJ may have seen somewhat different macroeconomic evolutions in the 20 years that followed the first oil shock, the next decade and a half was, again, characterized by greater similarities. Over 1995-2011, all three countries experienced near stagnation in per capita income growth. The rest of the OECD area did not perform very brilliantly either, but IGJ fell significantly short of the average. Indeed, for total GDP, they were the slowest growing of the 22 countries of the “old” OECD area over this period.¹⁶ Japan’s performance was particularly remarkable: given pervasive price deflation, its nominal GDP in 2011 is now estimated to lie below its value for 1995. Germany, on the other hand, while growing slowly, particularly between 2000 and 2005, recovered very strongly at the end of the “Great Recession”, thanks to a surge in exports made possible by a prolonged phase of earlier wage moderation. This, in turn, seems to have reflected a consensus between firms and trade unions (no doubt facilitated by co-determination) on the need for external competitiveness in exchange for employment guarantees.

¹⁵ It is true that it was burdened with the costs of reunification after 1991, but the growth shortfall was already more than one decade old.

¹⁶ On a per capita basis, France, Denmark, Portugal and Switzerland are below Germany’s 1.3 per cent annual growth, but are still way ahead of Japan’s and Italy’s dismal figures.

One possible explanation for these trends could be linked to the process of globalization which accelerated in these years. IGJ were bound to suffer more than other OECD countries from the shifting of industry to emerging economies because of their greater dependence on manufacturing. Industry's share of valued added in IGJ is among the highest in the advanced countries.¹⁷ Since resources are not instantly mobile, a process of de-industrialization is bound to have negative effects on employment and output. This was particularly true for Italy, where the weight of industry declined quite sharply between 1995 and 2009 (interestingly, however, this was much less the case in Germany).

Clearly, and hardly surprisingly, globalization affected IGJ differently according to whether their industrial structures were complementary to, or competitive with, those of the newly emerging economies with whom trade soared. Germany and Japan were almost certainly likely to benefit more from (and be hurt less by) this new competition, than was Italy. Demand from rapidly growing developing economies is bound to be strong for high-tech and investment goods. Both these represent higher shares of exports in Germany and/or Japan than they do in Italy.¹⁸ Germany, in addition, appears to have greatly benefited from the opening of Eastern Europe, an area with which it had traditionally had close relations. Figure 4 shows how Germany's imports and exports with the countries of this area rose as a share of total trade.¹⁹ Something similar happened to Japan's trade with China. Italy, partly for obvious geographic and historical reasons, was left behind. But then neither France nor Spain, to take just two European examples, shared Germany's commodity composition of exports or tight links with Eastern Europe, yet, they did not perform as poorly as Italy.

A further tentative explanation for Italy's relative failure may, paradoxically, come from its earlier successes. It was argued in Section 3 above that the export performance of the industrial districts had been particularly strong in the 1980s and 1990s, and this despite the fact that SMEs tend to do less well on foreign markets than larger firms (Barba Navaretti *et al.* 2010). Globalization, however, may have weakened the SMEs that dominate these districts (Ciocca 2007). Not only do they often have to compete with emerging countries that specialize in similar products but enjoy much lower labour costs. They also find it more difficult and expensive, because of their limited size, to delocalize some of their activities, something that larger German or Japanese firms were able to do on a significant scale in Eastern Europe and

¹⁷ In 2008, for instance, value added in manufacturing ranged between 18.1 per cent of GDP in Italy, 20 per cent in Japan and as much as 22.7 per cent in Germany, as against figures of the order of 12 to 13 per cent in Britain, France or the United States.

¹⁸ Thus, World Bank estimates put the share of high-tech exports in total manufactured exports in 2009 at 20 per cent in Japan and 16 per cent in Germany, but only 8 per cent in Italy. The weight of investment goods (defined as SITC categories 71 to 77) in total exports is more similar. In 2008 these represented 37 per cent of Japanese sales abroad, but 28 per cent in both Germany and Italy.

¹⁹ Imports are also shown in the chart because outsourcing figures strongly in Germany's trade links with Eastern Europe. Indeed, outsourcing and the threat to jobs this represented are almost certainly a major explanation for why earnings in Germany have grown much more slowly than they have in Italy since the creation of monetary union, thus providing the country with real depreciation within the currency area.

China respectively.²⁰ A production model that seemed well suited to the European market at the end of the 20th century, may perhaps be less appropriate to the more globalized world of the early 21st century.

A second set of explanations turns to more institutional reasons for relative stagnation. It has been argued that the institutions that Continental Europe (and, arguably, also Japan) developed during the Golden Age, became gradually less suited to the changing conditions of the world at the turn of the century (Eichengreen 2007). In an environment of rising technological uncertainty, it is venture capital and flexible financial markets that are needed, not bank-based financial systems (*ibid.*). Similarly, the new growth requirements are to be found in R&D and in human capital improvements, rather than in fixed investment. And even within research and development, the emphasis has to change from the incremental innovations, for which German firms, for instance, are well known, to the radical innovations characteristic of US firms (Hall and Soskice 2001).

In addition one can also list the criticisms levied by international organizations at the sclerotic institutions of Europe and Japan. Given the emergence of nimbler competitors, it has been argued, public sectors had to be more efficient, marginal tax rates had to be reduced and bloated welfare provisions had to be slimmed down; even more importantly, competition in product and, especially, in labour markets had to be encouraged, etc. (OECD 1989). There is room to cast doubt on some of these propositions. The evidence linking, for instance, reforms of the labour market to lower unemployment outcomes is virtually non-existent (Howell *et al.* 2007). And even the links between success and R&D expenditure seem far from proven. Figure 5, for instance, shows very clear differences in the research efforts of IGJ over this period. While Italy's poor research effort correlates with its poor macroeconomic performance, Japan's impressive data do not (though, it is true, of course, that the country might have done even worse had it not been for its R&D efforts). Still, few would doubt that there were sclerotic institutions in many OECD countries, and that some reforms were, and still are, indispensable. And it may well be that these sclerotic institutions are more prevalent in IGJ than elsewhere. One piece of evidence which might indirectly support this would be the relative presence/absence of foreign direct investment (FDI) on the plausible assumption that multinational corporations shun overregulated economies. It turns out that between 1995 and 2010 (or between 1980 and 2010, for that matter), FDI inflows, in per cent of GDP, have been lower in IGJ than in any single other OECD country.²¹

A third (and linked) set of arguments would suggest that IGJ did not only have many institutions that were unsuited to the new economy, but were also reluctant to change them. This would seem to be broadly true, at least when IGJ are compared with what happened in other advanced economies. Figure 3 above had already illustrated how the reform efforts of IGJ have

²⁰ There may well be some truth to the simple view that it is much easier for Siemens to be in China than it is for Sassuolo (the capital of the Italian ceramic tile industry) given the multitude of firms that compose it. This being said, it is well known that numerous firms in Italy's clothing industrial districts, in particular, have successfully outsourced many of their activities to Eastern Europe.

²¹ The only, small, exception is provided by Germany which, in the years 1995-2010, was somewhat more attractive than Greece, but still well below all the other OECD countries

been relatively modest, indeed non-existent in Italy, since 2000. More detailed data on selected aspects of regulation present a mixed picture (Table 8). Progress in Italy, by the standards of Germany, Japan and other OECD economies, is in evidence in the area of labour market rigidity. There seems also to have been some improvement in the ease with which business is conducted. The two major indicators which for Italy show no improvement are the legal ones. Judicial procedures still take an inordinately long time and the presence of the rule of law seems to have sharply decreased relative to what was happening elsewhere. In addition, economic performance must also have suffered given the presence, through much of the period, of what must have been the worst government Italy has had since World War II.

That progress in reforms has been slow would not have come as a surprise to Olson. One of his main arguments was that, as democracies grow in peace-time, so does the importance of their distributional coalitions. And these, in turn, “slow down a society’s capacity to adopt new technologies and to reallocate resources in response to changing conditions, and thereby reduce the rate of economic growth” (Olson 1982, p. 74). IGJ may not have swept away their distributional coalitions just after the war, but they may well have presided over a gradual build-up in their importance through time. It is not easy, however, to muster much evidence in favour of this thesis. Trade unions and monopolies (or oligopolies) are the two major culprits of Olsonian institutional sclerosis. Yet, the importance of unions has clearly shrunk over the last 10-20 years under the influence of labour market deregulation, massive immigration (at least in Italy and Germany), globalization, and the structural changes that have reduced the importance of heavily unionized public enterprises or large scale factories. Thus, most OECD countries, including IGJ, have seen significant declines in unionization and in strike activity (Table 9). As for restrictive product market practices, these must also have been weakened by deregulation and, more importantly, by the much higher degree of competition brought about by freeing world trade through successive GATT/WTO liberalization rounds and, within Europe, by the 1992 Single Market Programme. Most of these trends were shared by IGJ (even if, it has been argued, the extent of domestic competition has tended to decrease in Italy over time, despite all this (Ciocca 2007)).

