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## **The Italian economy: a problem of growth**

Pierluigi Ciocca  
Deputy Director General of the Bank of Italy

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A mediocre performance. Italy's economy experienced "miraculous" growth, expanding at a lively pace from the end of the Second World War until the early 1970s.<sup>1</sup> Since then a tendency to slow down has prevailed. This is apparent in all the indicators: GDP (total and per capita, effective and potential), consumption, productivity and exports (Tables 1 and 2).<sup>2</sup> Compared with the past, and with economies that have a larger service sector, the results have been particularly disappointing in the decade following the rupture caused by the 1992 foreign exchange crisis. From the first quarter of 2001 through the second quarter of 2003 economic activity expanded hardly at all: the most protracted stagnation in half a century.

Rectification of Italy's historical lag in development, wage and oil shocks, public sector imbalances and macroeconomic instability are, at least *prima facie*, explanations of the slowdown of the 1970s and 1980s. It is less easy to explain the poor performance afterwards, recommend economic policies and courses of conduct, and hazard medium-term forecasts.

The economic question facing Italian society has returned in all its gravity and all its profundity as a *problem of growth*. Obviously, the issues are why this has happened and what can be done. Given the nature of the problem – long-term dynamics – attention must be focused above all on the supply side.<sup>3</sup>

Five families of variables – combined differently in each theory and for the most part empirically tested – complete, or nearly, the taxonomy of the possible, strictly economic determinants of growth:

- morphology of the economy: entrepreneurship and enterprises; saving/investment; technology, R&D, capacity to innovate; quality and quantity of the workforce; external openness; financial system; relative prices; functional, personal and geographical distribution of income and wealth;

- infrastructure: material (power, water supply, transport, communications, networks) and juridical-institutional, administrative and above all private law (commercial, company, bankruptcy and labour law and civil procedure, all of which are components of a market economy);
- incentives for producers: competitive stimuli in the dynamic sense, both macro (exchange rate, wages, public spending) and micro (competition in product and factor markets, contestability of corporate ownership and control, antitrust action);
- international context: the development of world trade, changes in comparative advantages and in the terms of trade;
- macroeconomic framework: money and public finance; prices and interest rates; real and financial stability.

The questions facing post-1992 Italy can be tackled in three steps:

- identifying, within each family of determinants, those that have deteriorated with respect to pre-1992 levels or trends;
- assessing their “contribution” to the slowdown in the light of the magnitude of the deviation and what econometric analyses can tell us about the effect on growth;
- formulating measures – by government, business and unions – affecting not only the variables that have acted as a brake on the economy but also others, to ensure they provide as strong an impetus as they have since 1992.

It should be emphasized that the following analysis focuses on the *trend* of growth: on the performance of the Italian economy over time and compared with the past rather than with the trend in other countries. Although the two planes are connected they should not be confused.

The main problems: productivity and exports. Growth accounting for the past decade indicates that the slowdown in per capita GDP (compared with the previous decade) was caused by the decrease both in the contribution of labour and in the growth of labour

productivity. The slower rise in the latter – which nevertheless remains quite high – depended more on decreased growth in total factor productivity (weaker in terms of unincorporated technical progress and production organization) than on decelerating capital intensity. This all points to an economy that is structurally less capable of employing labour efficiently, innovating, applying technical advances, competing. What is most worrying is the decline – down to the negative values recorded during the unfavourable economic conditions of recent years – in the growth of labour productivity (see also Table 3) and total productivity growth. The latter slowed in most sectors.

On the aggregate demand side the slowdown has been most apparent in the reduced contribution of private and public consumption, which net exports have been insufficient to offset.<sup>4</sup> Exports are a potentially inexhaustible source of demand and therefore also an important indicator of the economy's capacity to produce high quality goods at low prices. It is alarming that Italy's exports have visibly lost shares of the world market after growing almost without a break from the end of "autarky" in the 1940s to the early 1990s.<sup>5</sup> The limitation of the "made in Italy" tag is the high price of the goods. It is also the quality, the type of goods and the persistently old model of specialization. Italian exporters appear less able to respond to changes in comparative advantages by renewing their products and reallocating resources.<sup>6</sup> At the same time – according to the statistics – the production of Italian firms abroad has not yet become a viable replacement for exports.<sup>7</sup>

*Factors of growth despite everything.* Some factors, far from producing unsatisfactory results over the past decade, have actually contributed to growth, preventing a more pronounced slide.

a) Capital formation, despite a slight decline in volume, has improved considerably as regards composition over the decade.<sup>8</sup> On the whole it has not impeded the development of the economy and remains the fundamental determinant of growth. Nevertheless, there has been no leap in investment – notably in R&D – even though funds were available. With the end of the recession of 1992-1993 the share of national income going to profits, the rate of profit on invested capital and the return on corporate assets all increased, rising

to levels that were higher, on the average, than in the years before the recession. The financial condition of firms improved at the same time, as their debt ratio and the cost of debt service both declined (Table 4, Figure 1).<sup>9</sup> These tendencies were most pronounced in the service sector (about 70 per cent of the Italian economy). Variations in entrepreneurship cannot be measured. But clearly what prevailed was prudence, the consolidation of positions, an attitude of business as usual.<sup>10</sup>

- b) Though remaining far behind other countries, Italy has continued to improve the education of its work force and of the population at large. In the 1990s the average number of years of schooling rose from 9 to 11, after rising from 7½ to 9 in the 1980s. The share of secondary school and university graduates in the work force increased sharply, both among the youngest age-groups and among the less young. Other indicators – audiovisual equipment, computers, foreign language proficiency, travel abroad, books published – confirm that in the course of the last decade human capital has continued to accumulate.
- c) The Italian economy has grown more open. This development – highly positive for its input of technical progress and competition, even beyond the sectors of internationally traded goods – involved both trade in goods and services and financial transactions.<sup>11</sup> All foreign exchange restrictions were removed at the end of the 1980s. Italian manufacturing is not among those most strongly protected, *de facto* or *de jure*, by tariff and non-tariff barriers, despite the extremely serious problem of unfair competition from countries that violate world trade rules.
- d) The financial system has undergone a profound, if slow and difficult, mutation, a true metamorphosis that began in the early 1980s and gradually gathered momentum, with a marked acceleration in recent years. This process has brought the Italian banking and financial industry, even in the South, more closely into line with the other leading countries. Overall, there has been an appreciable improvement. *Ceteris paribus*, structural changes fostering capital formation and allocative efficiency are estimated to have raised the average annual rate of per capita output growth by 0.3 percentage points in the past 10 to 15 years.<sup>12</sup>

e) All in all, the macroeconomic framework has achieved a better balance. Monetary policy was joined by more rigorous management of the public finances and of nominal incomes. Despite the currency crisis of September 1992 – and then that of March 1995 – the Italian economy avoided the abyss of instability. The good of price stability was recovered after a quarter of a century and then locked in through Italy's participation in the single currency. From every point of view – monetary, financial, foreign-exchange – the decade increased the scope for economic growth.<sup>13</sup> It bears reiteration that the underlying growth trend of economic activity, beyond the short period, was slowed little if at all by the reduction of the budget deficit following 1992 and by the successful disinflationary monetary policy of the Bank of Italy from 1994 to 1998.<sup>14</sup>

The relationship between growth and the labour market remains an open question. In ex post growth accounting, the slowdown in per capita output also reflects a smaller contribution of labour and decreasing labour intensity. At the same time, unutilized human resources were abundant (Table 5).<sup>15</sup> Comparative statistics show that relatively few Italians work and that those who do, work “little”. Given the level of labour productivity – which corresponds to a large endowment of capital per worker – the lesser utilization of labour lowers Italy's rank in terms of GDP per inhabitant. But this affects the level of economic activity rather than the trend growth rate. Growth is hardly fostered by a labour market and industrial relations that impede the reallocation of resources – capital as well as human – in response to changing relative prices and comparative advantages. By the conventional standards of contemporary labour economics, Italy continues to have “one of the ‘worst’ labour markets in Europe”.<sup>16</sup> This has several adverse effects, especially when Italy is compared with the rest of Europe. However, in itself it is less important for the analysis of the slower growth of the last decade.

