

Two Italian Puzzles: Are Productivity Growth and Competitiveness Really so Depressed?*

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Abstract

This paper focuses on two apparent puzzles for the Italian economy: (1) How can an extremely poor performance in productivity growth be compatible with strong employment growth? (2) How can a sharp decline in competitiveness come along with higher export prices and a general situation for exporters that looks far from desperate? Some possible explanations to these puzzles are presented in the paper. Special factors such as regularisation of immigrant workers and the entry of low-skilled workers into the labour market may have contributed to depressing measured productivity and overstating the loss in competitiveness. Against the backdrop of Italy's structural problems, this paper asks whether the Italian economy can adjust and grow. Medium-term prospects for the Italian economy remain challenging: for instance growth in total factor productivity is still disappointingly low and competitiveness keeps deteriorating. However, there have been encouraging signs of improvement, notably the labour market has performed well over the past few years and in response to pressures from fierce foreign competition some adjustment appears to have taken place in the exposed sectors.

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1. Introduction

Italy's per-capita GDP (in purchasing power standards) has lost ground over the years. Since the early 1990s, the gap has widened by 22 percentage points versus the US and 10 percentage points versus France (Figure 1). Such worsening has been significant since 2000. Italy's per-capita GDP is now about 8% below that of the European Union at 15 (EU15).

Many economists and international organisations have attributed Italy's poor per-capita GDP growth to a number of structural impediments. These are at the root of the well-documented modest growth in productivity and the erosion in external competitiveness. Some pundits have even gone as far as suggesting that these developments may eventually undermine the solidity of monetary union and/or force Italy out of the single currency area¹.

Commonly available indicators appear to suggest not only that problems related to productivity and competitiveness have played a role, but also that they are sizeable. Yet, despite the decline in per-capita GDP, Italy's export and overall economic performance does not appear to show the signs of the structural distress that these indicators would justify, thus raising some apparent puzzles about the Italian economy that the analysis in the present paper sets out to unravel.

These puzzles are: (i) how can an extremely poor performance in productivity growth be accompanied by strong employment growth? And (ii) how can the Italian economy reconcile a sharp decline in competitiveness with higher export prices and a general situation for exporters that looks far from desperate?

2. Low productivity growth and strong employment gains

Since the mid-1990s, Italy has achieved an impressive reduction in unemployment and a surge in employment, probably as a result of piecemeal reforms of the labour market. Unemployment has declined from levels above 11% in the second half of the 1990s to a seasonally-adjusted 5.9% in the third quarter of 2007. The employment rate of the working-age population increased from levels close to 52% in the mid-1990s to around 59% in the third quarter of 2007. Since the mid 1990s, and especially early in the current decade, a strong labour market performance has been accompanied by weak real GDP growth. A robust contribution of labour utilisation to GDP growth has been more than offset by a reduction in the contribution from labour productivity, resulting in weak overall GDP growth (Figure 2, labour productivity is given by the sum of total factor productivity and capital deepening).

By comparison, the US economy combined strong employment performance with acceleration in labour productivity during the same period. Also Italy combined employment growth with robust productivity gains in the 1980s. Then, following the 1992-93 currency crisis, employment collapsed and productivity jumped. Since the mid-1990s the situation has changed and weak productivity growth has been accompanied by persisting

¹ See for instance Daniel Gros, "Will EMU survive 2010?" CEPS Article, 17 January 2006 and Bernard Connolly, "Europe's Italy Problem", *The International Economy*, spring 2005.

gains in employment (Figures 3, 4, 5, and 6). It was only in 2006 and for the first time since 1995 that employment growth was accompanied by an increase in labour productivity in the manufacturing sector.

In terms of levels, labour productivity used to be higher in Italy relative to the EU15 and the US in the early 1990s. However, over the past few years growth in productivity has been modest, even negative in some years, and as a result the level of labour productivity is now low compared to that prevailing in the early 1990s, 4% below the EU15 average and almost 8% below that for the US.

There was a weak negative correlation between employment and labour productivity growth between the early 1980s and mid-1990s, which has become significantly stronger since 1997 (Figures 7 and 8). Such relationship should not be considered unusual, and indeed empirical evidence suggests that it has often been the case in many countries in the past. Yet, what is striking in Italy is the magnitude of the phenomenon and its relatively long duration.

There are many possible explanations for this increasingly strong correlation: (i) changes in technological progress, (ii) cyclical fluctuations, (iii) capital-labour substitution, (iv) effects of migration, (v) distortions in labour market statistics, and (vi) a shift from industry to services.

Technological innovation

A decline in the pace of technological innovation in the economy could be at the root of the odd combination.

In economic growth theory, technological progress is neutral with respect to employment over the long run as it raises the productivity of both labour and capital (if we assume a Cobb-Douglas production function with elasticity of substitution between labour and capital equal to 1). The increase in labour productivity leads to a rise in real wages, with a broadly neutral impact on overall employment. Higher wages and an increase in the productivity of capital induce more investment in physical capital by companies. This eventually leads to a balanced growth path led by technological progress, with labour productivity, real wages and the capital intensity of production growing at the same rate. Technological progress reflects the overall efficiency with which factors of production are combined and is depicted by total factor productivity². Once full employment is reached, employment would be expected to grow at the same pace as population in the long run. Equally, a decline in the pace of growth of technological progress should negatively affect productivity of labour and capital and be neutral for employment.

² The concept of total factor productivity does not exactly coincide with that of technological change for many reasons. The most important is that total factor productivity is a “measure of our ignorance” (Abramovitz, 1956) as it is calculated as a residual. It captures only ‘costless’ improvements in the way labour and capital resources are transformed into real GDP. Technological change that results from research and development spending would not be captured by total factor productivity as research and development is generally included in labour and capital factors of production. A second reason is that changes in the organisation of production, for instance, would also contribute to total factor productivity without being regarded as technological progress.

Although the question of whether technological advance is totally exogenous is still an open one, policy actions could contribute to influence total factor productivity. Given the declining trend in total factor productivity recorded in Italy over the past few years, it looks like policy measures have by and large failed to stimulate technological progress and enhance the trajectory of the balanced rate of productivity growth and the growth potential of the economy. By stimulating investments in the broader sense (physical capital, education and training, research and development) and by defining appropriate 'framework conditions' for businesses to operate and take full advantage of such investments, policy action can influence total factor productivity and, therefore, labour productivity. Some empirical work seems to support the view of weaker technological progress in recent years despite capital accumulation, as for example Bassanetti et al. (2004). Others point to the lack of innovation (Daveri, 2006). Beaudry and Collard (2002) show that a trade-off between productivity and employment growth may temporarily emerge when countries undergo a major endogenous technological change, which however is a factor that does not appear to have played a substantial role in the Italian case. Galí (1999) documented that positive technology shocks lead to a decline in labour input and tend to generate a short-term negative correlation between that variable and productivity, mainly due to rigidities in prices. This theory found support in the literature but appears to explain only short-term dynamics.

All in all, a decline in the pace of technological progress may partly explain the recorded trends in productivity (while being neutral for employment), although it can hardly be regarded as the most important factor in explaining Italy's performance.

Cyclical fluctuations

In the short run productivity growth can vary inversely with employment, for instance due to labour hoarding during recession or below-par economic activity or conversely when capital intensity cannot keep up with the growth of labour input during expansions. To some extent this may have played a role in Italy, especially at the beginning of the current decade. Still, labour hoarding seems to be more useful in explaining the cyclical behaviour of productivity rather than the divergent trend in productivity and employment growth, especially over such a long period of time.

Capital-labour substitution

In the medium term, labour productivity and employment can also deviate from the balanced growth path due to capital-labour substitution. If employment grows faster than the amount of capital, labour productivity growth would temporarily be below the balanced rate. This should be regarded as a temporary phenomenon and not a trade-off. In fact, a higher employment rate implies an increase in per-capita GDP and no negative long-term implications for productivity growth in the existing workforce. However, the entry of less productive 'marginal workers' temporarily depresses labour productivity.

The effectiveness of labour market reforms implemented in Italy could have determined a capital-labour substitution, even if the lower interest rates that have prevailed since the run-up to monetary union should have reduced the user cost of capital. Since the early 1990s there has been a slowdown in the growth rate of the ratio of the stock of capital to labour, i.e. capital deepening, possibly as a result of less capital-intensive technologies and activities

and the expansion of the services sector where labour input is prevalent (Figure 9). This evidence is consistent with capital-labour substitution. Labour could have become cheaper relative to capital and more flexible as a factor of production. While not changing the long-term path for growth, this shift may have explained the somewhat odd behaviour of productivity and employment.