It is true, however, that in IGJ, as well as in other OECD countries, resistance to change would seem to be strong. Low social mobility could be one reason, particularly for Italy. A recent survey of intergenerational income persistence suggests, for instance, that in Western Europe this is lowest in Italy, together with Spain (Causa *et al.* 2009), and, according to earlier work, certainly also lower than in Germany (D’Addio 2007) (no data were found for Japan). One would need, however, evidence on whether this has declined through time before arguing that it may have added to Italy’s lack of dynamism in recent years. A more plausible candidate for this could come from trends in the wealth of the population. Figure 6 shows changes in the ratio of net household wealth to income in IGJ and in three other major OECD countries. Abstracting from the strong fluctuations that came with the bursting of bubbles in Japan in the early 1990s and in Britain and the US in the late 2000s, what the chart clearly shows is that IGJ, and Italy in particular, are among the wealthiest societies on earth. It is not implausible to suggest that there could well be a link between “higher private wealth, a reduced propensity to

undertake effort and risk, and a deceleration in the pace of economic development” (Ciocca 2007, p. 346).

Finally, one further reason for semi-stagnation could come from the rapid population ageing of IGJ – in 2010 they had highest shares in the world of the over 65s in their populations (Figure 7). The links between demography and economics are obviously complex. Yet, common sense would suggest that there must be some truth in the simple saying that: “old men do not like change; old men do not take new initiatives”. The difficulties in reducing the welfare state can clearly be linked to ageing, as the median voter’s age rises and he/she is increasingly attached to his/her health and pension benefits. Similarly, decelerating productivity growth could be linked to lack of new initiatives. Survey evidence suggests, for instance, that older people are less entrepreneurial,²² and that there is less entrepreneurial activity in ageing countries.²³ If there is something in this hypothesis, then at least a partial explanation for why IGJ performed relatively poorly in recent years would be forthcoming. Unfortunately, of course, it is not an explanation that augurs well for the future given that ageing will continue for many years to come.

6. The Regional Problems

Regional differentials in output, employment, living standards, etc. exist in all countries. In Italy, however, they are particularly pronounced, at least if compared with those of Germany and Japan. The left-hand panel of Figure 8 presents a simple measure of geographic inequalities: the (weighted) coefficient of variation of regional GDP per capita for 11 regions in IGJ (and also for 16 regions in Germany after unification). The chart speaks for itself. Throughout the period, Italian differentials are by an order of magnitude larger than those of West Germany and Japan.

A particular feature of Italy’s differential is that it corresponds to a clear-cut division between two parts of the country (the Centre-North and the South), much more so than do the (smaller) German and Japanese differentials. The income gap between the *Mezzogiorno* and the Centre-North of Italy is also plotted in Figure 8 together with tentative estimates of roughly similar gaps in Germany and Japan. For Germany, the choice of a comparable indicator is simple after 1991. Unification brought together two regions at very different levels of development which are geographically clearly distinct. Before 1991, on the other hand, the richer and poorer regions of Western Germany were spread across the country. The indicator used shows the ratio of GDP per capita in four poorer *Länder* to that of the other more fortunate seven *Länder*.²⁴ For Japan, a slightly more geography-based approach was possible. The country was separated into a Central and relatively rich area and a more peripheral part made up

²² The EU’s Eurobarometer surveys on entrepreneurship show, for instance, that the percentage of people thinking of creating, or having created, a new enterprise is significantly higher among those aged 25-39 years and, to a lesser extent, 40-54 years, than it is among the over 55s.

²³ International surveys of entrepreneurship, as those presented by, for instance, the Global Entrepreneurship Monitor or International Entrepreneurship show that entrepreneurial activity tends to be lower in countries with a high percentage of the elderly than it is in “younger” economies.

²⁴ The four poorer ones (with GDP per capita below the West German average in both 1960 and 2008) are Niedersachsen, Rheinland-Pfalz, Saarland and Schleswig-Holstein.

of the North of the country, together with the various islands to the South.²⁵ In both comparisons, the Italian gap stands out for both its size and persistence. Even East Germany, despite suffering from a much larger gap vis-à-vis the West of the country at the time of unification, has been able in more recent years to close a good deal of the difference.

The obvious question this raises is how much Italy's performance was affected by the presence of such a major territorial divergence. At one very simple level, had the *Mezzogiorno* not existed, Italy would have been a much richer country. Already in the early 1950s, GDP per capita in purchasing power parity in the Centre-North was probably above that of both Germany and Japan, and the same would be broadly true today. This, however, is obviously far too simplistic not only because willing away the *Mezzogiorno* is not a feasible option, but also because, in its absence, many other things would also have differed in the country's economic history over the period.

A somewhat more realistic approach might alter the region's development. One relatively simple way would be to assume that, contrary to what happened, Italy would have conformed to a regional convergence rule which has been shown to apply to a number of advanced economies (Barro and Sala-i-Martin 1995). According to this rule, the gap between poor and rich regions has tended to decline by some 2 per cent per annum, be this in the US, in Japan or in Western Europe. Had Italy shared in this 2 per cent convergence process, the GDP per capita (constant price) differential between the two regions would have shrunk over the period from nearly 40 to 10 per cent, and the country's overall growth rate would have been somewhat higher. Over the 1953-2008 years, for instance, annual per capita GDP growth would have reached 3.7 rather than the recorded 3.4 per cent, with the South itself growing at 4.0 instead of 3.1 per cent.

The results just obtained assume, however, that nothing else would have changed had the *Mezzogiorno* been more successful. This is clearly an untenable proposition, as several important variables would clearly have behaved differently. Thus:

- i) More rapid income and employment growth in the South would have reduced migration flows to the Centre-North; this, in turn, would have made for higher wages and lower international competitiveness, at least in the 1950s and in the 1960s;
- ii) On the other hand, a more successful Southern economy might itself have developed some competitive tradeable sectors;
- iii) Equally, a more successful Southern economy would have required a smaller public policy effort; tax rates might thus have been lower and/or public expenditure might have been used for alternative (growth or welfare enhancing) purposes.

Quantifying such counterfactual experiments is not easy. A first step is to assess the diminished push for migration in the presence of faster income convergence between North and South. Since net migration diminished drastically from the mid-1970s onwards, it is only in the 1950s and 1960s that such an effect would have been important. While the actual income gap over the years 1955-73 (for which migration data exist) fell only slightly, it would have shrunk

²⁵ The Southern islands are Kyushu, Shikoku and Okinawa; the North is made up of Hokkaido and Tohoku.

from nearly 40 to just over 20 per cent of Northern per capita GDP had the *Mezzogiorno* converged at 2 per cent per annum. Assuming an elasticity of migration flows with respect to changes in this gap of -2, derived from the literature,²⁶ migration to the Centre-North in the years 1955-73 would have been reduced by, perhaps, 90,000 people per annum. Even assuming that migrants had a very high participation rate (70 per cent) and that half of them entered the manufacturing sector (both rather extreme assumptions), the reduction in the Centre-North's industrial work force would have been at most of some 7 to 8 per cent over the period as a whole.

The available evidence on the so-called "wage curve" suggests that changes in labour supply have only small effects on compensation levels. A consensus estimate is that the wage elasticity with respect to unemployment in developed countries, including Italy, is of roughly -0.1 per cent (Blanchflower and Oswald 1992; Nijkamp and Poot 2005). Incorporating such a figure, and even assuming a 10 per cent reduction in the Centre-North's labour force, would have resulted in only a 1 per cent increase in the compensation levels of the country's industrial work force and, perhaps, an even lower increase in unit labour costs (since lesser labour availability might also have induced somewhat higher productivity). Given a possible export elasticity with respect to the real exchange rate of -1,²⁷ export and overall output growth would have been reduced by perhaps 1 and 0.2 per cent respectively, thus not even fully undoing the favourable impact on national GDP growth of faster Southern convergence.