The last decade has seen an epochal change in Italian society: the beginnings of large-scale immigration. Among other things, this has created more freedom in the utilization of labour, dramatically increasing flexibility in the labour market and in employment relationships. Labour market institutions have not deteriorated further. Indeed, in some respects they actually improved towards the end of the decade.<sup>17</sup> Real wage growth slowed,

more than in the 1980s and more than productivity.<sup>18</sup> For companies, this at least partly compensated for the institutional shortcomings of the labour market. Other things being equal, it limited the overall decline in the demand for labour, which was responsible for the decline in labour-intensiveness in the economy for the decade. In contrast with past periods, wages are not now among the main problems of the Italian economy. Nominal earnings are higher in the North – where the same labour legislation as in the rest of the country is in effect, but with full employment – even though they are not high enough to induce substantial internal migration. In other respects labour is not immobile.<sup>19</sup> Mobility is uncertain and costly, and the conditions – legal conditions, but also housing, services, social acceptance of immigrants and migrants in general – can be improved. The institutional progress and the low relative cost of labour were responsible for the upturn in employment after 1996, with the anomaly of a statistically very high *ex post* elasticity of employment to GDP in recent years (partly the result of the “emergence” of underground labour).

*Factors of stagnation.* From the classification of the causes of growth recalled at the outset, almost by exclusion the following appear to be the proximate causes of stagnation.

- 1) Italy's very high public debt, the extremely burdensome legacy of a long period of political and financial irresponsibility that led to its more than doubling between 1981 and 1995, when it rose from 60 to 125 per cent of GDP.<sup>20</sup> In various ways the public debt has represented and continues to represent an impediment to faster capital accumulation, hence to growth. In the past the obstacle consisted in part in the risk premium inherent in the high cost of money, which curbed investment. In more recent years the brakes have been applied by expectations that depress the propensity to invest. From entrepreneurs' viewpoint the reduction in taxes – which were raised rapidly until 1997<sup>21</sup> – has come to seem less and less likely, even in the medium term. There are scant budgetary resources to maintain and upgrade an infrastructural endowment that is less and less adequate and to reduce the cost of labour for firms.<sup>22</sup> These are two additional consequences relating to the still precarious state of the public finances that have a negative impact on growth. At the very best, the disparity vis-à-vis Italy's European competitors in three crucial areas – taxation, infrastructure, social contribution costs – is not expected to widen further. The

long-term expectations of Italian businessmen, who are now bound by the irrevocably fixed exchange rate with other euro-area producers, are that the gap is unlikely to be narrowed.

- 2) The backwardness of Italy's infrastructure, now acute and palpable. Especially inadequate in the South, tangible infrastructure, whose maintenance and modernization is very costly first of all for the public finances, has not been strengthened in Italy as a whole; it has probably deteriorated. It has not matched the growing needs. Italy's endowment of tangible infrastructure has not measured up to the quantitative and qualitative standards of the other European countries and risks continuing to fall short.<sup>23</sup> Moreover, the same is true of important components of intangible infrastructure. The economy's legal order, which is crucial for growth, has proven increasingly less suitable as regards both legislation and its application. This holds for company law, bankruptcy law, civil procedure and some aspects of labour law. Though in themselves they “cost nothing”, reforms in this field too have made slow headway. A new version of company law, whose civil-law elements are noteworthy, will enter into force in 2004. Yet attaining the overall vision needed to forge a new, organic framework of company law is hindered by the insufficient connections of economic culture with legal culture and by vested interests.<sup>24</sup>
- 3) Both the fragmentation of enterprise and the inability of small firms to grow – historical features of Italian capitalism – have grown more accentuated.<sup>25</sup> The reasons are partly legal, bureaucratic and tax-related; Italian firms find it “in their interest” to stay small, in order to contain costs and risks. Unfortunately, this has coincided with the age of digital technology, ICT and electronics, technical advances whose potential to bestow greater flexibility can be exploited especially by large companies engaging in mass production.<sup>26</sup> Far from being imposed by the model of specialization, Italian firms’ failure to grow perpetuates that model, restricts investment abroad and limits exports.<sup>27</sup> There is ample evidence of the impediments this creates for the training of workers, investment in research, technical progress (especially in ICT) and productivity.<sup>28</sup> In the relationship between the swarm of tiny companies and the few surviving large corporations there is a lack of complementarity in research and an insufficient osmosis of innovations.<sup>29</sup>



4) Despite international openness, competition in its broadest sense has diminished overall in the Italian economy. It has diminished both at the level of macro determinants (the exchange rate, real wages, public spending) and at that of micro determinants (in product markets and in the market for corporate ownership and control). The support of public spending, the scope for currency depreciation and the accommodating dynamic of wages have weakened the stimuli to efficiency and innovation that can overcome laxity and moral hazard on the part of producers. In the last ten years primary public expenditure has been high (42-43 per cent of GDP, as in the 1980s), the exchange rate lax (first for the lira and then for the euro up to the start of 2002), the growth in real wages slow. In the market for corporate ownership and control the contestability of existing structures has been toned down by the high incidence of majority ownership by the largest shareholder, particularly as firm size decreases. In the goods markets the indices of oligopoly (Lerner indices) have risen on average to 19 per cent, from 15-16 per cent in the 1970s and 1980s; the decline in competition has been principally in services other than banking and financial intermediation.<sup>30</sup> The 1990 antitrust law mainly prescribes a static type of protection for consumers who file complaints of understandings in restraint of trade or abuses of dominant position in the goods markets to which final demand is directed. Contrary to what the dynamic conception of competition as the engine of economy-wide growth would require, it lays less stress on promoting competition in the markets for “basic products”, which play a direct or indirect role in the production of all other goods. These are the key industries. Their competitive tenor is decisive for the allocation of resources over time, for the leveling of profit rates across products, for the growth of the economy. The scaling down of public enterprise, as opposed to its correct and efficient management, has itself removed an alternative to private enterprise, a potential competitor. In some fields it has led to actual or potential quasi-rents for private enterprises. The foregoing observations are succinctly confirmed by the disjunction between the Italian economy’s high profit rate and low growth rate in the last ten years. On the whole producers have not perceived a more intensely competitive climate, one spurring them to capital mobility, productivity, lower costs and innovation.