At first glance, the empirical evidence does not appear to support the hypothesis of cheaper labour. Available measures of nominal unit labour costs³ suggest that Italy has become less competitive compared to other major European countries over the past few years (Figure 10). This mainly reflects inflation differentials, especially after monetary union, and a relatively disappointing performance in labour productivity growth, while real compensation per employee has not diverged significantly from that of other major European countries. In 1999-2006, growth in real compensation per employee was on average 0.3% in Italy versus 1.3% in France, 0.6% in Germany, -0.2% in Spain and 0.5% in the Euro Area. Growth in nominal unit labour cost was instead 2.6% in Italy, 1.7% in France, 0.3% in Germany, 2.6% in Spain and 1.5% in the Euro Area over the same period⁴. Therefore, the first impression would run counter to the idea of cheaper labour as a factor of production relative to other countries.

The share of wages on value added does not provide support to the idea of cheaper labour either. This share has declined since the late 1970s (Figure 11) and it was low by international standards at the beginning of the 1990s (Bassanetti et al. 2006). Since the beginning of the current decade, however, there has been a sharp pickup, partly due to poor cyclical conditions (the share of wages on value added tends to follow a cyclical pattern and rise during downturns), partly to a rebound driven by manufacturing from historically low levels and partly to continuing strong growth in employment. Also, a still rigid and protected labour market for insiders and the two-layer bargaining system not allowing downward wage flexibility has prevented a more pronounced moderation in compensation growth which would have put it more in line with the poor productivity developments that have prevailed since the beginning of the decade.

However, it is the cost of the marginal worker that counts for the hiring decisions by companies and this cost has declined significantly in Italy over the past few years, notwithstanding relatively high average cost. In fact, labour market reforms in Italy have only been partial and they have generated a dual market, opening a gap in earnings and employment flexibility between insider workers and new labour market entrants. Insider workers' jobs are protected and their wages are downward rigid due to the wage negotiation system and the trade unions objective function, while greater flexibility in working arrangements has been allowed for new entrants. In addition, policy has been oriented at reducing youth unemployment, thus allowing further reduction in the cost of hiring young workers (e.g. cuts in social security contributions and tax credits). Both hiring conditions (increased use of temporary contracts) and wages (downward flexibility) have made for a fall in the relative price of labour at the margin and thus a substitution of capital for labour, benefiting employment.

³ Labour costs include wages paid to employees as well as non-wage labour costs, i.e. social security contributions paid by employees and employers.

⁴ Source: EU Commission.

This story is well documented in Brandolini et al. (2006). The trigger for reforms was the withdrawal of the lira from the EMS on the 17th of September 1992. The severe financial crisis made for a steep downturn in economic activity (GDP growth was -0.9% in 1993), with a loss of more than 860,000 jobs (3.3%) in six quarters (1,080,000 units from 1991 to 1995). It was the most dramatic employment crisis since the Second World War. This called for emergency policy measures on the budget side but also set the stage for the all-important incomes policy agreement of the 23rd of July 1993⁵. The agreement included the abolition of the wage indexation mechanism (*scala mobile*) and introduced a two-tier bargaining system, with industry-wide national contracts devoted to protect purchasing power and company-level contracts devoted to performance-related pay rises. These changes were instrumental in abating inflation and, by introducing a framework of cooperation among social partners, set the stage for a major change in the Italian labour market. Since the early 1990s, strong labour demand in the business sector has sustained net job creation in the face of weaker output growth. Brandolini et al. (2006) show that greater reliance on fixed-term contracts contributed significantly to restrain growth in labour cost⁶. They conclude that available evidence supports the idea of a shift in the relative price of labour versus capital compared to the previous expansion⁷.

Rosolia and Torrini (2007) find evidence that entry conditions in the labour market deteriorated since the early 1990s, after substantial improvement between the mid-1970s and the late 1980s. They document a decline of about 12% in real weekly wages of male workers who entered the labour market at age 21-22 between 1992 and 2004. The decline is 4% for entry at age 25-26⁸. They also find that the age/earning profile experienced during the working life of cohorts that entered the labour market after 1992 is broadly unchanged over time, i.e. younger cohorts do not experience any catching up. Therefore, the entry loss entails a persistent loss with respect to previous cohorts. The wage gap between old and young workers went from 20% in the late 1980s to 35% in the early 2000s. The behaviour of economy-wide wages have not matched the weakness experienced in entry wages, thus contributing to develop a two-tier market over time and a 'generation gap'. These findings do not include new working arrangements of jobs as independent contractors, with less favourable conditions than the standard dependent employment contracts, which have become increasingly important in recent years. Their inclusion would probably further widen the gap, especially considering that pension benefits accrued to these workers have been far less generous. Rosolia and Torrini (2007) exclude potential explanations offered by economic theory related to market forces, such as relative supply developments, technological change and the selection of less productive young workers in the labour market, leaving only changes in institutional arrangements as a possible explanation. The evidence is compelling for a structural break at the beginning of the 1990s that does not appear to be matched by similar developments in other European countries. Boeri and Garibaldi (2007) find a sizeable negative effect of temporary workers on changes in productivity at the firm level by using a panel of 1300 firms between 1995 and 2000.

⁵ The 1993 agreement was preceded by a provisional three-party agreement in July 1992 which abolished the indexation mechanism of wages and introduced a short-term wage freeze and by Law 223 in 1991 which eased legislation for collective dismissals.

⁶ The hourly post-tax earnings of temporary workers working year-round fell short of those of other workers by 19%, after controlling for individual characteristics in 2000. Since then, the gap has widened further.

⁷ These conclusions are reinforced by a secular recomposition of demand towards labour –intensive services (see other section for a discussion on this potential factor for explaining the puzzle).

⁸ This compares with a 33% gain for aggregate average yearly real wages per standard labour unit in the private sector (National Accounts) between 1976 and 1992.

Lack of flexibility has also a cost attached to it. It is well-known that temporary contracts have been used as a device to bypass the rigid regulation of individual dismissal. In the early 1990s temporary contracts took off. Their share in newly hired workers went from 28% in 1993 to more than half in 2006, and their share on total employment from 6% to 11.3% over the same period. If we include about half of self-employed workers on collaboration and occasional employment contracts, whose employment relationships are exclusive and therefore can be regarded as close to fixed-term payroll jobs, temporary contracts would reach 12.5% of total. Cipollone and Guelfi (2006) estimated the value that employers attach to flexibility. The results show that firms value the possibility of increasing by 1% short-term workers as equivalent to a reduction in the range of 1.3-2.8% in labour cost of open-ended workers. By extending these estimates to the whole economy, they conclude that for employers the almost 10 percentage point increase in the share of fixed-term contracts among new hires recorded between 1995 and 2003 is equivalent to a 10.4-22.4% wage cost reduction. Given the elasticity of employment to wages, enhanced flexibility of the Italian labour market accounts for anything between 37 and 80% of employment growth in the private sector. These rough estimates suggest that the increased flexibility had a sizeable effect on overall labour costs, thereby contributing to change relative prices of labour versus capital.

Hence, the headline increase in average unit labour costs for the economy hides a substantial decline in labour costs at the margin, which helps to explain the apparent puzzle of poor productivity growth combined with substantial employment gains.

Impact of migration

In addition to the above labour demand effects, labour market reforms combined with a substantial influx of migrant workers and produced a labour supply shock. As economic theory would suggest, this has long-term effects on employment levels and no effect on productivity (if constant returns to scale are assumed; the effect would be negative if the marginal worker is assumed to be less productive as previously mentioned). Bank of Italy estimates⁹ indicate a positive correlation between foreign presence and employment and an even stronger correlation for the participation rate. It looks as if the presence of foreigners, and especially foreign women, even enabled Italian women to better reconcile work with family responsibilities, thereby increasing participation in the labour market.

In the period 2002-2004 a significant influx of immigrants was officially recorded. The influx increased from 151,932 in 2001 to 411,970 in 2002, 380,737 in 2003, 266,829 in 2005 and 237,614 in 2006¹⁰. The total number of foreigners residing in Italy was 2,938,922 as of 1st January 2007 and, according to the latest labour force survey, the number of foreigners in employment was 1,590,000 in the third quarter of 2007. In 2006, foreign residents accounted for about 80% of the growth in the labour force and for about two fifths (178,000 units) of additional employment. The employment rate of working-age foreigners is 66.1%, significantly higher than that for the native population and this is only partly explained by demographics. Resident foreigners made up 5.9% of total employment

⁹ Bank of Italy, Annual Report for 2006, May 2007.