This extremely simplified calculation ignores, however, a number of other features that would have operated in the opposite direction. First, Northern industry might have engaged in more capital-deepening investment. Second, in the presence of faster income growth, Southern industry might have developed some competitive tradeable goods and/or services, in line with a hypothesis that postulates that fast growing countries generate increased exports (Krugman 1989). Third, and most importantly, it was argued in Section 2 that much of the strike wave that characterized the late 1960s and then led to a significant increase in labour market rigidities in the 1970s, may have been, in part at least, a response to badly managed migration flows. In the presence of more subdued migration Italy's economic history over these years could well have been different. Quantifying these various effects is beyond the scope of this paper, but an impressionistic judgment might well be that, over the longer run, they could have been at least as important, if not more so, than any negative first round effects of a somewhat lower labour supply elasticity in the Northern part of the country in the years 1955-73.

²⁶ Though estimates of elasticities of regional migration flows to changes in relative regional incomes (controlling for other variables such as unemployment and distance), can vary considerably across time and country, an earlier summary conclusion was that "most of the elasticities of migration with respect to income have been greater than 1.0 but less than 3.0" (Gallaway *et al.* 1975, p. 262). For present purposes, use was therefore made of (a rounded-up) result obtained specifically for Italy over the 1958-74 years (1.8 for relative wages) (Salvatore 1977).

²⁷ It is difficult to find reliable figures for international trade elasticities for the 1950s and 1960s. A well known survey of the time could not find statistically significant results for Italy (Houthakker and Magee 1969). For eight other advanced countries for which such results were obtained, the average estimate was of the order of -1.0 (*ibid.*).

In addition, of course, more successful Southern development would have made for less aid to the *Mezzogiorno*. Over the period as a whole, aid to the South may have averaged 1 to 1½ per cent of GDP per annum (Boltho 2010). Assuming that, as the per capita GDP gap shrank, efforts to help the South would have similarly diminished, Italian public expenditure and/or taxation levels would have been somewhat lower than they were. A conservative estimate might put the potential savings at perhaps ½ a per cent of GDP per annum. Had this been reflected in lower taxation, it might have generated some (small) positive impact on entrepreneurship and growth. Had it been used in more productive forms of expenditure (e.g. infrastructure rather than income maintenance payments or subsidies), it would almost certainly have had (somewhat larger) positive effects on growth. And to these benefits, should be added the likelihood of lower rent-seeking and crime in the South (fostered by high levels of public spending), and, perhaps, no *Lega*.

Summarising these various arguments, one could come to a simple (and, surely, broadly acceptable) conclusion: had the *Mezzogiorno*'s history over the last 60 years been more favourable, Italy would have clearly benefited. More rapid expansion in the South would have stimulated economic growth to the tune of, say, a ¼ per cent per annum. In addition, Italy might have avoided some of the costs that came from the *Autunno caldo*, might have used public funds more productively and would, almost certainly, have witnessed lower levels of criminal activity. Even if a somewhat higher real exchange rate would have penalized exports during the Golden Age, it could still be argued that had Italy's regional problems been more similar to those of the two other countries, its growth over the period might well have come somewhere in between those of Germany and Japan (3.5 and 4.2 per cent per annum respectively) and well above the 3.4 per cent actually recorded.

A comparison with Germany's regional experience since unification is also instructive in showing why East Germany has, so far at least, been more successful than the *Mezzogiorno* in closing its (much larger) income gap vis-à-vis the more developed part of the country. For one thing, the West German institutions that it adopted were, as argued earlier, almost certainly superior to Italian institutions in terms of "a functioning legal system, control of crime and corruption, efficient administration of taxes" (Carlin 2010, p. 12), etc.. In addition, East Germany was able to decouple itself from West German wage-setting mechanisms and unit labour costs declined rapidly in relative terms (*ibid.*).²⁸ Italian unions had, of course, followed an almost opposite pattern by enforcing wage equalization across the country in the late 1960s. And East Germany benefited from massive public investment into an infrastructure that, arguably, is now the best in Europe.

²⁸ Wage moderation was one component of this decoupling. Rapid productivity growth in the tradeable sector was another, thanks in part to industrial policy and in part to a return to historical specialization patterns (Carlin 2010).

7. Conclusions

As was argued in the Introduction, the economies of IGJ have shared a number of similarities since World War II. The most notable has, no doubt, been success. Growth of per capita income was rapid through most of the period, living standards are among the highest in the world, relatively generous welfare provisions (undreamt of in 1950) protect most of the population from sudden reversals of fortune, educational and health standards are much higher than they were 60 years ago, etc. In addition, IGJ are also very open to the rest of the world and are, if not welcoming, at least accepting the invigorating inflows of immigrants (Germany more so than Italy, and Italy more so than Japan).

Yet, looked at from the standpoint of Germany and Japan, there are disappointing features in Italy's performance. The relative lack of substantial reforms in the reconstruction years is one of them. On the other hand, and surprisingly, perhaps, a more permissive macroeconomic policy stance may not have been as pernicious as is commonly thought. In the 1970s and 1980s when the monetary and fiscal policy divergences between Italy on the one hand and Germany and Japan on the other were at their peak, Italy's growth performance was, in comparative perspective, just as good, if not better than that of the two other countries. Policy orthodoxy is not always conducive to rapid growth. It is true that the public debt that was created at the time is still burdening the country today, but this is partly due to a fiscal policy stance in most years of this century that was not compatible with the constraints imposed by monetary union.

More important were three other differences that have been stressed in this paper: administrative inefficiencies (reflected, *inter alia*, in poorly working institutions and in an inadequate infrastructure), the failure to resolve the underdevelopment of the country's South, and the near-permanent state of conflict in industrial relations. German and Japanese bureaucratic efficiency, functioning institutions and infrastructure quality would seem to be, on available evidence, greatly superior to Italy's. Regional problems, never serious in Japan, were severe in Germany after unification, but have so far been tackled rather successfully. And industrial relations were exceptionally peaceful in Germany and Japan in comparison to Italy's (Table 9). Yet, despite all this conflict, income distribution in Italy is much less equal than in Germany and, at least until recently, in Japan.

Behind these differences lies probably a further difference with much older roots: the incapacity of the Italian state compared to that of the two other countries to efficiently run a modern economy. This incapacity is easily seen in the area of regional development where vast funds were wasted, often in rent-seeking activities and corruption. But it also permeates the area of industrial relations. Seldom did the state try to play a pacifying role (as in various ways it did in Germany and Japan). The mismanagement of internal migration in the 1960s is just one example of government shortcomings; the almost total failure of promoting reforms since 2000 (other than for some purely *ad-personam* changes in the area of judicial procedures) is another. And while Germany (through tax policy) and Japan (through industrial policy) helped the formation of what has been called "patient" capital, Italy, since the 1960s, had no such ambitions. Its corporate sector gave priority to short-termism, capital flight and continuing requests for public aid. Ultimately, Italy paid the price for remaining profoundly divided

between a business class that, at best, patronized trade unions and looked only for immediate profits, and a trade union movement whose significant anti-capitalist component was largely oblivious to any form of economic constraint (Salvati 2000). Germany was spared such ideological conflicts (Hennings 1982), while Japan never really encountered them.

As was rightly argued, Germany and Japan have shown through time a capacity to efficiently take and manage major decisions, a capacity that Italy lacks (Salvati 1984). Had the country had a more efficient state and more cooperative industrial relations, its regional problems would probably have been less severe, and its growth performance would almost certainly have been significantly better than what was recorded. As it is, this performance was very respectable. Italy today enjoys living standards that are not much below those of Germany and Japan and grew nearly as rapidly as they did, despite the constraints it faced. The regret is that so much more could have been achieved.

This is particularly true at present. The last 15 years have seen very slow growth in the OECD area, but particularly so in IGJ. Some reasons for this poor performance are common to the three countries (e.g. demography and, possibly, the dampening effects of earlier successes and rapid wealth accumulation). Japan, in addition, is still paying the consequences of two decades of deflation. Germany, on the other hand, has recently been able, through a concerted effort on the part of companies and trade unions, to re-conquer external competitiveness. Germany's wage flexibility is particularly noteworthy. In the East of the country it has promoted convergence; in the West it has stimulated exports. Italy cannot claim a Japanese-type excuse and has, contrary to Germany, lost competitiveness since the Euro came into being.