Two last remarks will complete the picture. First, at the international level the changes in comparative advantages, together with the opportunities for access to potentially vast outlet markets, have constituted specific risks for the existing structures of Italy's productive system. On the one hand there is the rise of new trading partners (China and India after the "Asian tigers", for example) that tend to export the consumer goods Italy produces and to import capital goods Italy does not produce; on the other there has been a strengthening of economies, such as that of the United States, which tend to supply products – consumer and producer goods and services – characterized by economies of scale, R&D and innovation. Italy's model of specialization has therefore become "vulnerable from above and below".<sup>31</sup>

The second remark concerns the accentuation of inequality in the personal and geographical distribution of income, which was already greater than in other industrial countries.<sup>32</sup> This may have acted as a brake on growth by limiting the contribution of the less affluent not only to consumption and national saving but also to productivity.<sup>33</sup> A good part of the population lacks the resources needed to invest in human capital, for themselves or their children, and to ascend the consumption ladder towards expenditure possibly having a greater cultural content. This part of the population, living largely in the South, risks being cut off from the possibility of making the best contribution of its human potential to the country's economic progress. The picture is aggravated by comparatively low social mobility, unchanged across generations and even diminished across jobs. Stagnation and the very rapid aging of the population certainly do not favour social dynamism.

A synthesis in historical perspective. Given the size of the deterioration in the variables reviewed in the preceding section and the elasticity to growth of some of them, as a group they may have prevailed over the variables favouring development. Taken together, they appear sufficient to explain the growth *décalage* on the order of 1 percentage point suffered by the Italian economy in the last ten years.<sup>34</sup>

A very summary interpretation of the *décalage* can be put forward. On the one hand there has been an acceleration in the changes in techniques (ICT is only the best known

example) and comparative advantages (the primacy of some industrial countries in terms of access to the new technologies and the appearance on the international scene of countries capable of quality and lower costs in manufacturing Italy's traditional products). On the other hand the Italian economy has been less than prompt in exploiting these opportunities, coping with the challenges inherent in them and reallocating resources owing to the *combination* of three factors: shortcomings within firms, handicaps imposed on firms from outside and, *lato sensu*, insufficient competitive stimuli for producers.<sup>35</sup>

These factors, described here sequentially for ease of exposition, almost certainly interact. The low level of competition does not induce firms to accumulate more capital and grow larger; external diseconomies discourage them from facing the costs and risks inherent in attempting to overcome the shortcomings within the productive system by these two means. The defence of profitability is entrusted to collusive and protectionist mechanisms, to preservation of the status quo. The slower growth of the economy perpetuates the burdens originating in the public finances. The internal shortcomings are accentuated. A vicious circle prevents the economy from responding to the increasingly severe external challenges, from fully exploiting the opportunities offered by technical progress and the shift in comparative advantages.

A purely economic explanation of such a complex social phenomenon as the growth, or non-growth, of a country's productive capacity over a decade may appear unsatisfactory, incomplete. In reality, empirical correlates and ultimate determinants of a meta-economic nature can be found for each of the explanatory variables referred to above. Fulfilment, individualism, familism, localism, aging, lack of education – rooted deep in the Italian social body, these factors are sometimes cited even by economists. Equally, the country's institutions are cited, in a broader but vaguer sense with respect to law and economics and company law.

In a historical perspective a recurring condition in Italy is the appearance of the problem of the economy as a problem of growth, with the country perpetually teetering between progress and backsliding. Carlo Cipolla has clarified the key point in a secular perspective: the wealth of Italians is never acquired permanently. The risk of a standstill, of

hard-won positions being lost, is ever present. Italy is without “natural” endowments, above all sources of energy. Imports are necessary, exports vital. Italian manufacturers are at a disadvantage in terms of primary resources that they, no less than those who govern the country, must make good. Constant pressure must be maintained against monopolies, moral hazard, collusion and corner-cutting, but also against the provincial presumption of having caught up with more richly endowed nations, of having overcome the economic problem, of being “rich for ever”. Such pressure is essential to prevent firms from straying from the strait and narrow: the endless search – based ultimately on study in “schools” and “workshops” – for innovation, quality, value added to imported inputs, export capability.<sup>36</sup>

In a non-competitive context high profits such as those of the 1990s may lead to stagnation rather than growth. They may be consumed merely in consolidating firms’ financial situations. By contrast, profits earned in an increasingly competitive environment generate growth, as happened twice in Italy’s economic history: during the period of Giolittian prosperity (1900-1913) and during the postwar “economic miracle” (1950-1963). In the first case the competitive stimuli deriving from the fixed exchange rate, the lowering of customs barriers and the neutrality of the State in the tug-of-war between profits and wages combined with the opportunities offered by international expansion, the worldwide fall in interest rates and emigrants’ remittances. In the second case the competitive threat that well-managed public-sector enterprises posed for large private-sector firms and the reopening of the economy combined with the opportunities offered by the unlimited supply of labour, the easing of the energy constraint and investment in infrastructure. Between 1957 and 1963 Italian firms raised gross fixed investment to one third of GDP. Not a few “small” ones became “medium-sized”. Together they produced a formidable, winning response to the challenges created by the Common Market, thus dispelling the fears that this nonetheless had engendered. They succeeded in grasping the opportunity provided by the creation of trade flows within Europe. The fact that the renewal of competitive stimuli was sacrificed to “planning” was the most important shortcoming of economic management in the 1960s and 1970s.

*The way out of the bind.* Economic growth depends on the simultaneous action and interaction of four elements: the international context, the productive structure, the burdens weighing on the economy and the factors stimulating it. When, as the international context changes, the balance between propulsion and resistance breaks down, the burdens become excessive, the stimuli insufficient. The structural shortcomings are accentuated. Expectations worsen. The economy stagnates.

Today, this is once again the case of the Italian economy. There should be agreement on the nature of the problem, if not on all its causes; different views are likely on the specific measures to be taken and the desirable courses of conduct. Analysis does not produce the “recipe” and its ingredients. It can suggest guidelines for overcoming the stagnation afflicting the Italian economy: strengthening the productive structure, reducing the handicaps that weigh down Italy Inc. and creating competitive stimuli for producers in a climate of improved expectations. Ideally, policy and behaviour should act on these three fronts simultaneously, aiming to bring about a new, more advanced, balance between incentives and impediments. The synergism of opportunities, abilities and stimuli is as necessary as it is difficult to achieve along the knife-edge of growth.

Consolidation of the public finances by means of reforms,<sup>37</sup> modernization of the country’s infrastructure and networks, partly in the context of major European projects,<sup>38</sup> reform of the legal framework for the economy,<sup>39</sup> promotion of competition in a dynamic sense,<sup>40</sup> and correction of territorial and distributive disparities are still the major challenges that face the political and administrative classes. But “the management of the country’s affairs” (Raffaele Mattioli) is the responsibility, at the various levels, of the entire governing class.