¹⁰ Source: ISTAT, Foreign population resident in Italy, 2 October 2007. Resident immigrants are recorded in official statistics once they enter the National Register (*anagrafe*). Almost all immigrants with regular permit are recorded into the National Register, although with some time lag.

recorded in 2006, with peaks of more than 10% in the hotel and restaurant sector and in construction, and more than a quarter of women employed in services to households and other social services. These data show that the phenomenon is sizeable. Thus, by having long-term positive effects on employment levels, the labour-supply shock is believed to have indirectly contributed to the widening gap between employment and productivity growth.

Distortions in labour market statistics

The large influx of immigrant workers and regularisation of both foreign illegal workers already in Italy and national illegal workers may have caused statistical distortions. The Italian Statistical Office (ISTAT) estimates the unobserved components of GDP and employment, including the output of undeclared workers. This is done according to the rules established within the European System of Accounts (ESA) 1995 and by using a variety of statistical sources and techniques. The estimates of total value added by the statistical office are obtained by multiplying labour units by per-capita value added. Therefore, if undeclared workers are properly estimated by the statistical office, the level and dynamics of employment, output and productivity in national accounts should not be affected. For instance, regularisation of illegal immigrants should mostly result in reclassification of labour inputs from undeclared to declared¹¹, leaving relevant national account aggregates unchanged. However, if the number of undeclared workers is underestimated, the level of employment and output on the supply side would go under recorded, although productivity measures would remain largely unaffected.

There is evidence suggesting that the number of undeclared workers indeed went under-recorded in the past. The Immigration Law introduced in 2002¹² did not aim at increasing the influx of immigrant workers, rather at regularising those already in Italy. Thus, a large part of regularisation is believed to have mostly changed the status of workers from undeclared to declared rather than registered new immigrant entrants (no data is available to distinguish between genuine influx and regularisation). Yet, in 2002 the number of regularisation requests was about 700,000, more than the estimate of illegal foreign workers made in the previous year (about 500,000).

The irregularity rate (ratio between full-time equivalent undeclared workers over total) fell in 2002 and 2003, and then recovered slightly thereafter. In 2005, total illegal workers still accounted for around 12% of full time equivalent employment¹³, after the ratio declined by 1.1 percentage points both in 2002 and 2003, the most important years for regularisation (Figure 12). What is striking, however, is that the percentage of undeclared foreign workers over total undeclared workers plunged during the same period from an estimated 22% in 2001 to meagre 4% in 2003. Undeclared foreign workers dropped to only 0.5% of total full-time equivalent employment. This may arouse the suspicion that undeclared foreign workers in the national accounts may have not been properly estimated.

¹¹ This is argued in various publications by the Statistical Office and in Alfonso Rosolia, "Notes on undeclared work in NAs and the regularisations of illegal immigrants", mimeo, 5 March, 2007. The shift from undeclared to declared could also be noticed in the different trend of total employment in national accounts (where undeclared are included) and the Labour Force Survey (where only legally resident households are surveyed).

¹² Law N. 189 Article 33 dated 30 July 2002 and no. 222 of 9 October 2002.

¹³ Source: ISTAT, Italian Statistical Office, national accounts.

Under-recording may also be at play for native workers. Undeclared workers may have gone under recorded in national accounts in the past and the new fixed-term contractual arrangements may have succeeded in allowing some undeclared workers to be declared. It is no coincidence that the estimated irregularity rate started to fall in 1998, the year that followed the introduction of the so-called ‘Treu package’, which gave a boost to temporary work contractual arrangements. In sum, if indeed the undeclared workforce was under-recorded in the past, the rise in employment since the mid-1990s would not be entirely genuine as it would partly be a shift from undeclared work outside official estimates to declared work.

Still, even assuming that undeclared work was underestimated would not explain the observed divergence between employment and productivity growth. Observing the behaviour of productivity in those sectors where the presence of undeclared workers is believed to be higher (notably hotels and restaurants, agriculture and fisheries and construction) seems to suggest that some distortions may be at play on the productivity side as well. Figure 14 shows an unusual collapse in total factor productivity growth around the start of the current decade in two of the sectors where the percentage of undeclared workers over total is believed to be higher: “agriculture and fisheries” and “hotels and restaurants”. Growth in total factor productivity went deeply negative in both cases. The trend is less clear in the construction industry, where it is also believed there is a high presence of undeclared workers.

Shift from industry to services

Another possible explanation for poor productivity in the economy is the secular shift from industry to services. In 1995, the share of value-added on GDP of industry excluding construction was 24.9%. By 2006 this share had declined to 21.4%. Over the past 10 years, net employment gains have mostly occurred in the non-capital intensive service sectors and some of these sectors were characterised by relatively low productivity growth and levels. Of course many services are high-productivity activities, as for instance financial services in many countries. Others are far less productive such as the distribution sector, where employment growth has combined with strict land regulation and other forms of regulation that have limited consolidation in the sector and growth of large retail outlets, depressing gains in productivity.

Looking at available evidence, however, recomposition by sectors does not appear at the root of lower productivity in the past 10 years. Daveri and Jona-Lasinio (2005), for instance, found little evidence of this. Moreover, in the same period the manufacturing sector, which is supposed to be a high-productivity-growth sector, has performed poorly, somewhat at odd with the performance in the 1970s and 1980s and that of other countries. As explained in the next section, some statistical problems with the deflator of exports may at least partly justify this odd performance, given that manufacturing is the most export-oriented sector in the economy. At any rate, the productivity slowdown in the private sector has to some extent been led by manufacturing. Therefore, although in theory recomposition in favour of services would entail a drop in productivity growth and a one-off negative level effect, this has not happened in Italy because of the poor productivity showing of manufacturing.

Summing up, of the above-mentioned possible reasons explaining the productivity/employment behaviour that has prevailed since the early 1990s, the most important ones are probably capital-labour substitution, regularisation of immigrant workers and low-skilled low-productivity workers entering the labour market. Some of the above considerations seem to suggest that the combination of strong employment gains and poor productivity growth may be transitory, although it has already lasted for many years.

3. Italy's competitiveness and export price rises

Since the mid 1990s, the Italian economy has combined a sharp decline in competitiveness with high export prices. Italy used to have a market share in world trade second only to Germany within the EU15. In 1995, Italy's market share in world trade was 5.22% in volume terms. The share declined to 3.73% in 2000 and to 3.66% in 2005. Italy now ranks below Germany, France and the UK on this metric¹⁴. Even within the EU15, Italy's share of trade has steadily declined. It was 8.9% in 1995. It then declined to 6% in 2000 and to 5.7% in 2005 (Figure 15). During the same period, unit labour costs have increased markedly¹⁵. Yet, Italy's average unit values of exports (a proxy for export prices) have continued to increase over the years, leading to another puzzle (Figure 16).

The Italian Statistical Office (ISTAT) does not release export prices. It publishes export unit values (i.e. export values divided by quantities), which combine changes in both prices and the product mix. Export unit values have increased significantly over the years and especially recently. Between 2004 and the third quarter of 2007 they have increased at an average annualised rate of 7.5% (Figure 17). The evidence is also supported by qualitative sectoral data on prices by export markets which show that since 2002 Italian exporters, especially those in traditional sectors, have increased export prices more than domestic prices in the face of an appreciation of the euro exchange rate and increased competitive pressure (Basile et al. 2007).

The trends in market shares and export unit values raise a few questions. Are Italian exporters trying to protect profit margins at the expense of market shares? Or is there a significant quality upgrading of export products combined with increased pricing power? Is there any other possible explanation?

The economic debate on the Italian competitiveness problem has mainly focused on structural issues such as Italy's unfavourable market specialisation, biased towards low technological production, hence exposing exporters to competition from low-cost producers, and the size of Italian firms (mainly small to medium), which prevent firms from fully exploiting economies of scale in an increasingly global market¹⁶. A few contributions have also tried to address the apparent puzzle of export prices.

¹⁴ Based on UN Comtrade and European Commission data.