More importantly, in the three areas singled out in this paper as having hindered performance relative to Germany and Japan, little progress is evident. Industrial relations have improved somewhat, but more because of the erosion of union power than because of any concerted effort to build a social consensus. The *Mezzogiorno*'s relative backwardness has hardly changed, thus frustrating any attempt at raising Italy's potential growth rate. The present government's incompetence has sunk to new depths. Given the virtual absence of reforms and a hopelessly divided political system, it is difficult to see how the country can, despite the continuing vitality of its SME sector, return to significantly higher growth rates.

Tables and Figures

Table 1. Italy, Germany, Japan: Growth of Per Capita GDP

(average annual percentage changes)

	1946-53	1953-73	1973-95	1995-2011 ^a	1946-2011 ^a
Italy	8.5	5.1	2.3	0.5	3.4
Germany	10.7	4.8	1.9	1.3	3.6
Japan	8.0	8.0	2.5	0.7	4.3
Rest of OECD area ^b	2.7	2.9	1.8	1.7	2.2

a. The data for 2011 come from Oxford Economics forecasts.

b. The “Rest of the OECD area” (which excludes IGJ) is defined as Western Europe (excluding Turkey), North America (excluding Mexico), Australia and New Zealand.

Sources: Baffigi (2011); The Conference Board Total Economy Database, January 2011; Maddison, 2003; Oxford Economics Data Base, July 2011.

Table 2. Italy, Germany, Japan: Macroeconomic Policy Stance, 1953-73

	Budget balance ^a (in per cent of nominal GDP)	Growth of broad money supply (average annual percentage changes)	Consumer price inflation
Italy	-2.5	14.1	3.8
Germany	1.9	14.0	2.7
Japan	0.3	18.5	4.6

a. Annual averages; the data are approximate as no consistent series for government net lending seems to be available for the whole period for any of the three countries.

Sources: IMF, *International Financial Statistics* (1980 Yearbook) and Data Base; OECD, *National Accounts of OECD Countries, 1953-1969* and Economic Outlook Data Base; Ohkawa and Shinohara, 1979.

Table 3. Italy, Germany, Japan: Educational Attainments

	Population aged 15-64 (equivalent years of primary education)		Population aged 25 and over (average years of total schooling)	
	1950	1973	1950	1970
Italy	5.5	7.6	4.1	5.2
Germany	10.4	11.6	4.9	5.2
Japan	9.1	12.1	6.1	7.5

Sources: Barro and Lee, 2010; Maddison, 1995.

Table 4. Italy, Germany, Japan: Export Performance in the “Golden Age”

(average annual percentage changes)

	A. Price and Quantity Shifts, 1953-73		
	Export volume growth	Export unit values Relative to competitors	Relative to domestic wholesale prices
Italy	13.1	-1.2	-1.2
Germany	10.7	1.2	2.1
Japan	17.2	-1.5	-0.5

	B. Growth of Manufactured Exports and Markets ^a , 1955-71		
	Export market growth	Export volume growth	Gain or loss in market shares
Italy	9.1	15.2 ^b	6.1
Germany	9.9	10.3	0.5
Japan	7.1	17.7	10.5

a. In volume terms. Market growth was given by the growth of manufactured exports of 12 major OECD economies in six commodity groups to eight geographical areas.

b. Italy's data, not shown separately in the original source, were derived from OEEC/OECD foreign trade statistics and deflated by unit values that were roughly estimated using available (incomplete and imperfect) Italian data.

Sources: *Annuario statistico italiano*; Batchelor *et al.*, 1980; IMF, *International Financial Statistics* (1980 and 1990 Yearbooks); OEEC, *Statistical Bulletins, Foreign Trade, Series IV*; OECD, *Trade by Commodities, Series C*.

Table 5. Italy, Germany, Japan: Responses to the Oil Shocks

(average annual percentage changes)

	Average earnings		Consumer price inflation	
	1973-76	1978-81	1973-76	1978-81
Italy	21.7	21.2	17.6	17.9
Germany	7.9	5.5	5.6	5.2
Japan	17.5	5.4	14.8	5.5

Sources: International Monetary Fund, *International Financial Statistics* Data Base; Oxford Economics Data Base.**Table 6. Italy, Germany, Japan: Financial Indicators, 1973-95**

(average annual percentage changes or annual 1974-95 averages)

	Budget deficit ^a	Consumer price inflation	Nominal effective exchange rate	Real effective exchange rate	Real short-term interest rate ^b
Italy	-9.8	10.8	-5.0	-0.5	2.7
Germany	-2.8	3.4	3.3	2.0	2.9
Japan	-2.2	4.2	5.2	2.9	2.9

a. In per cent of nominal GDP.

b. Short-term rate less change in GDP deflator.

Sources: International Monetary Fund, *International Financial Statistics* Data Base; OECD, *Economic Outlook* Data Base; Oxford Economics Data Base.

Table 7. Italy, Germany, Japan: Importance of Small Firms

(share of manufacturing employment in establishment or firms with 10 to 99 employees)

	1961	1971	1981	1991	2001
Italy	26.4 ^c	28.3	33.6	38.9	41.8
Germany ^a	18.3	17.4	22.2	20.5 ^d	22.5
Japan ^b	43.7 ^e	40.3	41.4	41.7	41.7

Note: The data may not be strictly comparable across countries.

- a. The data are approximate since definitions changed in the period and East Germany is included from 1991. A very rough attempt was made to try to make the data comparable.
- b. The employment data exclude establishments with 1 to 3 workers (1 to 4 in 1981).
- c. 11 to 100 employees.
- d. 1990.
- e. 1959.

Sources: Ciocca, 2007; *Japan Statistical Yearbook* (various issues); *Statistisches Jahrbuch* (various issues).

Table 8. Italy, Germany, Japan: Institutional Reforms

Selected indicators

		Rule of law ^a	Employm. protect. ^b	Starting a busin. ^c	Closing a busin. ^d	Enforcng. contracts ^e
Italy	2003	1.05 ^f	2.7 ^g	16	39	1390
	2009	0.39	1.4	6 ^h	58 ^h	1210 ^h
Germany	2003	1.63 ^f	2.5 ^g	27	50	403
	2009	1.63	2.1	12 ^h	53 ^h	394 ^h
Japan	2003	1.36 ^f	2.0 ^g	21	93	242
	2009	1.31	1.2	16 ^h	93 ^h	360 ^h
Rest of OECD area	2003	1.59 ^f	1.0 ^g	12	71	309
	2009	1.56	0.9	8 ^h	78 ^h	366 ^h

Note: The data may not be strictly comparable across countries.

a. Deviations from world average.

b. Strictness of employment legislation. OECD index updated with World Bank summary measure of labour market rigidities.

c. Average of number of procedures and time spent (in days) to register a new firm.

d. Claimants' recovery rate (in percentage) from an insolvent firm.

e. Duration of legal procedures (in days) needed to resolve disputes.

f. 1996.

g. Late 1990s.

h. 2010.

Sources: OECD, *Employment Outlook*, 2004; World Bank, "Worldwide Governance Indicators" and "Doing Business" Data Bases.

Table 9. Italy, Germany, Japan: Importance of Trade Unions and Strikes

	Italy	Germany	Japan
Trade Union Density^a			
1960	24.7	34.7	32.3
1970	37.0	32.0	35.1
1980	49.6	34.9	31.1
1990	38.8	31.2	25.4
2000	34.8	24.6	21.5
2010	35.1	18.6	18.4
Strike Activity^b			
1950-59	679	98	715
1960-69 ^c	1402	22	250
1970-79	1503	53	124
1980-89	621	27	10
1990-99	158	11	2
2000-08	92 ^d	5	0

a. Union members in per cent of total employees.

b. Working days lost per thousand employees.

c. Industry only.

d. 2000-07.