The confidence of entrepreneurs in the future of their businesses must correspond to the risks to which the Italian economy is exposed: risks that are serious but not insuperable. If the problem of competitiveness involves not only the price but also the quality and composition of output, then it is necessary to invest more and differently, including investment in infrastructure and networks coordinated at the national and European levels. Thanks to the restoration of sound monetary conditions, interest rates are at a historical low,

also by international standards. Firms' financial situations – profits, equity capital and leverage – have improved with respect to the not-so-distant past. The rate of increase in nominal wages is still moderate, in the wake of the success of the incomes policy introduced in 1993, in what was becoming in some respects a “cowed labour market”.<sup>41</sup> Human capital, research, innovations in the relationship with the scientific community, increases in firm size, corporate governance, willingness to consider contributions of all kinds and not just of capital, acceptance of competition are some of the many ways in which entrepreneurship can be expressed in the four million productive units with which Italy is endowed.

Recognition of the seriousness of the situation requires workers and unions to move in a well-defined direction: to supplement possibly fiercer bargaining over real wages and the distribution of income with a new opening on the fronts of labour mobility and forms of employment. It is possible to imagine legal solutions that would better reconcile protection of both the employed and the unemployed with the need for dynamic reallocation of human resources and capital. The immobility of resources is incompatible with innovation in products and techniques. Of fundamental importance is the upstream defence of workers through quality public education that puts them on an equal footing at the start.<sup>42</sup>

*A realistic and necessary objective.* If implemented systematically and synergically, interventions and courses of conduct such as those outlined in the preceding section would put the Italian economy back on a higher growth path. How much higher and over what time span it is impossible to say. The notion of potential output is of no help for an economy whose future depends crucially on *changes* in both economic policy and producers' ability to respond and, above all, on their mutual reinforcement. Some insights can come from comparative analysis, which has been eschewed so far in this paper, insofar as I have focused deliberately on the shifts over time in the main determinants of Italian economic growth.

Over the last decade the US economy grew at an annual rate of more than 3 per cent in terms of GDP, thanks in part to the expansion of the population. Other countries with a high level of income but a less pronounced increase in population saw GDP grow at annual rates of just under 3 per cent, the OECD as whole achieved 2.6 per cent. A rate of between

2.5 and 3 per cent should be well within the reach of an Italian economy in which the actions described above are taken – one point, at least, higher than the 1.6 per cent achieved in 1993-2002. Compared with the other European economies and the OECD, Italy has a similar national saving rate (20 per cent of GDP) and the figure for household saving is one of the highest (12 per cent of disposable income); setting aside demographic trends, the pool of potentially available labour is large, the stock of entrepreneurial skills abundant, and the best technology accessible. There are no grounds for believing that the Italian economy – once the unfavourable conditions propagated and prolonged by 11 September have been overcome, the weaknesses removed, albeit gradually and not without difficulty, and the strong points reinforced – will not grow at least as fast as comparable economies have succeeded in doing.<sup>43</sup>

The scale of the objective is made clearer by considering not only the conspicuous size of the increase in economic activity (about \$20 billion per year at a realistic exchange rate) but also the fact that it would allow a doubling of GDP in 27 years instead of 44,<sup>44</sup> a less painful adjustment of the pension system and a conspicuous increase in consumption.

Italian society has many unsatisfied needs, individual and collective, present and future. It is aging. In such a society it is senseless even to suggest the irrelevance of growth in GDP, economic maturity and the possibility of renouncing the criterion of efficiency.

One last consideration. The concept of the stationary state is a fascinating one – by means of which Ricardo attempted to do without history – but it is potentially misleading. A zero-growth economy may contract; it may then fail to return to a stationary equilibrium. There are various reasons – the public debt, the pension system, the age structure of the population and demographic regression, the personal and regional disparities of income – to believe that, starting from zero growth, the involution scenario is more likely for Italy.

It is possible to overcome the problem of growth besetting the Italian economy, or at least to gain that precious extra point. It is not only possible, it is necessary.

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<sup>1</sup> Regarding the mechanics of economic progress in Italy after the war see the reconstruction by Ciocca, Filosa and Rey in P. Ciocca, *L'instabilità dell'economia*, Chap. VI, Einaudi, Turin, 1987. A reinterpretation, not out of line with the present work, is G. Nardozzi, "The Italian Economic Miracle", in *Rivista di Storia Economica*, No. 2, 2003, pp. 139-180.

<sup>2</sup> This tendency, which is common to other industrial countries, has been particularly sharp in Italy, as well as in Japan, which has experienced a speculative bubble due to overinvestment, and in Germany, which has had the burden of unification. Since the 1980s Italy has achieved less economic advance than the world, OECD and European averages.

<sup>3</sup> "The conventional wisdom – which I believe to be correct – takes the general upward trend to be driven mainly by factors on the supply side: by improvements in the education, training, and skills of workers; by technological innovation; and by increases in the stock of machinery and equipment per worker as well as the replacement of obsolete equipment with new versions adapted to the latest and most productive technology ... That business investment can stimulate both short- and long-term growth is a reminder that demand-side and supply-side forces are not wholly independent of each other...". R.M. Solow, "Mysteries of Growth", in *The New York Review of Books*, 3 July 2003, p. 49.

<sup>4</sup> In the last decade the average contribution of household consumption to demand has fallen to 0.9 percentage points of GDP, compared with 1.8 points in the previous decade. The contribution of public consumption has fallen from 0.5 to 0.1 percentage points, while that of net exports, which was slightly negative in 1983-1992, has been practically nil. In a long-term analysis we can gain a better understanding of the problem of demand from simulations for the past ten years. Had exports retained their market share, then, taking all the interactions into account, they would have guaranteed that aggregate demand expanded annually in real terms by half a percentage point more than was the actual case. An increase in labour productivity a quarter of a point greater than observed would, in turn, have been enough to ensure, in various ways, approximately 1 point greater growth in both total and domestic demand. Together, the two effects – 1.5 more points of GDP growth – would have kept aggregate demand growing at the rates recorded in the 1970s and 1980s (3 per cent per annum).

<sup>5</sup> Exports decelerated in the later 1990s (the annual increase was 4 per cent between 1997 and 2001) and declined sharply in 2002 and 2003. They now account for 3.6 per cent of world exports of goods, compared with earlier peaks of 5 per cent in 1990 at current prices and 4.5 per cent in 1995 at constant prices. Other industrial countries have also lost shares to new exporters such as China. The drop in Italy's share has been the largest, however, and it has been large even compared with the exports of the industrial economies alone (down from 6.7 to 5.7 per cent between 1995 and 2002). The decline has been concentrated within the EU (1 point less in the past 7 years, 3 points in Germany). According to IMF estimates for 2002 based on purchasing power parities, the weight of the euro area in international trade (31 per cent) is equal to twice its share of world GDP (16 per cent) while Italy's is only one third greater (4 per cent compared with 3 per cent).

<sup>6</sup> Italy has lost market shares despite the large depreciation (around 30 per cent) in the lira's nominal effective exchange rate between 1992 and 1995 and despite the fact that the subsequent appreciation was mild because the currency re-entered the EMS in November 1996 at a prudential rate of exchange and the euro depreciated between January 1999 and February 2002. Compared with the ten years up to 1992, Italian products have been only moderately successful on international markets in the past decade, even though on average they have been more price-competitive. A gradual decline in price competitiveness has reached a cumulative 28 per cent between the peak of April 1995 and June 2003 (15 per cent between the average for 1995 and the average for the first half of 2003). Italy continues to specialize in the production of goods requiring medium-to-low human capital, for which international demand (European in particular) is slack, that use imitable technology and are vulnerable to competition from recently industrialized countries. There are very few signs that Italy's model is



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converging on that prevailing in the euro area. In sectors with a high value added and dynamic demand (computers, chemicals, pharmaceuticals, consumer electronics) Italy is actually despecializing, virtually forgoing such areas of production as computers, biotechnology and fine chemicals. See M. Bugamelli, "Il modello di specializzazione internazionale dell'area dell'euro e dei principali paesi europei: omogeneità e convergenza", *Temì di discussione*, No. 402, Banca d'Italia, 2001.