¹⁵ Measure of competitiveness based on producer or consumer prices show a different picture. These measures may be perceived as more reliable indicator given that labour input represents, on average, only a small part of total costs as exporting firms generally purchase raw and intermediate goods and services as a sizeable component of their cost base.

¹⁶ Italy's smaller average size of firms versus other major economies limits the ability to penetrate foreign markets, and especially the most dynamic emerging Asian markets for several reasons: (i) fixed costs to access

Possible explanations of this apparent puzzle are: (i) companies protecting profit margins, (ii) a shift in product mix/specialisation, (iii) off-shoring of low-quality production/market exit and upgrading of product quality, (iv) increased pricing power or, more generally, market power and (v) measurement errors.

Companies protecting profit margins

One may suspect that the broad-based export recovery recorded in 2006, and to a lesser extent in the first part of 2007, particularly when exports are measured in values, is simply cyclical, and that exporters have preferred to increase prices rather than recover market shares. However, rises in export prices above those recorded in other competitor countries have been recorded for many years. After several years of consistent and prolonged growth in export prices it seems difficult to assume a deliberate and suicidal attempt by Italian companies to try and protect profit margins at the expense of market shares, although this hypothesis has initially been aired by international institutions and economic commentators. Protecting profit margins is usually a short-term strategy that cannot be sustained over the long run. Thus, this is not believed to be a valid explanation.

A shift in product mix/specialisation

According to the OECD¹⁷, the correlation between Italy's sectoral specialisation (by using the RSCA, the Revealed Symmetric Comparative Advantage index) and that of the dynamic Asian economies is a significantly positive one and the highest among industrialised OECD countries, implying that there is a strong competition. This correlation has also increased over the years.

Despite this strong competition, there has been no significant shift in Italy's product specialisation. The Balassa index shows that there has been a small decline in traditional Made in Italy sectors since 2000. Overall, the shift has been limited. The value of the specialisation index in traditional sectors is extremely high (as in Spain). These sectors are exposed to competition by newly-developed countries. The Balassa index also shows: (i) a still high specialisation in low technology manufactures, which has been declining only slowly since 2000; (ii) a mild increase in specialisation in medium-low technology manufactures, which is now significantly higher than in France and Germany and in line with Spain, where specialisation is declining; (iii) a mild increase in specialisation in medium-high technology manufactures, which remains the lowest versus Germany, France, and Spain; (iv) a low and declining specialisation in high technology manufacturing, which remains well below that of Germany and France (Spain has caught up with Italy), while all European countries are below the G7 average.

It could be argued that the OECD classification by technological content is not truly representative of the sophistication in production. In fact, a low-technology product which has a high content of design, branding and highly complex production processes, as is

foreign markets (Bugamelli, Cipollone e Infante, 2000; Bugamelli e Infante, 2003), (ii) lower propensity to innovate (Basile, 2000), (iii) sizeable initial sunk costs make it more difficult for firms to enhance productivity by product and process innovation (Lotti e Schivardi, 2003). Moreover, the small size bias of the Italian industry does not appear to be related to the sectoral specialisation of Italian firms (Pagano e Schivardi, 2005).

¹⁷ OECD (2007), OECD Economic Survey: United Kingdom, OECD, Paris.

often the case for Italian productions, may no longer be considered as low technology. Yet, by this metric the shift in product specialisation has been small for Italy, and certainly unable to explain the rise in export unit values.

Offshoring of low-quality production/market exit and upgrading of product quality

Under the pressure of newly industrialised countries, Italian exporters could have restructured production by relocating low-quality production to low-cost countries. Moreover, the competition faced by low cost producers could have forced some companies to exit the market. Both phenomena would have resulted in a recomposition of the export mix towards the high-end of the quality and price scale, justifying the increases in the export deflator recorded over the past few years.

A deliberate strategy to upgrade the quality of domestically produced goods might also partly explain this phenomenon. While some domestic firms producing at the lower end of the quality scale may have had to close down in the face of fierce competition from emerging countries, others are believed to have increased the quality of products in terms of marketing, design content, complexity etc. also by relocating low-quality production abroad. This would have allowed them to increase prices.

Empirical evidence seems to support this view. Lamieri and Lanza (2006) find that, two out of three Italian companies have upgraded the quality of their products as a reaction to the introduction of the euro (40% of companies show a full scale upgrading on all range of products). Of the remaining third, some were already at the higher end of the quality scale (silk and leather for instance) and already have a quasi-monopolistic pricing power on niche products. Other sectors seem to have been unable to adjust in the same way (ceramics and wool). Borin and Lamieri (2007) present several methodologies to estimate quality upgrading and propose a model that show that greater quality of exports results in lower price elasticity of demand.

Increased pricing power or more generally market power

Closely linked to the previous point, although of a different nature, is the possible increase in pricing power of exporters. Lanza and Quintieri (2007) shows a significant reduction in price elasticity of market shares between 1995-1999 and 2000-2005 in traditional Made in Italy sectors, such as wine, vegetable oil, ceramic and glass products, furnishing, mechanical products etc.. For instance, the Italian olive oil price is about 140% higher than the European average and export unit values have continued to rise (+40% in 1998-05). Yet, Italy's market share has remained largely unchanged. Another example is furnishing. The sector is retaining a competitive edge by increasing the complexity of production. The higher the complexity of production, the greater the ability to include functional and aesthetic features, so as to sell at higher prices. Not all sectors show reduced sensitivity to relative prices (jewellery for instance). Nevertheless companies appear to enjoy higher pricing power in several sectors and especially in traditional Made in Italy sectors. De Nardis and Pensa (2004) use the concept of relative mark-up as an indicator of market power by exploiting the relationship with the elasticity of the residual demand curve. They show that Italian exporters have been able to practice mark ups over marginal costs in most destination markets despite intense competition from low cost producers, thereby showing increased market power.

Another potential explanation is an increased ability to ‘price to market’. By using survey data between the first quarter of 1999 and the second quarter of 2005, Basile et al. (2007a) say that “impulse-response analysis shows non-negligible reactions of export-domestic price margins to unanticipated changes in cost competitiveness and in foreign and domestic demand levels. [...] For the period 1999-2001 a typical pricing-to-market behaviour emerges, while over the most recent years favourable foreign demand conditions have allowed firms to increase their export-domestic price margins in the face of a strong deterioration of their cost competitiveness”.

Measurement errors

Pushed up by low productivity growth, unit labour costs have been higher in Italy than in other major Euro Area economies, although marginal labour costs have declined. Price competitiveness measures, such as real effective exchange rates based on average unit labour costs, have deteriorated sharply¹⁸. However, if the deterioration in labour productivity is overstated, as was previously suggested, that of unit labour costs would similarly be overstated as would competitiveness losses measured on the basis of unit labour costs.

There are other potential measurement errors in export unit values. Given that export unit values are not fully indicative of underlying export prices, comparing unit values to other measures of export prices could give an estimate of the bias. According to Bugamelli (2007) who used survey data of the Bank of Italy and adjusted for quality of products, in the last decade (1996-2005) export unit values have overestimated export price increases by 2 percentage points on average every year. This would imply underestimation of volumes, and thus real GDP growth, as original export data are in value terms¹⁹.

To sum up, it appears that several factors may help unravel the apparent puzzle of rising export prices while exporters are facing competitiveness problems. Price competitiveness problems may also be overstated by simply looking at average labour costs for manufacturing or for the whole economy. Deep restructuring in the Italian industry over the past few years may have put surviving exporters in a substantially better position than in the past, thereby allowing them to move upscale in terms of product quality and thus increase prices.

Still, Italy scores pretty low on numerous pillars of the World Economic Forum indices. Although the subjective nature of these indices suggests that they may not be the best gauge of competitiveness, overall they signal that the problem is broader. ‘Framework

¹⁸ If measured by unit labour costs in manufacturing, deterioration is less dramatic (wages have increased more in the public sector and in sectors less exposed to international competition, notably in services).

¹⁹ The deflator of import has been rising strongly, possibly having been overestimated as well. Still, the larger weight of exports over imports does not make for a full offset on the contribution by net export to GDP growth. Moreover, Gilles Moëc noted that this underestimation on the demand side would match a similar underestimation on the supply side as growth in the deflator of value added in manufacturing appears overstated as well (“Italy’s Growth Prospects: Accelerando to Moderato”, May 25, 2007, Bank of America Economic Brief). Similar considerations were made in “Enough Italy Bashing, by Eric Chaney, Morgan Stanley Research Notes.

conditions' are still not favourable and the factors that are critical to driving productivity and competitiveness need to be improved.