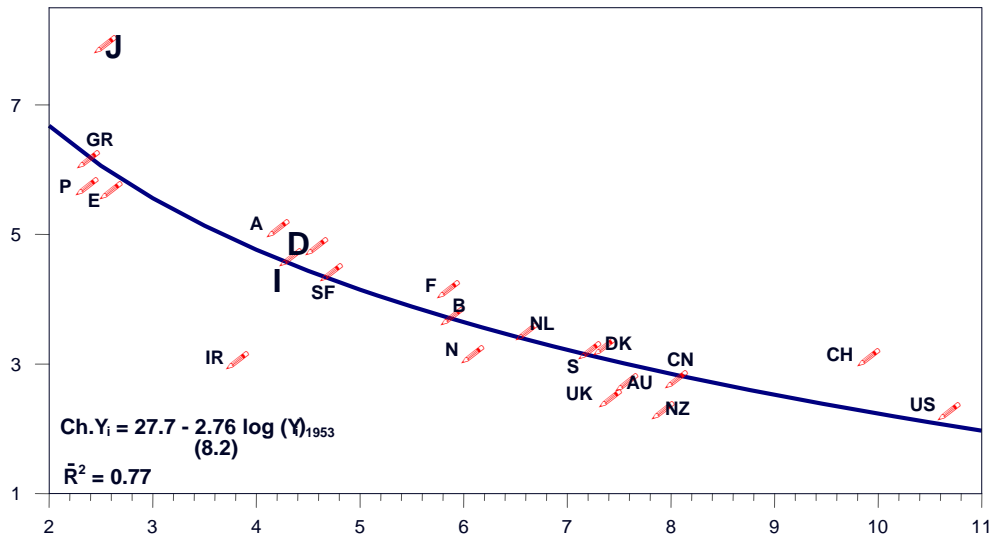
Sources: Bean, 1989; *Economic and Labour Market Review* and *Employment Gazette* (various issues); Flora *et al.* 1987; ILO, Statistical Database; *Labour Market Trends* and *Monthly Labor Review* (various issues); OECD Data Base.

Fig. 1

Convergence: 1953-1973

$$\text{Ch. } Y_i = (\log Y_{i1973} - \log Y_{i1953}) \% \text{ p.a.}$$

Growth rate of GDP per capita

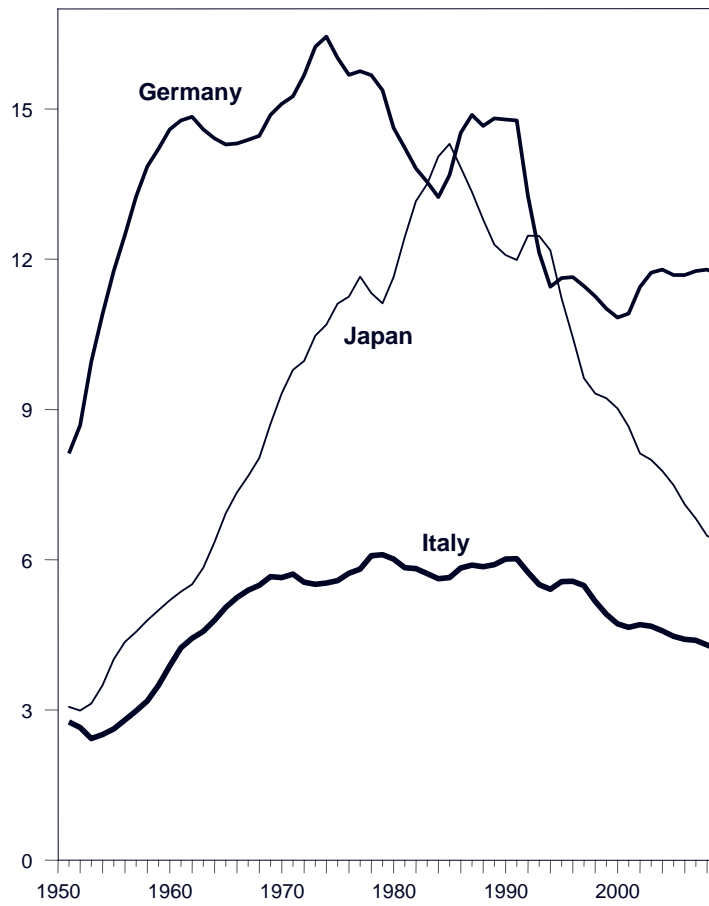


Country's GDP per capita in 1953 (Y_{i1953}) in 1990 ppp dollars (thsnds.)

Source: basic data from Maddison (2003).

Fig. 2

Export Performance
Share in world exports of manufactures
(3 years moving averages)

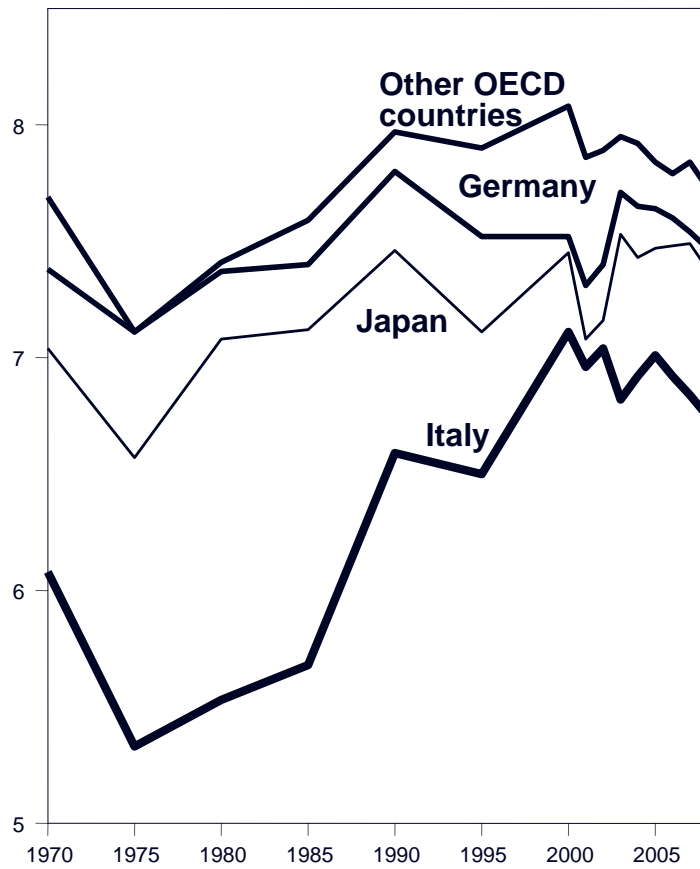


Sources: Gatt, International Trade (various years); WTO Data Bank.

Fig. 3

THE "FREEDOM" INDEX

**Indicator of government interference
with the economy**

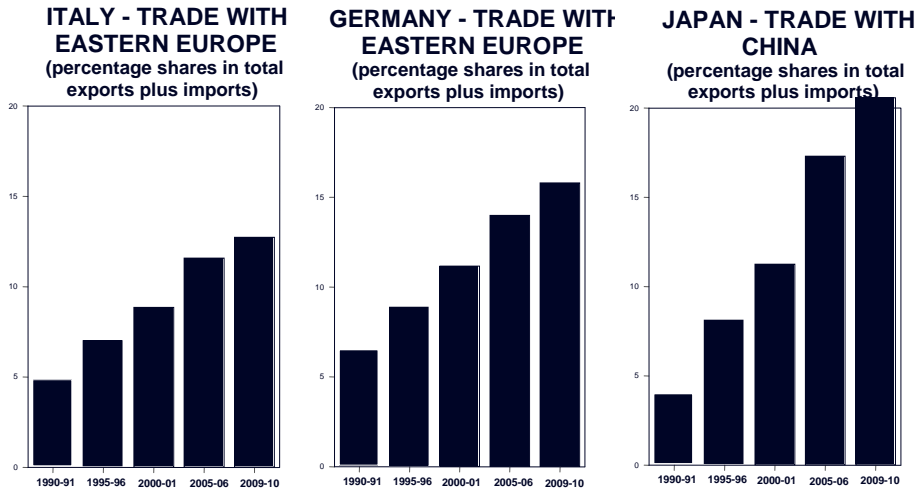


Note : values go from 0 to 10; higher values denote greater economic freedom

Source: Gwartney and Lawson (2009).

Fig. 4

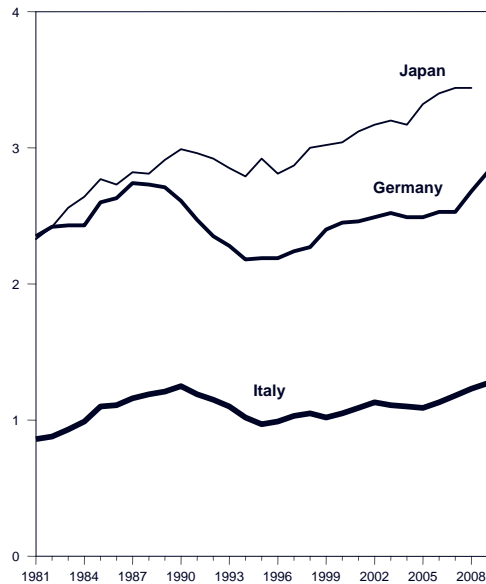
TRADE WITH EASTERN EUROPE AND CHINA



Source: IMF, *Direction of Trade Statistics*.