<sup>7</sup> Although direct investment abroad has increased, it is still only just over 1 per cent of GDP (compared with 5-6 per cent in France, Germany and Spain). Equally small (also around 1 per cent of Italy's GDP) is the flow of foreign capital into Italy – obviously because returns are perceived to be insufficient.

<sup>8</sup> On average for the period 1993-2002 the overall rate of investment was lower than in 1982-1991 (19.3 per cent compared with 20 per cent) while the rate of "non-residential" investment was marginally higher (14.6 against 14.4 per cent). In the same period the average contribution of gross fixed investment to the growth of aggregate demand (0.3 per cent) was slightly less than in the previous decade (0.5 per cent). The ratio of total spending on R&D to GDP did not change over the two decades (1.1 per cent), neither did that of the private component (0.6 per cent). Non-residential capital per worker continued to increase at around 2 per cent per annum, however, which was no slower than in the decade up to 1992. After the drop in 1993-1994 following the exchange crisis in the summer of 1992, the ratio of investment to GDP at constant prices continued to rise uninterruptedly from 17.8 per cent in 1994 to 20.8 per cent in 2001-2002. The expansion in the "non-residential" component was even faster, up from 12.7 to 16.2 per cent of GDP.

<sup>9</sup> In the course of the decade the share of value added going to profits increased by five percentage points to a historic peak, registering an average four points above that for the decade to 1992. At 7 per cent the return on equity for a broad sample of mainly industrial firms (ROE after taxes and net of financial costs) was more than one point better than in the decade preceding the recession. Net financial costs for "non-financial" firms declined from 9 per cent of value added in the years immediately preceding 1992 to between 4 and 5 per cent in 1998-2002. Firms elected to reduce their debt burden (for the "non-financial" firms their leverage – debt over debt plus equity – was reduced from 55 per cent in 1990-91 to 39 per cent in 1998-2002) and to consolidate ownership control (in manufacturing firms with more than 50 employees, on average 65 per cent of share capital is held by the top shareholder). Positive though they are in terms of financial stability, these developments did not result in stepped-up capital formation or swifter entrepreneurial turnover. They did not stimulate the growth of output, either actual or potential.

<sup>10</sup> An equation for investment in plant, equipment and transport equipment hinging on aggregate demand and the relative prices of productive factors in the last decade provides a highly accurate interpolation of the data. There are no signs of instability in the parameters. The sum of the residuals is close to zero. Systematic errors for the decade do not emerge even if the equation is estimated on a sample of observations from before 1993.

<sup>11</sup> Trade openness (defined as half the ratio of exports plus imports to GDP at current prices) had declined to 15 per cent in 1992. Since then it has risen, and in the last three years has stood at 20 per cent. Financial openness (defined as half the ratio to GDP of capital inflows plus outflows for direct and portfolio investment) rose from 2 per cent at the end of the 1980s to 10 per cent in 1999. The value of non-banks' capital transactions in the balance of payments increased 15-fold as regards Italian capital, 26-fold as regards foreign capital.

<sup>12</sup> Within the financial sector the banking industry increased the volume and the range of intermediation and of its services. It increased productivity and cut unit labour costs. It strengthened its capital base. It refined the management of credit and risks. It eliminated inefficient banks, without trauma. It carried out mergers and acquisitions, corporate restructurings. It saw the rise of large groups, three of them now among the largest in Europe. At the same time, institutional investors came into being, the money and financial markets grew greatly in size and made enormous progress in organizational and informational efficiency. Among banks and non-bank intermediaries competition increased considerably. The increase involved both product markets and the market in ownership and control of financial enterprises. The disparities in interest rates, including geographical disparities, were significantly narrowed. P. Ciocca, *La nuova finanza in Italia. Una difficile metamorfosi (1980-2000)*, Bollati Boringhieri, Turin, 2000.

<sup>13</sup> The rate of inflation since 1993 has averaged 3.1 per cent, compared with 7.5 per cent from 1982 to 1992. Italy's international investment position swung from a net debtor position equal to 11 per cent of GDP in 1992

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to a net creditor position. Now there is again a net debt, owing in part to the current account deficits run since 1999. Interest rates are at historic lows, in line with the rest of Europe. Since the incomes policy pact of 1993, wage moderation has been assured. The non-accelerating-inflation rate of unemployment has been declining since 1995-1996.

<sup>14</sup> The deficit was cut from 11 per cent of GDP in 1992 to below the EU's 3 per cent threshold in the years following 1997. From 1992 through 2000 the "negative" impact of restrictive fiscal policy averaged less than 0.4 percentage points a year, with a maximum of 1.4 points in 1995 (see S. Momigliano and S. Siviero, "Appraising the Effects of the Budget on the Economy with an Econometric Model: The Italian Fiscal Adjustment in the Nineties", Rome, typescript, March 2002). Even adding in these "lost" decimal points, the economy's growth performance during these years remains mediocre. A credible anti-inflationary monetary policy stance of high short-term interest rates, acting in advance and working on expectations, helped to bring down long-term rates, which are crucial to investment. Had the deficit not been reined in, and had inflation not been overcome, then the recession would have been dramatic indeed.

<sup>15</sup> Higher unemployment and lower employment; low labour force participation; stagnation and rapid aging of the native population; barriers to immigration, to the social integration of immigrants and their better utilization – these patterns correspond to the slowdown in the contribution of labour inputs to growth in per capita GDP (as shown by growth accounting). In what is perhaps an overestimate, "grey" labour has been said to account for 26-27 per cent of Italian GDP, compared with 16-17 per cent for the OECD economies as a whole (F. Schneider and D.H. Enste, "Shadow Economics: Size, Causes, and Consequences", *Journal of Economic Literature*, 2000, p. 104). These same negative features may, to some degree, be reversible. And if a start is made on righting them, they may actually represent an opportunity for growth. The Italian economy does not lack labour resources.

<sup>16</sup> C. Dell'Aringa, "The Italian Labour Market: Problems and Prospects", Università Cattolica, Milan, February 2003, p. 4.

<sup>17</sup> Formal centralization and tacit cooperation were strengthened after 1993, in part through the incomes policy agreement. Labour conflict diminished considerably. Since 1997 the tax and social security contribution wedge has narrowed. Unemployment benefits remain low. Active labour market policy remains insufficient, but the public employment service has now been reformed and decentralized. Employment protection legislation remains rigid – especially for larger firms – as regards individual and collective hiring and dismissal of regular, permanent employees, but it has become much more elastic as regards fixed-term contracts and temporary employment agencies and also in terms of working hours.