4. Italy's reform process

Against the backdrop of Italy's structural problems, can the Italian economy adjust and grow?

Growth accounting and structural indicators can provide some clues on Italy's structural problems. According to European Commission data, the gap of per-capita GDP versus the EU15 average in 2000-2005 (0.8 percentage points) is almost entirely explained by a negative total factor productivity differential, which cannot entirely be explained by the above-mentioned distortions. Italy has a level of labour hourly productivity at only 91% of the EU15 average. Labour productivity is driven down by low labour quality (possibly partly explained by Italy's low-tech productive specialisation) matched by poor performance in the education and life long learning policy indicators.

Italy lags far beyond in terms of labour participation, mainly because of low participation by older people (55-64), youth and –to a lesser extent– female participation. Moreover, the reduction of youth participation since the early 1990s (which speeded up since 2002/2003) does not combine with much improved educational performance (as measured by the level of educational attainment). Recent immigration developments are likely to mitigate the participation problem in the future. Nevertheless, worrying demographic trends make improving labour participation all the more important.

Structural indicators show that wage bargaining and wage setting policies and making-work-pay policies have seen a relative deterioration vis-à-vis the EU15, calling for a revision of the current labour relation framework. Wage dispersion is low across regions and combines with a high level of regional dispersion in unemployment, suggesting that wage differences and/or labour mobility across regions is rather low versus the rest of Europe.

As for the policy setting deemed to affect productivity performance, Italy has problems with level indicators of efficient financial market and access to finance, barriers to entrepreneurship and business environment, openness to trade and investment and R&D innovation and ICT. In the field of competition, the average mark-up at industry level is higher than in the rest of Europe (although there is no problem in network industries). Market integration measures such as trade and investment indicators underline an insufficient degree of openness. Indicators signal low openness to trade and investment, especially as for the cost and time to trade across borders and the level of protection given to investors. Problems are also indicated in the business environment, especially in terms of administrative burdens for companies and low efficiency of the public administration. Doing business still appears relatively difficult in Italy, especially in terms of paying taxes, dealing with licenses, enforcing contracts and the time to close a business. Italy shows a relatively high level of regulation in the access to credit and a high cost of bank services.

Substantial progress has been made in many areas over the past few years, but a lot more needs to be done to address the above-mentioned problems. Speeding up the reform process is essential for boosting Italy's potential growth and competitiveness. By removing

impediments to a full and efficient use of resources, reforms increase sustainable growth with higher levels of employment. Besides ensuring long-term fiscal sustainability, as discussed in Chapter 4, the priority goals of Italy's reform process could be summarised as follows: (i) enhance competition and simplify regulation, through actions to reduce entry barriers and liberalise services, (ii) promote research and innovation, (iii) increase participation in the labour market, make the labour market more flexible, and encourage investment in human capital, (iv) upgrade tangible and intangible infrastructure, and (v) reconcile environmental protection with technological progress.

High regulation and low competition in the non-tradable sector (especially the cost of financial services) are at the root of poor productivity gains. Important reform steps have already been taken by improving the functioning of markets and extending competition to previously-protected sectors. As part of the drive to enhance competition, government initiatives have improved the functioning of markets and extended the area of free choice. Reforms have been introduced, aimed at lifting restrictions on market access (e.g. restrictions on supply, eligibility for doing business, minimum distance, antitrust caps at local level, etc.), lifting restrictions on business (e.g. range of products offered, minimum prices and ban on advertising, discounted products, constraints on the portability of bank accounts, company type, etc.), reorganising the electricity and gas markets (increasing competition through unbundling of distribution and selling of electricity, and organisational unbundling of transmission and distribution system operators in the gas sector), ensuring energy supply at competitive costs by setting minimum targets of fuel mix diversification, increasing the security of gas supplies by encouraging investments in new infrastructures, promoting policies to sustain renewable sources by increasing energy efficiency, and finally measures to reduce red tape (strengthening the "one-stop shop" for business activities and cutting administrative requirements). Enhanced competition would keep a lid on inflation and in turn benefit competitiveness. Higher inflation in Italy than in other countries was one of the key reasons for deteriorating competitiveness in the past.

More effort is needed to strengthen innovation in the economy. For this reason, a research and development target equal to 2.5% of GDP by 2010 has been set by the government (2/3 from private sector), which is below the European target (3.0%) but still extremely ambitious given that research and development spending is currently very low (1.1% in 2006). Weak investment in R&D may reflect the specialization of Italian firms in traditional sectors as well as the prevalence of small family businesses, whose innovation and investment in R&D appears to go under-recorded. However, R&D spending appears low even after controlling for industry structure. Innovation is also closely linked to foreign direct investment. Openness to foreign direct investment is increasing, but remains low compared to other countries. The small number of foreign multinational enterprises may have constrained technological transfers and spillovers of best practice to domestic firms. Furthermore, outsourcing and offshoring has led to geographical fragmentation of value-added chains, threatening the Italian industrial district model (*distretti*). However, this should also have allowed Italian firms to cut costs in low value-added areas through redirecting resources to what they do best and facilitating the diffusion of productivity enhancing technology. Yet, investment in communication technology, which is more closely associated with total factor productivity enhancements, remains one of the lowest in the OECD.

Within the budget constraints and without losing sight of the need to cut taxation, additional resources need to be found to increase infrastructure spending and in particular:

improving general production efficiency and business competitiveness through better logistics, upgrading the existing networks in order to integrate Italy within the European transport system, encouraging innovative projects in the transport sector, reducing the infrastructure gap between Central/Northern and Southern Italy.

Despite major labour market reforms in the past, the functioning of the labour market is far from optimal. A lot more needs to be done, notably: further reforms are needed to encourage young people and women to join the workforce through active employment policies (in addition to immigration policies), introduce re-employment incentives to postpone retirement, promote social policies providing more services and assistance (including family-support policies and childcare provision), decrease the size of the shadow economy and reduce regional disparities.

A key challenge for the Italian economy is to increase labour market participation. Over the long run, employment is affected mainly by the functioning of the labour market as well as broad influences on labour supply such as growth in the working-age population and labour participation. While there is limited scope to influence the former, the scope for a larger contribution to GDP growth from the latter and in general from labour market functioning is substantial. In Italy, levels of participation are low in the formal economy and below those of most industrialised countries. This is particularly true of women and older workers and there are huge regional gaps, which represent a sizeable source of untapped growth potential. More employment-friendly arrangements should provide stronger incentives to participate in the labour market, including tax incentives, and a better market functioning should contribute to a better match of supply and demand and a more efficient allocation of labour.

Moreover, a significant reduction in the divide between labour market insiders and outsiders is badly needed. Incomes policies in the 1990s and early in the current decade have been crucial to the improvement in terms of macroeconomic stability and labour market functioning. However, these highly successful developments have come at the cost of an increasing duality in the labour market. These developments have also exposed the inadequacy of the Italy's safety nets and low unemployment benefits. Shock absorbers in the labour market are insufficient and fragmented. Benefits are generally lower than in the rest of Europe and mainly limited to industry. Globalisation and the far-reaching restructuring process in Italian businesses call for smoother transition from unemployment to employment and require a more efficient mechanism to match labour demand with supply as well as unemployment benefits based on proper incentives. The current divide between insiders and outsiders looks unsustainable for the future, calling for a significant enhancement of safety nets on the one hand and a substantial reduction in job protection for insiders on the other.

Italy needs to invest more in human capital, as educational achievements are weak by international standards, and improve the matching of labour with capital thus contributing to improve total factor productivity. The issue of increasing the accumulation of human capital in addition to physical capital needs to be forcefully addressed to enhance growth potential over the long term.

Finally, another key challenge is modernising the public administration, also through e-government programmes, to improve the framework conditions for the reform process to take place efficiently. This is especially important given the large size of the public sector in

the economy and the potentially large productivity gains that could be achieved, with positive spillovers into the rest of the economy.

5. Concluding remarks

Without downplaying the structural issues at stake, this paper presents evidence suggesting that the short- to medium-term outlook for the Italian economy may be less bleak than some indicators depict. The decline in productivity growth, partly as a result of labour market changes, may have concealed a genuine structural improvement that is now gradually emerging. Under the pressure of globalisation, healthy restructuring in the sector most exposed to competition has been encouraged through a process of “creative destruction”. Despite poor demographic trends, reforms in the labour and, more recently, product markets should help enhance potential growth over time.