Fig. 5

R&D EXPENDITURE
(in per cent of GDP)

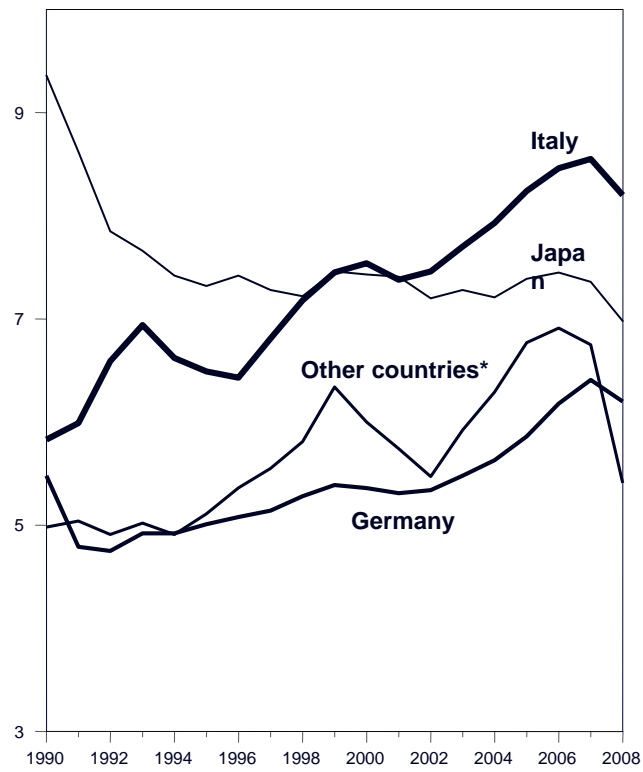


Source: OECD Data Bank.

Fig. 6

WEALTH/INCOME RATIOS

**(total household assets in per cent
of disposable income)**

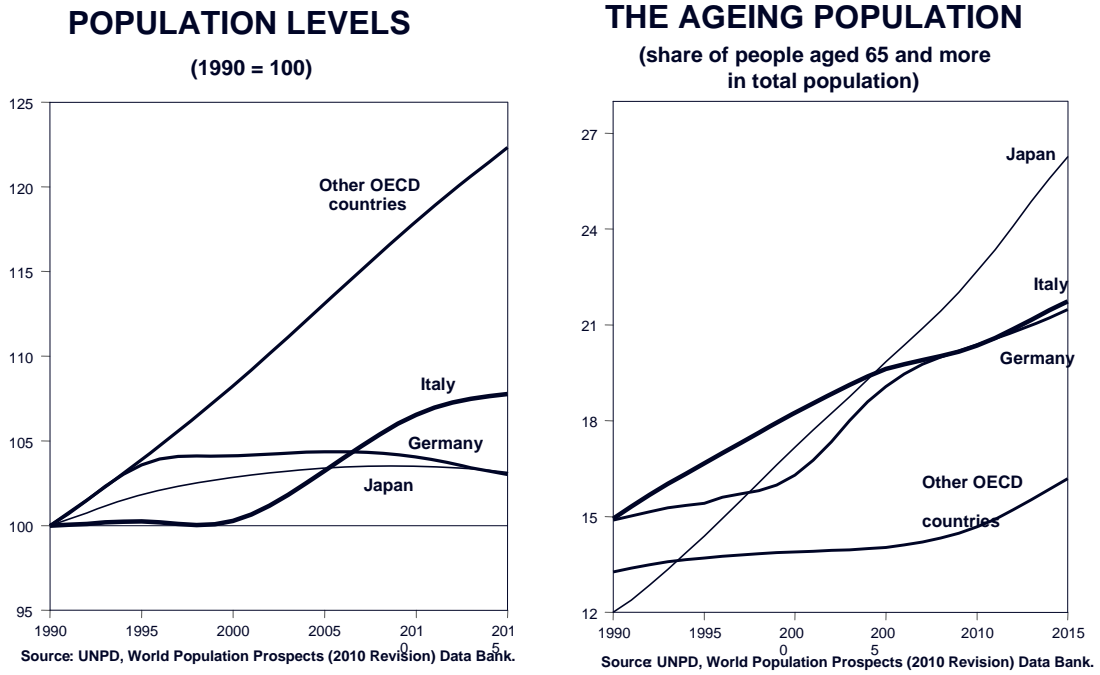


*France, United Kingdom and United States.

Source: OECD, *Economic Outlook* (various issues).

Fig. 7

DEMOGRAPHY



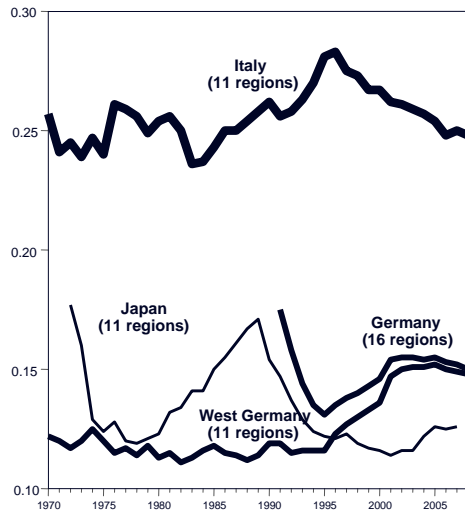
Japan

Source: UNPD, World Population Prospects (2010 Revision) Data Bank.

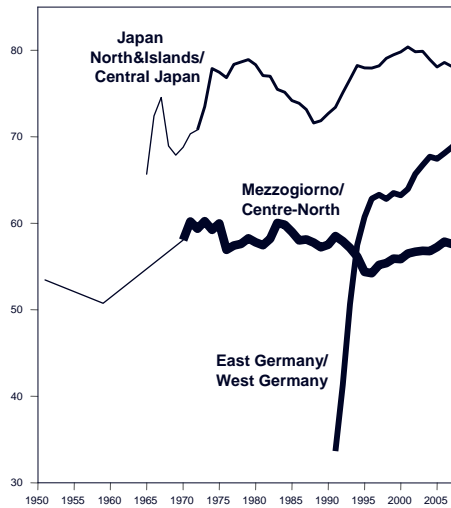
Fig. 8

REGIONAL INCOME DIFFERENTIALS

A. Weighted coefficient of variation for per capita regional GDP



B. "Poor" region's GDP per capita in % of "rich" region (current prices)



Sources: Italian, German and Japanese National Accounts.

References

- Abelshauser, W. (2004), *Deutsche Wirtschaftsgeschichte seit 1945*, München: C.H.Beck.
- Abramovitz, M. (1986), “Catching up, Forging ahead, and Falling behind”, *Journal of Economic History*, 46, 2, pp. 385-406.
- Ackley, G. and Ishi, H. (1976), “Fiscal, Monetary, and Related Policies”, in Patrick, H. and Rosovsky, H. (eds.), *Asia’s New Giant*, Washington, DC: Brookings Institution.
- Arcelli, M. (ed.) (1997), *Storia, economia e società in Italia, 1947-1977*, Bari: Laterza.
- Arcelli, M and Micossi, S. (1997), “La politica economica negli anni Ottanta (e nei primi anni Novanta)”, in Arcelli, M. (ed.).
- Armstrong, P., Glyn, A. and Harrison, J. (1991), *Capitalism since 1945*, Oxford: Basil Blackwell.
- Baffigi, A. (2011), *Italy’s Historical National Accounts, 1861-2011*, Banca d’Italia – Quaderni di Storia Economica, October, forthcoming.
- Barba Navaretti, G., Bugamelli, M., Ottaviano, G. and Schivardi, F. (2010), “The Global Operations of European Firms”, *Bruegel Policy Brief*, 5, June.
- Barca, F. (ed.) (1997), *Storia del capitalismo italiano dal dopoguerra a oggi*, Roma: Donzelli editore.
- Barca, F. (1997), “Compromesso senza riforme nel capitalismo italiano”, in Barca, F. (ed.).
- Barca, F. and Trento, S. (1997), “La parabola delle partecipazioni statali: una missione tradita”, in Barca, F. (ed.).
- Barca, F., Iwai, K., Pagano, U. and Trento, S. (2001), “Divergence in Corporate Governance Models: The Role of Institutional Shocks”, in Boltho, A., Vercelli, A. and Yoshikawa, H. (eds.).
- Barro, R.J. and Sala-i-Martin, X. (1995), *Economic Growth*, New York, NY: McGraw-Hill.
- Barro, R.J. and Lee, J.-W. (2010), *A New Data Set of Educational Attainment in the World 1950-2010*, NBER Working Paper, no. 15902, April.
- Basevi, G. and Onofri, P. (1997), “Uno sguardo retrospettivo alla politica economica italiana negli anni Settanta”, in Arcelli, M. (ed.).
- Batchelor, R.A., Major, R.L. and Morgan, A.D. (1980), *Industrialisation and the Basis for Trade*, Cambridge: Cambridge University Press.
- Bean, R. (ed.) (1989), *International Labour Statistics*, London: Routledge.
- Blanchflower, D.G. and Oswald, A.J. (1992), *International Wage Curves*, NBER Working Paper, no. 4200, October.
- Boltho, A. (1986), “L’economia italiana a confronto: 1973-1985”, in Ente Einaudi, *Oltre la crisi*, Bologna: Il Mulino.
- (1996a), “Was Japanese Growth Export-led?”, *Oxford Economic Papers*, 48, 3, July, pp. 415-432.