<sup>18</sup> The average annual increase in real earnings per standard labour unit in the private sector fell from 1.7 per cent in 1983-1992 to 0.4 per cent in 1993-2002. Labour productivity in the two periods grew by respectively 2.3 and 1.8 per cent per year (measured by value added at factor costs net of rentals per standard labour unit).

<sup>19</sup> In large industrial firms turnover has been increasing. The number of employees involved has risen from 22 to 33 per cent of the workforce in the previous year, about the same as in other countries.

<sup>20</sup> From 1993 to 2002, the public debt averaged 117 per cent of GDP, compared with 90 per cent in the previous ten years. Its residual maturity is now 6 years (it was just 3 in 1992). The debt is still nearly 110 per cent of GDP, despite privatizations (with proceeds equal to 9 per cent of GDP against a value of the firms privatized equal to 20 per cent, including the discounted sale of the "family jewels" and the dismemberment of the large public groups), securitizations, and a securities swap with the Bank of Italy. Relative to GDP Italy's public debt is the largest in the OECD except for Japan (where it is 156 per cent). It is far above the European average of 62 per cent.

<sup>21</sup> Current revenue of general government rose steadily, from 34 per cent of GDP in 1980 to 42 per cent in 1990 and 47 per cent in 1997.

<sup>22</sup> About one third of the cost of labour consists of social security contributions to a pension system in which the ratio of retired to active workers is rising dangerously (from the present 27 per cent it is projected to go to 60 per cent in 2040).

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<sup>23</sup> Between 1991 and 2001 gross annual expenditure on infrastructure amounted to 1.5 per cent of GDP, having fallen sharply in the last thirty years to the lowest level since Italian unification (wartime excepted). Net of depreciation, total investment was virtually nil.

<sup>24</sup> P. Ciocca, “Un diritto per l’economia?”, *Rivista Trimestrale di Diritto e Procedura Civile*, No. 3, 2002, pp. 887-896; G. Carriero, P. Ciocca and M. Marcucci, “Diritto e risultanze dell’economia nell’Italia unita”, in P. Ciocca and G. Toniolo (eds.), *Storia economica d’Italia*, Vol. 3, part II, Laterza, Bari, 2003.

<sup>25</sup> The relative importance of micro firms has also grown in other countries (the United Kingdom, France and the United States) where the economy is increasingly oriented to services, consumption is being personalized and legislation favours smallness. However, the phenomenon is far more pronounced in Italy, where it is widespread in nearly every branch of the economy and not only in traditional products. Comparatively, this is due not to different birth and mortality rates of small enterprises, but to the slowness of their growth after their birth. In the 1981 and 1991 censuses the average number of workers in Italian firms was 4.5. It fell to 3.9 in 2001 (data based on local production units). Firms with more than 500 workers — classified as “large” — numbered 1,265 in 1981 (with 2.4 million workers, or 18.8 per cent of the total), 1,173 in 1991 (with 2.6 million workers, or 18.1 per cent), and 1,061 in 1996 (with 2.2 million workers, or 16.2 per cent). Around 95 per cent of Italian firms have fewer than 10 employees; even in industry the average is only 6.5. Industrial districts and groups only partially compensate for the serious limit in the scaling up Italian firms. According to some calculations, the “districts” account for 40 per cent of the workers in manufacturing and 10 per cent of total employment in the economy. According to other calculations, which only include companies specialized in districts’ typical products, the percentages are 13 and 3 per cent, respectively. Even though “groups” are widespread, they involve a very small percentage of firms, especially large ones. Among manufacturing firms with more than 50 employees, those belonging to groups fell from 47 to 40 per cent of the total between 1996 and 2001. See S. Trento, “Il ristagno dell’economia italiana: specializzazione o nanismo generalizzato?”, typescript, Rome, 2003.

<sup>26</sup> See S. Rossi (ed.), *La Nuova Economia. I fatti dietro il mito*, Il Mulino, Bologna, 2003. Relatively limited use is made of ICT by Italian companies, especially small firms.

<sup>27</sup> Of Italy’s 900,000 industrial firms, those that export number 98,000, with 3 million employees (an average of 30 per firm). In the economy as a whole, which counts a total of 175,000 exporting firms, the incidence of exporting firms decreases considerably with firm size; only 3 per cent of companies with fewer than 20 employees export, compared with 62 per cent of those with 250 or more employees. In the manufacturing sector 1 per cent of export-oriented companies (the largest ones) account for 40 per cent of the sector’s total exports, while 60 per cent of exporting firms, those with fewer than 10 workers, account for only 5 per cent. Exports to non-EU markets are virtually the exclusive preserve of large companies, which are also the only ones able to export simultaneously to more than one country. The cyclical elasticity of exports also decreases sharply with firm size.

<sup>28</sup> See the systematic study coordinated by Ignazio Visco at the OECD, *The Sources of Economic Growth in OECD Countries*, Paris, 2003.

<sup>29</sup> W.J. Baumol, *The Free-Market Innovation Machine. Analyzing the Growth Miracle of Capitalism*, Princeton University Press, Princeton, 2002.

<sup>30</sup> See N. Cetorelli and R. Violi, *Forme di mercato e grado di concorrenza nell’industria bancaria dell’area dell’euro*, Ente Einaudi, Quaderni di Ricerca No. 35, Rome, 2003, pp. 37-38 and 43-44. One might think that fragmentation into myriad firms favours competition. In reality, the contrary may be true. Small firms, especially if little inclined to grow, constitute a less worrisome threat to the other companies in the same market. They have little capacity to innovate. Their high costs limit their potential to reduce their selling prices. For a number of reasons, collusion, herd behaviour and tacit agreements are possible in sectors where production is divided among a large number of mini-companies. These are the very sectors of the Italian economy with the highest margins and the least competition by international standards. See OECD, *Economic Surveys. Italy*, Paris, July 2003, p. 49.

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<sup>31</sup> F. Onida, “Crescita, competitività e dimensioni d’impresa nella proiezione internazionale del sistema produttivo dell’Italia”, *Economia italiana*, 2002, p. 699.

<sup>32</sup> The indices of concentration of personal income in Italy (the Gini index is around 34 per cent) are high compared with other advanced economies and the EU, though lower than those of the United States. The indices of concentration of wealth stand at around 60 per cent. Both measures of concentration have increased. From 1993 to 2002 not only did the economic gap between the South and the rest of the country not narrow but it actually widened further: average per capita income in the South is 57 per cent of that of the rest of the country, compared with 60 per cent in 1983-1992. Areas of underdevelopment persist in the South. Inequality in the distribution of income is high (the index of concentration is 36 per cent, compared with 29 per cent in the Centre and North); inequality of wealth is particularly high in Campania and Sicily.

<sup>33</sup> The connection between growth and distribution requires analytical caution at both the theoretical and the empirical level: “As for inequality, I suspect its causal connection to the trend in growth is weak. ... Besides, there is nothing in this kind of correlation to tell you what is causing what: Do fast-growing countries reduce income inequality or does lower income inequality favor growth?”, Solow, *op. cit.*, p. 51.