As indicated in the final section of this paper, a number of important reforms and policy measures have already been introduced to respond to Italy’s economic challenges. It could be argued that some of these reforms still have to fully produce their impact on the economy, and thus part of the explanation for the poor performance may lay on adjustment lags. This optimistic interpretation considers the recent period as a necessary and temporary adjustment that entails economic growth below full potential. However, there is plenty of evidence suggesting that Italy is lagging behind on a number of structural counts and thus still faces daunting challenges. A lot more needs to be done.

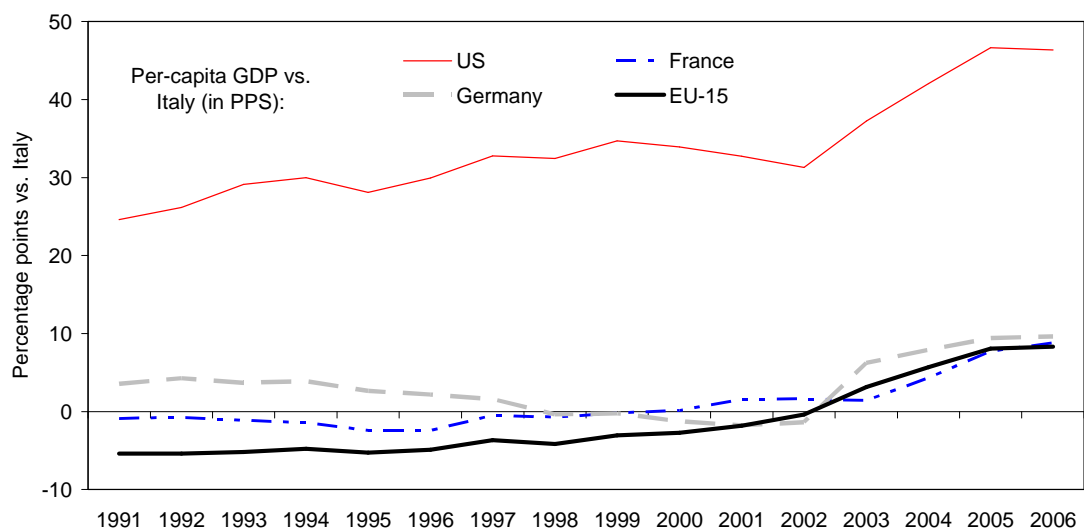
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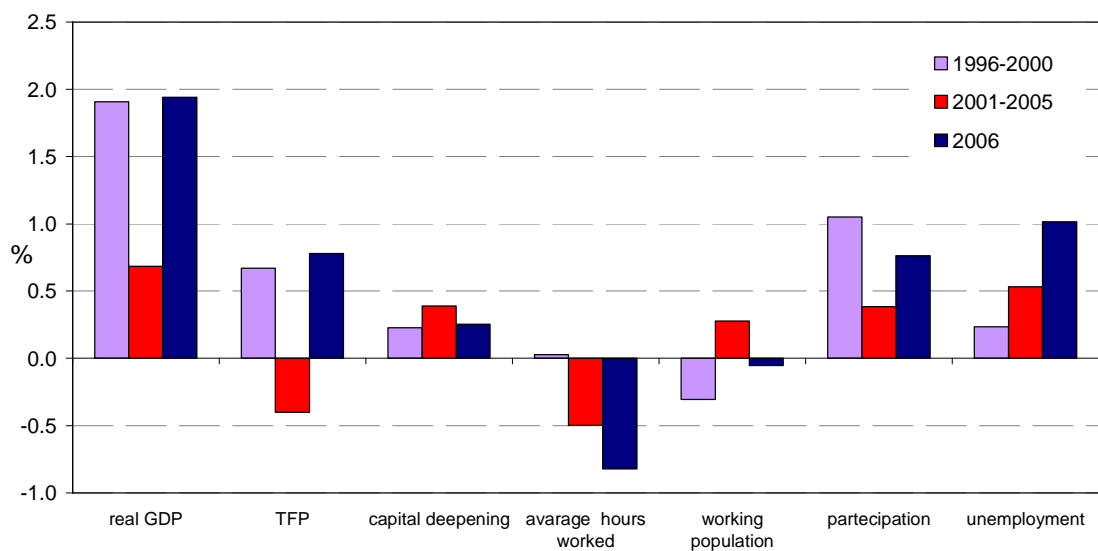
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Figure 1. Italy's per-capita GDP compared to other countries (in PPS)



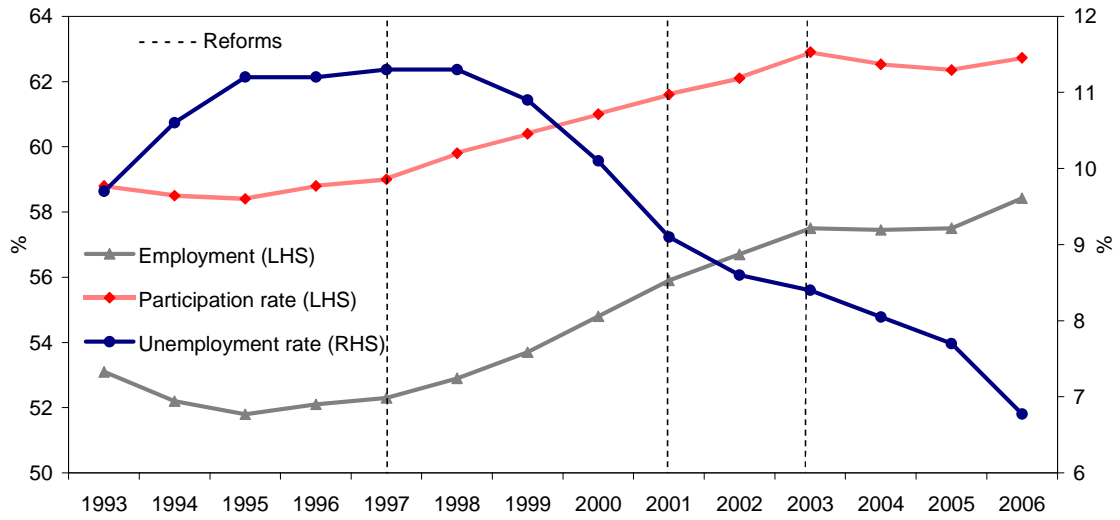
Source: EU Commission AMECO, own calculations