- (1996b), “Convergence, Competitiveness and the Exchange Rate”, in Crafts, N. and Toniolo, G. (eds.).
- (2001a), “Reconstruction after Two World Wars: Why the Differences ?”, *Journal of European Economic History*, 30, 2, Fall, pp. 429-456.
- (2001b), “Foreign Trade Performance: From Early Similarities to Present Diversity”, in Boltho, A., Vercelli, A. and Yoshikawa, H. (eds.).
- (2010), “Why Do Some Regional Differentials Persist and Others Do Not ? Italy and Spain Compared, 1950-2000”, *Rivista di storia economica*, 26, 1, April, pp. 3-33.
- Boltho, A., Vercelli, A. and Yoshikawa, H. (eds.) (2001), *Comparing Economic Systems: Italy and Japan*, Basingstoke: Palgrave.
- Calmfors, L. and Driffill, J. (1988), “Bargaining Structure, Corporatism, and Macroeconomic Performance”, *Economic Policy*, 6, April, pp. 12-61.
- Carlin, W. (1996), “West German Growth and Institutions, 1945-90”, in Crafts, N. and Toniolo, G. (eds.).
- (2010), *Good Institutions are not Enough: Ongoing Challenges of East German Development*, CESifo Working Paper Series, no. 3204, October.
- Castronovo, O. (1995), *Storia economica d’Italia: Dall’Ottocento ai giorni nostri*, Torino: Einaudi.
- Causa, O., Dantan, S. and Johansson, Å. (2009), *Intergenerational Social Mobility in European OECD Countries*, OECD Economics Department Working Papers, no. 709.
- Caves, R.E. (1971), “Export-led Growth and the New Economic History”, in Bhagwati, J.N., Jones, R.W., Mundell, R.A. and Vanek, J. (eds.), *Trade, Balance of Payments and Growth*, Amsterdam: North Holland.
- Ciocca, P. (2007), *Ricchi per sempre ?*, Torino: Bollati Boringhieri.
- Ciocca, P., Filosa, R. and Rey, G.M. (1973), “Integrazione e sviluppo dell’economia italiana nell’ultimo ventennio: un riesame critico”, in Banca d’Italia, *Contributi alla ricerca economica*, vol.III, Roma.
- Crafts, N. and Toniolo, G. (eds.) (1996), *Economic Growth in Europe since 1945*, Cambridge: Cambridge University Press.
- D’Addio, A.C. (2007), *Intergenerational Transmission of Disadvantage: Mobility or Immobility Across Generations?*, OECD Social, Employment and Migration Working Papers, no. 52.
- Da Empoli, D. (1993), “Public Choice in Italy”, *Public Choice*, 77, 1, pp. 75-83.
- de Cecco, M. (1971), “Lo sviluppo dell’economia italiana e la sua collocazione internazionale”, *Rivista internazionale di scienze economiche e commerciali*, 10, pp. 973-988.
- de Cecco, M. and Giavazzi, F. (1993), “Inflation and Stabilization in Italy: 1946-1951”, in Dornbusch, R., Nöbling, W. and Layard, R. (eds.), *Postwar Economic Reconstruction and Lessons for the East Today*, Cambridge, MA: MIT Press.
- Egebo, T. and Englander, A.S. (1992), “Institutional Commitments and Policy Credibility: A Critical Survey and Empirical Evidence from the ERM”, *OECD Economic Studies*, 18, Spring, pp. 45-84.

- Eichengreen, B. (2007), *The European Economy since 1945*, Princeton, NJ: Princeton University Press.
- Flora, P., Kraus, F. and Pfenning, W. (1987), *State, Economy, and Society in Western Europe, 1815-1975*, Frankfurt: Campus Verlag.
- Gallaway, L.E., Rydén, R. and Vedder, R.K. (1975), "Internal Labor Migration in Sweden, 1967", *Swedish Journal of Economics*, 75, 3, September, pp. 257-265.
- Giavazzi, F. and Spaventa, L. (1989), "Italy: The Real Effects of Inflation and Disinflation", *Economic Policy*, 8, April, pp. 133-171.
- Giersch, H., Paqué, K.H. and Schmieding, H. (1992), *The Fading Miracle*, Cambridge: Cambridge University Press.
- Graziani, A. (1972) (ed.), *L'economia italiana dal 1945 a oggi*, Bologna: Il Mulino.
- (1998), *Lo sviluppo dell'economia italiana*, Torino: Bollati Boringhieri.
- Gros-Pietro, G.M. (1990), "La ristrutturazione dei grandi gruppi industriali", *Rivista di politica economica*, 80, 5, pp. 149-169.
- Gwartney, J. and Lawson, R. (2009), *Economic Freedom of the World*, Vancouver: Economic Freedom Network.
- Hall, P.A. and Soskice, D. (2001), "An Introduction to Varieties of Capitalism", in Hall, P.A. and Soskice, D. (eds.), *Varieties of Capitalism*, Oxford: Oxford University Press.
- Heckelman, J.C. (2007), "Explaining the Rain: The Rise and Decline of Nations after 25 Years", *Southern Journal of Economics*, 74, 1, July, pp. 18-33.
- Hennings, K.H. (1982), "West Germany", in Boltho, A. (ed.) (1982), *The European Economy: Growth and Crisis*, Oxford: Oxford University Press.
- Houthakker, H.S. and Magee, S.P. (1969), "Income and Price Elasticities in World Trade", *Review of Economics and Statistics*, 51, 2, May, pp. 111-125.
- Howell, D.R., Baker, D. Glyn, A. and Schmitt, J. (2007), "Are Protective Labor Market Institutions at the Root of Unemployment? A Critical Review of the Evidence", *Capitalism and Society*, 2, 1, pp. 1-73.
- Kawagoe, T. (1993), "Land Reform in Postwar Japan", in Teranishi, J. and Kosai, Y. (eds.).
- Kindleberger, C.P. (1967), *Europe's Postwar Growth*, Cambridge, MA: Harvard University Press.
- Knack, S. and Keefer, P. (1997), "Does Social Capital Have an Economic Payoff? A Cross-Country Investigation", *Quarterly Journal of Economics*, 112, 4, November, pp. 1251-1288.
- Kosai, Y. (1986), *The Era of High-Speed Growth*, Tokyo: University of Tokyo Press.
- Krugman, P. (1984), "Import Protection as Export Promotion: International Competition in the Presence of Oligopolies and Economies of Scale", in Kierzkowski, H. (ed.), *Monopolistic Competition and International Trade*, Oxford: Oxford University Press.
- (1989), "Differences in Income Elasticities and Trends in Real Exchange Rates", *European Economic Review*, 33, 5, May, pp. 1031-1046.
- Maddison, A. (1995), *Monitoring the World Economy, 1820-1992*, Paris: OECD.