<sup>34</sup> Econometric analyses of the growth record based on cross-section data have estimated that, *ceteris paribus*, a reduction of 1 percentage point in the tax burden raises per capita GDP by 0.6 to 0.7 per cent; an increase of 10 per cent in investment in research and development raises per capita GDP by 1.2 per cent and its trend growth rate by 0.2 points; a 1 point increase in the ratio of investment to GDP raises output per worker by 1.3 per cent. The increased R&D investment would be obtained, among the various possible ways, if the average size of Italian firms were reasonably larger. The intensification of competition produced by a (gradual, decade-long) easing of regulatory restrictions and lowering of entry barriers to bring them into line with the average levels in the OECD area would raise total factor productivity growth by several tenths of a point. (See, among others, R.J. Barro, “Human Capital and Growth in Cross-Country Regressions”, *Swedish Economic Policy Review*, 1999; OECD, *op. cit.*; G. Nicoletti and S. Scarpetta, *Regulation, Productivity and Growth: OECD Evidence*, OECD Economic Department Working Papers No. 347, January 2003, especially p. 40.) No less considerable are the effects of different legal and institutional structures on growth (see R. Hall and C. Jones, “Why Do Some Countries Produce So Much More Output Per Worker Than Others?”, *Quarterly Journal of Economics*, 1999). The ability of the factors discussed in the preceding section to explain the slowing of economic growth in Italy would be even more evident if account were taken of non-linearity and interactions that econometric analysis has more difficulty in capturing.

<sup>35</sup> “Like a farmer using a carrot and a stick to coax a donkey forward, the market system ...”, P.A. Samuelson-W.D. Nordhaus, *Economics*, McGraw-Hill, Maidenhead, 1995, p. 25.

<sup>36</sup> C.M. Cipolla (ed.) *Storia facile dell’economia italiana dal medioevo a oggi*, Mondadori, Milan, 1995. For Cipolla the roots of the North-South gap lie in the secular interweaving of economic structures and cultural stratifications. See C.M. Cipolla, “Il caso Mezzogiorno? Colpa dei normanni”, *Il Sole 24 Ore*, 1 May 1996.

<sup>37</sup> The economic cycle apart and considering realistic interest and growth rates, the primary budget surplus needed to reduce the ratio of the stock of public debt to GDP by 3 percentage points per year is around 5-6 per cent of GDP (it was 3.6 per cent in 2001-02). For a given primary surplus, increasing public investment in infrastructure and human capital and reducing the tax burden on the economy requires a corresponding reduction in primary current expenditure. Purchases of goods and services, wages and salaries, pensions are, in order of the time needed to produce effects, the candidates for such far from easy expenditure savings.

<sup>38</sup> Concentrating at one extreme on truly useful large-scale transport projects but at the other also on higher education, scientific research, high-tech sectors, and the preservation and restoration of the country’s unique artistic and natural heritage.

<sup>39</sup> There is an urgent need for legal reforms that, consistently with the company law due to come into force at the beginning of 2004, will provide scope for entrepreneurship, simplify formal acts, broaden the range of possible organizational solutions for firms, encourage the increase in firms’ size (with the support of a tax system that takes this crucial aspect into account). A new legal system must be created for the economy (from bankruptcy procedures, to labour law, civil procedure and antitrust law) with a view to promoting a “market

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economy with rules". In conformity with Community law, this legal system must be suitably framed, capable of meeting the specific needs of the Italian economy. Empirical comparative analyses carried out in the last few years have confirmed that the legal and institutional spheres exert a considerable influence – through the accumulation of capital, better use of resources, certainty of contracts and transfer of risks – on the growth of the economy.

<sup>40</sup> Competition must be "imposed", by laws and on laws, by means of dynamic antitrust activity, in addition to the static protection of consumers, based on priorities dictated by what the economy needs in order to grow, and through behaviour on the part of the public sector that counters moral hazard, collusive practices and rents and leads producers to assume responsibility for their actions and, above all, to be self-reliant. "One shortcoming of the liberal economic order ... is that individuals seek, on occasion, to pursue their own (economic) interests by political means. They seek regulation, political influence, and protected monopoly. They have money and use it to buy power." E. Rothschild, *Economic Sentiments: Adam Smith, Condorcet, and the Enlightenment*, Harvard University Press, Cambridge (MA), p. 157.

<sup>41</sup> P.A. Samuelson, "Wherein Do the European and American Models Differ", *Temi di Discussione del Servizio Studi*, Banca d'Italia, 1997.

<sup>42</sup> The allocation of resources over time and knowledge are the key factors in the analysis by L. Pasinetti, *Dinamica strutturale e sviluppo economico. Un'indagine teorica sui mutamenti nella ricchezza delle Nazioni*, Utet, Turin, 1984.

<sup>43</sup> This is confirmed by the econometrically estimated parameters summarized in footnote 34. Given these parameters, the values the independent variables should take on for growth to revive significantly are not beyond the reach of the Italian economy.

<sup>44</sup> It is well known that Keynes was fascinated by the "magical consequences", the "incredible effect" "of compound interest": "If the proceeds of one Spanish galleon seized by Drake had been invested abroad at 5 per cent compound interest, the value at the present day would be many times that of the whole of our actual foreign investments". *The Collected Writings of John Maynard Keynes* (D. Moggridge, ed.), vol. XII, *Economic Articles and Correspondence. Investment and Editorial* (letter to F.P. Ramsey, summer 1928), Macmillan, London, 1983, p. 785.

Table 1

**AVERAGE ANNUAL GROWTH RATES OF GDP AND PER CAPITA GDP**  
(percentages)

	1951-1972		1973-1982		1983-1992		1993-2002		2001-2003	
	GDP	GDP/POP	GDP	GDP/POP	GDP	GDP/POP	GDP	GDP/POP	GDP	GDP/POP
<b>ITALY</b>	5.3 (1)	4.6(1)	3.2	2.8	2.3	2.3	1.6	1.4	0.9	0.7
<b>UNITED STATES</b>	3.9	2.4	2.4	1.3	3.4	2.4	3.2	2.0	1.8	0.7
<b>CANADA</b>	4.9	2.6	3.2	1.9	2.7	1.5	3.4	2.4	2.4	1.4
<b>UNITED KINGDOM</b>	2.8	2.3	1.4	1.4	2.5	2.2	2.7	2.3	1.9	1.5
<b>FRANCE</b>	5.0	4.0	2.7	2.1	2.2	1.7	2.0	1.5	1.3	0.8
<b>GERMANY</b>	5.7	5.1	2.0	2.0	2.1	1.8	1.3	1.1	0.3	0.2
<b>JAPAN</b>	9.4	8.1	3.8	2.7	3.9	3.4	1.0	0.7	0.9	0.7
<b>EU</b>	4.8	4.0	2.3	1.9	2.4	2.0	2.1	1.8	1.2	1.1
<b>OECD</b>	4.8	3.7	2.6	1.9	3.0	2.4	2.6	1.8	1.4	0.9
<b>WORLD</b>	4.8	2.9	3.2	1.4	3.1	2.2	3.3	2.5	2.9	2.0

Sources: A. Maddison, *The World Economy* (2001); IMF, *World Economic Outlook* (September 2003); for Italy, Prometeia and Istat. (1) 1952-1972.