Figure 2. Growth accounting. annual growth rates and contributions to growth



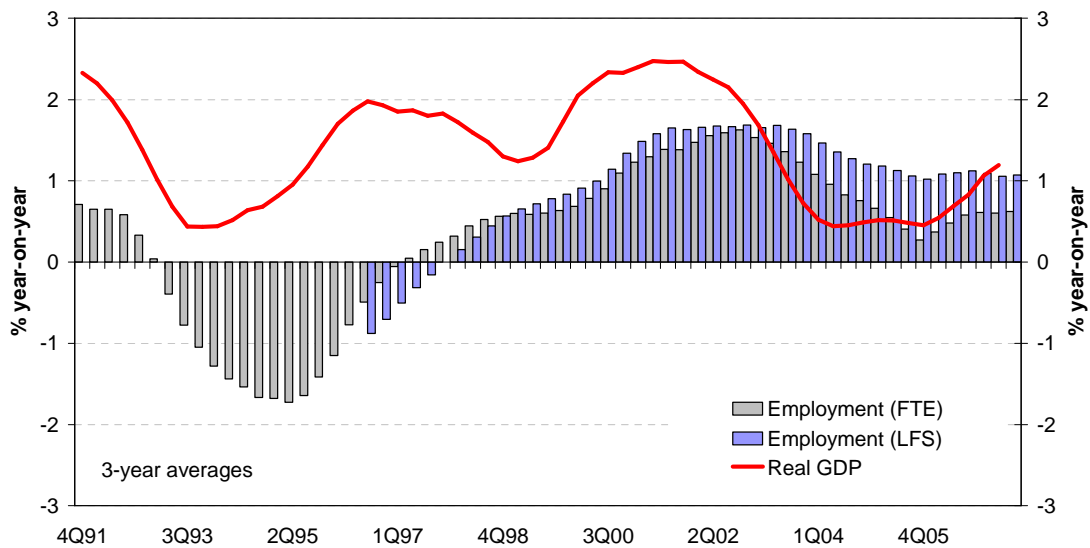
Source: ISTAT, own calculations

Figure 3. Labour market performance in Italy over the past 15 year



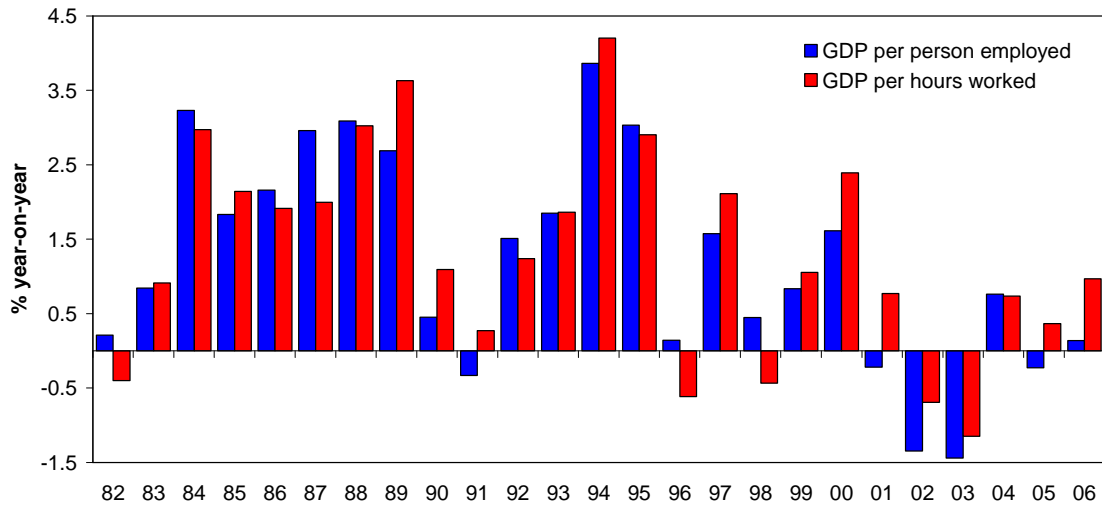
Source: ISTAT.

Figure 4. Real GDP versus employment growth



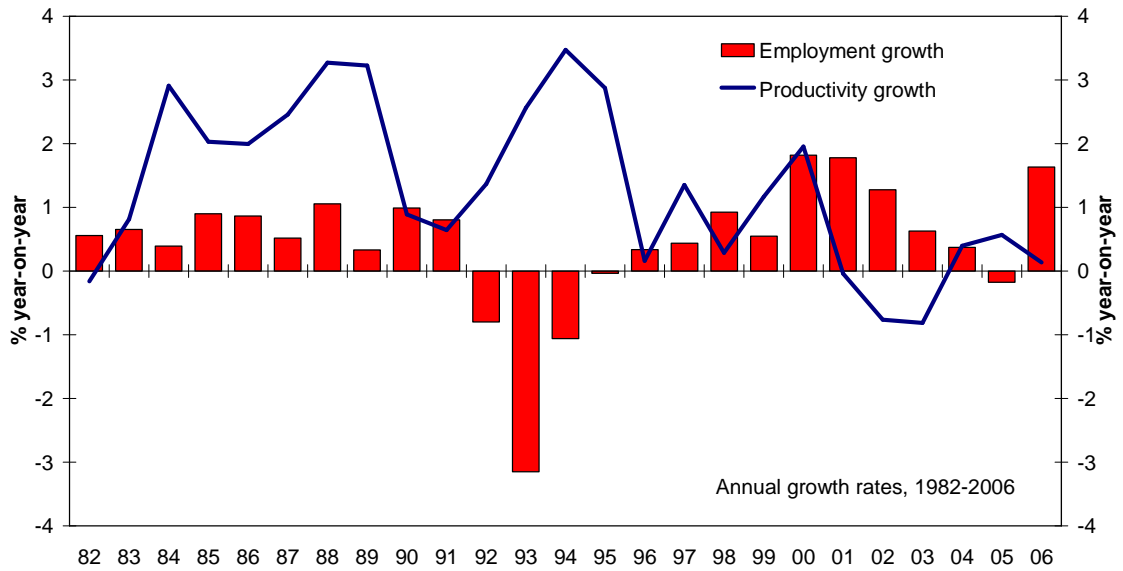
Source: ISTAT. Note: FTE=Full-time equivalent workers. LFS=Labour Force Survey.

Figure 5. Labour productivity: a declining trend since the early 1990s



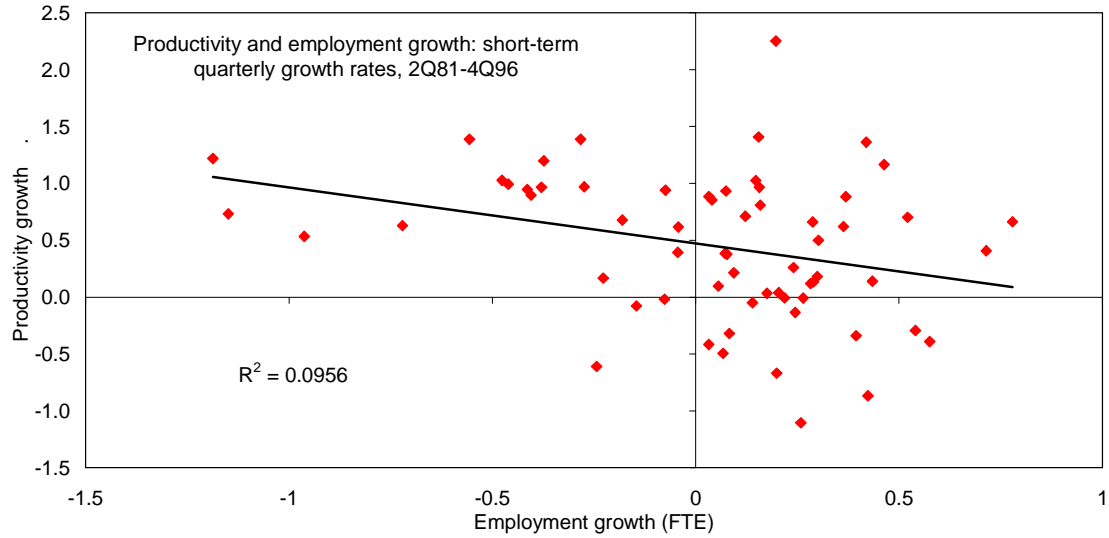
Source: ISTAT

Figure 6. Employment versus productivity growth: the odd couple



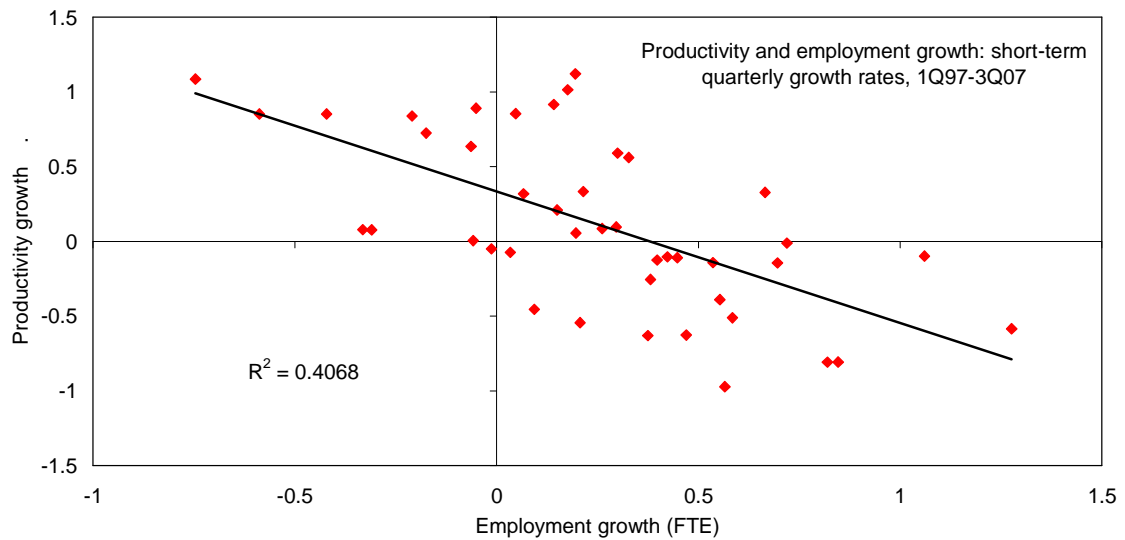
Source: ISTAT and own calculations based on FTE workers