- (2003), *The World Economy: Historical Statistics*, Paris: OECD.
- Magnani, M. (1997), “Alla ricerca di regole nelle relazioni industriali: breve storia di due fallimenti”, in Barca, F. (ed.).
- Maier, C.S. (1999), “Conti e racconti: interpretazioni della performance dell’economia italiana dal dopoguerra a oggi”, in Ciocca, P. and Toniolo, G. (eds.), *Storia economica d’Italia, I, Interpretazioni*, Bari: Laterza.
- Mauro, P. (1995), “Corruption and Growth”, *Quarterly Journal of Economics*, 110, 3, pp. 681-712.
- Michalski, W. (1970), *Export und Wirtschaftswachstum*, Hamburg: Verlag Weltarchiv.
- Nakamura, T. (1981), *The Postwar Japanese Economy*, Tokyo: University of Tokyo Press.
- National Institute (1963), “Fast and Slow-Growing Products in World Trade”, *National Institute Economic Review*, 25, August, pp. 22-39.
- Nickell, S., Nunziata, L. and Ochel, W. (2005), “Unemployment in the OECD since the 1960s. What Do We Know?”, *Economic Journal*, 115, 1, January, pp. 1-27.
- Nijkamp, P. and Poot, J. (2005), “The Last Word on the Wage Curve?”, *Journal of Economic Surveys*, 9, 3, July, pp. 421-450.
- OECD (1989), *Economies in Transition: Structural Adjustment in OECD Countries*, Paris: OECD.
- Ohkawa, K. and Shinohara, M. (eds.) (1979), *Patterns of Japanese Economic Development: A Quantitative Appraisal*, New Haven, CT: Yale University Press.
- Olson, M. (1982), *The Rise and Decline of Nations*, New Haven, CT: Yale University Press.
- Panic, M. and Rajan, A.H. (1971), *Product Changes in Industrial Countries’ Trade: 1955-1968*, London: National Economic Development Office.
- Paqué, K.H. (1996), “Why the 1950s and not the 1920s ? Olsonian and non-Olsonian Interpretations of Two Decades of German Economic History”, in Crafts, N. and Toniolo, G. (eds.).
- Prodi, R. and De Giovanni, D. (1990), “Quarantacinque anni di politica industriale in Italia: protagonisti, obiettivi e strumenti”, *Rivista di politica economica*, 80, 5, pp. 35-62.
- Rossi, N. and Toniolo, G. (1996), “Italy”, in Crafts, N. and Toniolo, G. (eds.).
- Salvati, M. (1984), *Economia e politica in Italia dal dopoguerra a oggi*, Milano: Garzanti.
- (2000), *Occasioni mancate*, Bari: Laterza.
- (2011), *Le origini lontane del ristagno economico presente*, mimeo.
- Salvatore, D. (1977), “An Econometric Analysis of Internal Migration in Italy”, *Journal of Regional Science*, 17, 3, January, pp. 395-408.
- Signorini, F. L. and Visco, I. (1997), *L’economia italiana*, Bologna: Il Mulino.
- Soskice, D. (1990), “Wage Determination: The Changing Role of Institutions in Advanced Industrialized Countries”, *Oxford Review of Economic Policy*, 6, 4, Winter, pp. 36-61.
- Stern, R.M. (1967), *Foreign Trade and Economic Growth in Italy*, New York, NY: Frederick A. Praeger.

- Teranishi, J. and Kosai, Y. (1993), "Introduction: Economic Reform and Stabilization in Postwar Japan", in Teranishi, J. and Kosai, Y. (eds.).
- Teranishi, J. and Kosai, Y. (eds.) (1993), *The Japanese Experience of Economic Reforms*, New York, NY: St. Martin's Press.
- Tsuru, S. (1976), *The Mainsprings of Japanese Growth: A Turning Point ?*, Paris: The Atlantic Institute.
- Valli, V. (1977), *L'economia e la politica economica italiana (1945-1979)*, Milano: Etas Libri.
- von Prollius, M. (2006), *Deutsche Wirtschaftsgeschichte nach 1945*, Göttingen: Vandenhoeck und Ruprecht.
- World Economic Forum (various years), *Global Competitiveness Report, 2008-2009, 2009-2010, 2010-2011* (<http://www.weforum.org/issues/global-competitiveness>).
- Yamamura, K. (1982), "Success that Soured: Administrative Guidance and Cartels in Japan", in Yamamura, K. (ed.), *Policy and Trade Issues of the Japanese Economy*, Tokyo: University of Tokyo Press.
- Yoshikawa, H. (1995), *Macroeconomics and the Japanese Economy*, Oxford: Oxford University Press.

PREVIOUSLY PUBLISHED “QUADERNI” (*)

- N. 1 – *Luigi Einaudi: Teoria economica e legislazione sociale nel testo delle Lezioni*, by Alberto Baffigi (September 2009).
- N. 2 – *European Acquisitions in the United States: Re-examining Olivetti-Underwood Fifty Years Later*, by Federico Barbiellini Amidei, Andrea Goldstein and Marcella Spadoni (March 2010).
- N. 3 – *La politica dei poli di sviluppo nel Mezzogiorno. Elementi per una prospettiva storica*, by Elio Cerrito (June 2010).
- N. 4 – *Through the Magnifying Glass: Provincial Aspects of Industrial Growth in Post-Unification Italy*, by Carlo Ciccarelli and Stefano Fenoaltea (July 2010).
- N. 5 – *Economic Theory and Banking Regulation: The Italian Case (1861-1930s)*, by Alfredo Gigliobianco and Claire Giordano (November 2010).
- N. 6 – *A Comparative Perspective on Italy's Human Capital Accumulation*, by Giuseppe Bertola and Paolo Sestito (October 2011).
- N. 7 – *Innovation and Foreign Technology in Italy, 1861-2011*, by Federico Barbiellini Amidei, John Cantwell and Anna Spadavecchia (October 2011).
- N. 8 – *Outward and Inward Migrations in Italy: A Historical Perspective*, by Matteo Gomellini and Cormac Ó Gráda (October 2011).
- N. 9 – *Comparative Advantages in Italy: A Long-run Perspective*, by Giovanni Federico and Nikolaus Wolf (October 2011).
- N. 10 – *Real Exchange Rates, Trade, and Growth: Italy 1861-2011*, by Virginia Di Nino, Barry Eichengreen and Massimo Sbracia (October 2011).
- N. 11 – *Public Debt and Economic Growth in Italy*, by Fabrizio Balassone, Maura Francese and Angelo Pace (October 2011).
- N. 12 – *Internal Geography and External Trade: Regional Disparities in Italy, 1861-2011*, by Brian A'Hearn and Anthony J. Venables (October 2011).
- N. 13 – *Italian Firms in History: Size, Technology and Entrepreneurship*, by Franco Amatori, Matteo Bugamelli and Andrea Colli (October 2011).
- N. 14 – *Italy, Germany, Japan: From Economic Miracles to Virtual Stagnation*, by Andrea Boltho (October 2011).
- N. 15 – *Old and New Italian Multinational Firms*, by Giuseppe Berta and Fabrizio Onida (October 2011).
- N. 16 – *Italy and the First Age of Globalization, 1861-1940*, by Harold James and Kevin O'Rourke (October 2011).
- N. 17 – *The Golden Age and the Second Globalization in Italy*, by Nicholas Crafts and Marco Magnani (October 2011).
- N. 18 – *Italian National Accounts, 1861-2011*, by Alberto Baffigi (October 2011).
- N. 19 – *The Well-Being of Italians: A Comparative Historical Approach*, by Andrea Brandolini and Giovanni Vecchi (October 2011).
- N. 20 – *A Sectoral Analysis of Italy's Development, 1861-2011*, by Stephen Broadberry, Claire Giordano and Francesco Zollino (October 2011).
- N. 21 – *The Italian Economy Seen from Abroad over 150 Years*, by Marcello de Cecco (October 2011).
- N. 22 – *Convergence among Italian Regions, 1861-2011*, by Giovanni Iuzzolino, Guido Pellegrini and Gianfranco Viesti (October 2011).
- N. 23 – *Democratization and Civic Capital in Italy*, by Luigi Guiso and Paolo Pinotti (October 2011).
- N. 24 – *The Italian Administrative System since 1861*, by Magda Bianco and Giulio Napolitano (October 2011).
- N. 25 – *The Allocative Efficiency of the Italian Banking System, 1936-2011*, by Stefano Battilossi, Alfredo Gigliobianco and Giuseppe Marinelli (October 2011).

(*) Requests for copies should be sent to:

Banca d'Italia – Servizio Studi di struttura economica e finanziaria – Divisione Biblioteca e Archivio storico – Via Nazionale, 91 – 00184 Rome – (fax 0039 06 47922059).

The *Quaderni* are available on the Internet www.bancaditalia.it.

*Printed by the
Printing and Publishing Division
of the Bank of Italy*