Table 2

**INDICATORS OF ITALIAN ECONOMIC GROWTH**  
(average annual percentage changes)

	1983-1992	1993-2002	2001-2003
GDP	2.3	1.6	0.9
Employment (standard labour units)	0.6	0.3	1.3
Per capita GDP	2.3	1.4	0.7
Labour productivity	1.8	1.3	-0.5
Employment rate	0.5	0.1	1.2
Potential GDP	2.3	1.7	1.8
Value added at factor cost (1)	2.3	1.8	1.0
Contribution of capital stock	0.7	0.6	0.7
Contribution of labour input	0.4	0.2	0.9
Total factor productivity	1.2	1.0 (2)	-0.6
Labour productivity (3)	1.7	1.5	-0.3
Total factor productivity	1.2	1.0	-0.6
Capital intensity	0.5	0.5	0.3
Per capita consumption	2.9	1.2	1.2
Exports of goods and services	4.7	5.3	-0.8
(World trade)	5.4	6.5	2.1

Sources: Based on Istat, OECD and IMF data; estimates for 2003.

(1) Net of the rental of buildings. – (2) 1.4 in 1991-1995, 0.6 in 1996-2002. – (3) Differs from the preceding estimate because it is calculated on value added at factor cost rather than on GDP.

**Table 3****LABOUR PRODUCTIVITY IN ITALY**  
(average annual percentage changes)

	1983-1992	1993-2002	2001-2003
GDP per employed person	1.6	1.2	-0.6
GDP per standard labour unit	1.8	1.3	-0.5
Value added at factor cost per standard labour unit			
– Total economy	1.8	1.4	-0.3
– Total economy (net of rental of buildings)	1.7	1.5	-0.3
– Private sector (net of rental of buildings)	2.3	1.8	-0.4
– Private services (net of rental of buildings)	0.9	1.6	-0.6
– Industry excluding construction	3.3	1.7	0.1
Value added at factor cost per hour of work in industry	2.8	1.9	0.6

Sources: Based on Istat and Invind data; estimates for 2003.



**Table 4****DEBT AND INTEREST EXPENSE OF ITALIAN FIRMS (1)***(annual data; percentages)*

	Leverage (2)	Net interest expense/ value added (3)
1990	54.82	8.97
1991	54.55	9.16
1992	58.05	12.32
1993	56.03	8.48
1994	54.32	7.32
1995	53.82	8.32
1996	50.83	7.09
1997	46.48	5.79
1998	42.32	4.75
1999	36.41	4.16
2000	35.97	5.51
2001	39.74	5.22
2002	40.82	5.24
Q1 2003	41.26	5.11

Sources: Financial accounts, Istat.

(1) The data are for "non-financial firms" and from 1995 onwards refer to the new definitions of financial instruments and sectors of economic activity introduced by ESA95.- (2) Leverage is calculated as the ratio of financial debt to the sum of financial debt and equity.- (3) Estimate of the value added of "non-financial" firms based on the institutional accounts and national accounts compiled by Istat.

**Table 5****ITALIAN LABOUR MARKET INDICATORS**

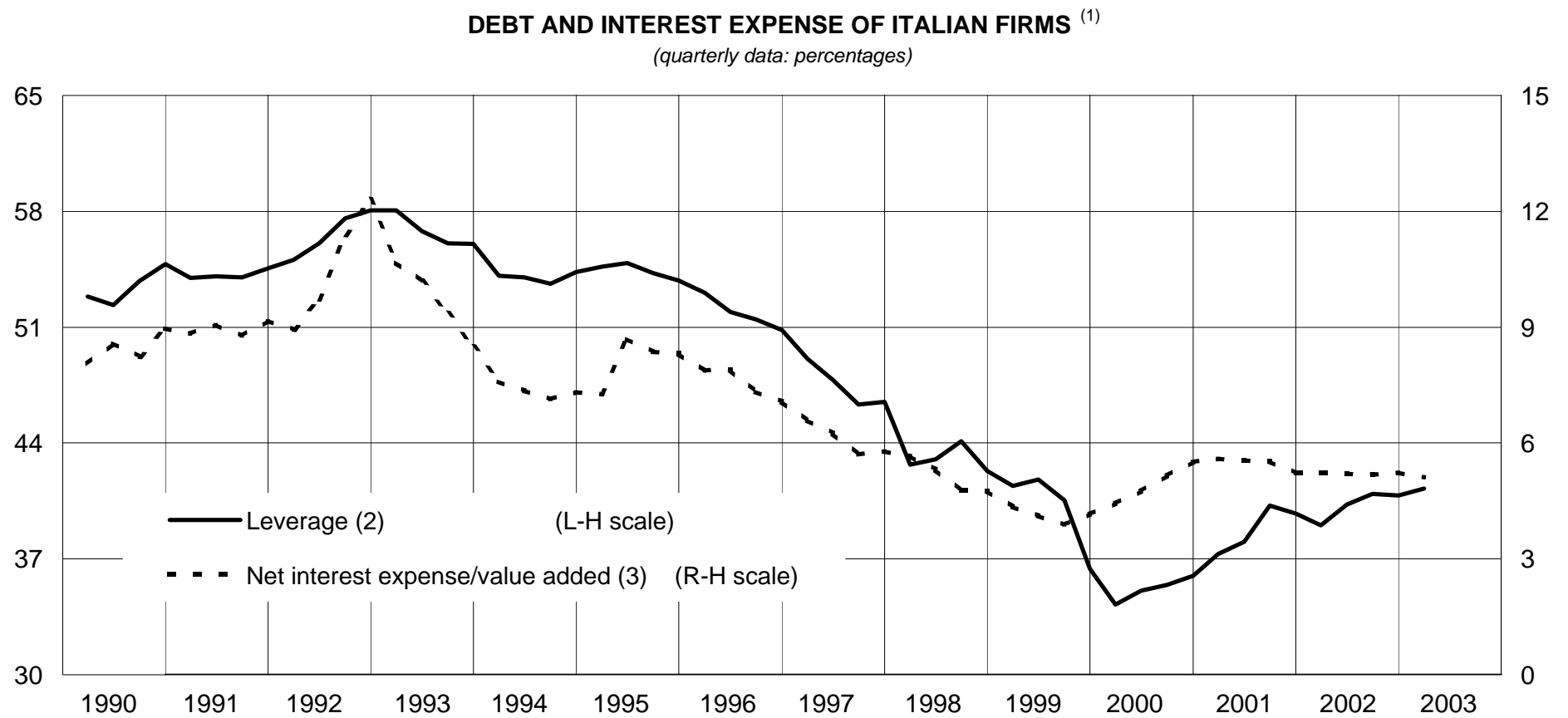
(percentages; annual averages)

	1983-1992	1993-2002	2001-2003
Unemployment rate	9.2	10.8	9.1
Participation rate (persons aged 15-64)	58.9	58.8	60.9
Employment rate (persons aged 15-64)	53.5	52.3	55.3
Incidence of underground work	—	14.7 (1)	15.3 (1)
Annual population growth rate	0.1	0.2	0.2
Composition of the population			
0-14 years	18.0	14.7	14.2
15-64 years	68.0	68.0	67.2
65+ years	14.0	17.3	18.6
Immigrants/population	—	1.8 (1)	2.5 (1)
Annual hours of work in manufacturing industry (number)	1,637	1,676	1,656

Sources: Based on Istat and Invind data; estimates for 2003.

(1) Data up to 2001.

Figure 1



See Table 4.