Figure 7. Productivity growth versus employment gains from 1981 to 1996



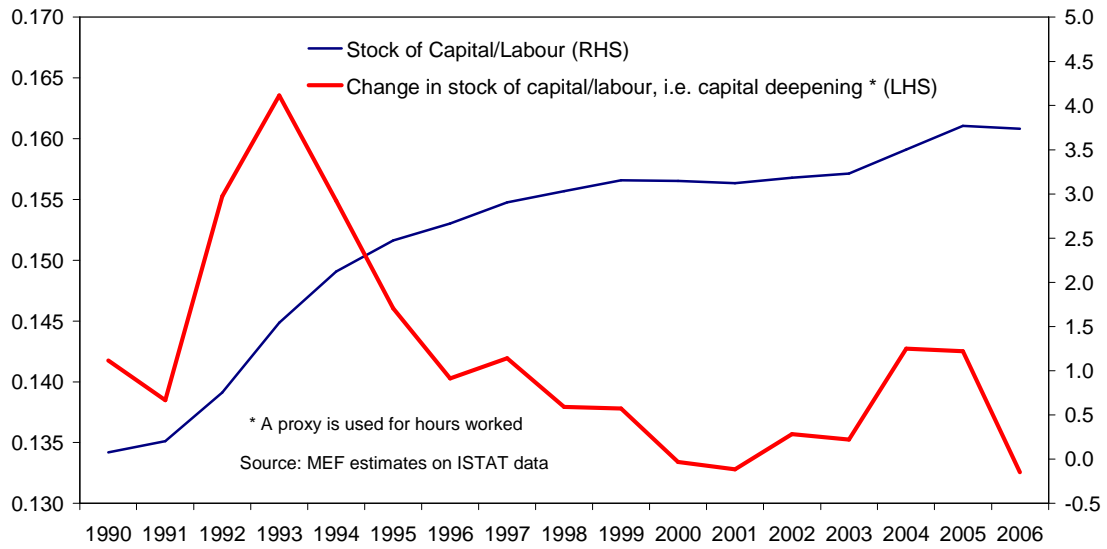
Source: ISTAT and own calculations based on FTE workers

Figure 8. Productivity growth versus employment gains since 1997



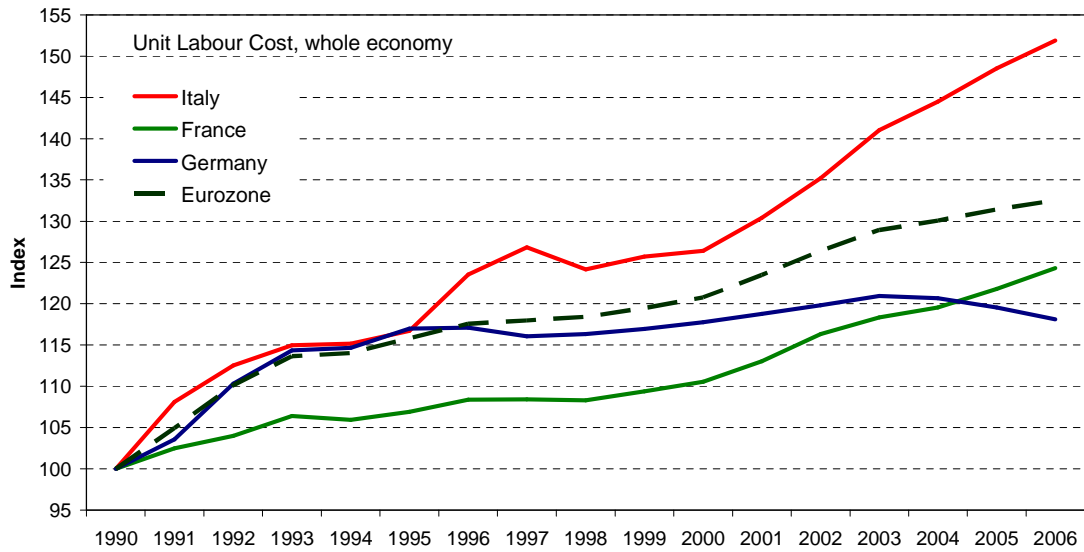
Source: ISTAT and own calculations based on FTE workers

Figure 9. Labour versus capital utilisation



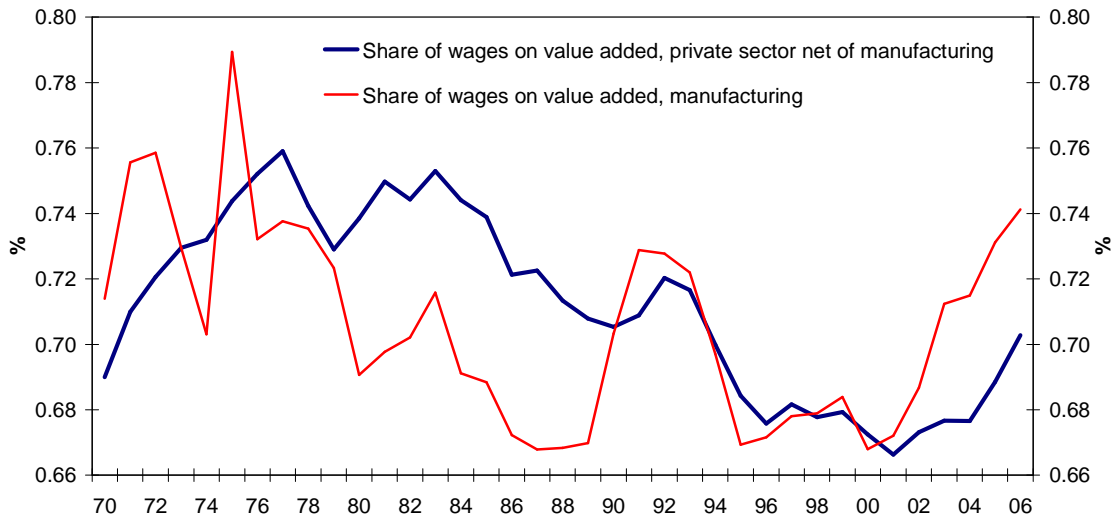
Source: ISTAT and own calculations

Figure 10. Nominal unit labour costs, whole economy



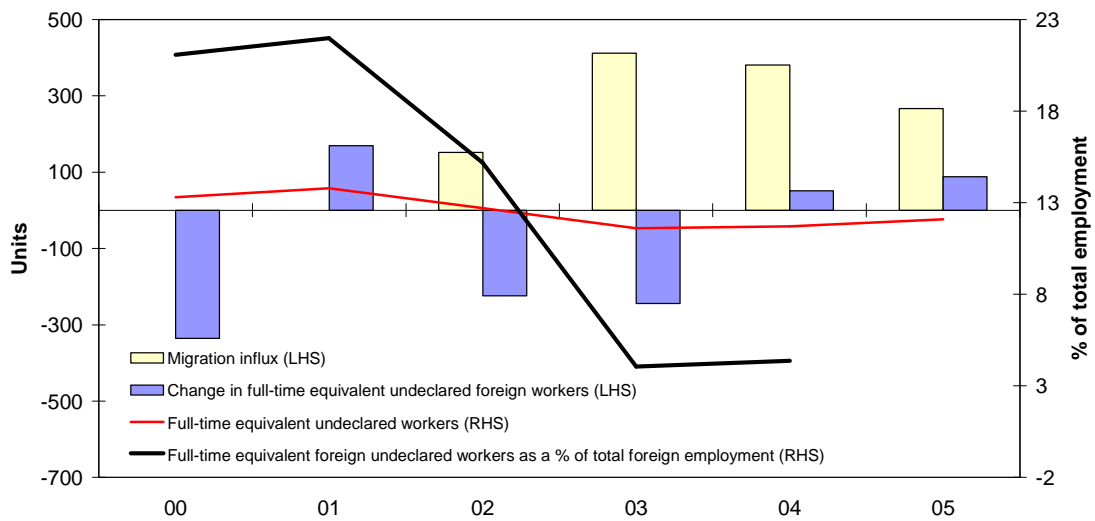
Source: EU Commission AMECO and own calculations.

Figure 11. The share of wages on value added



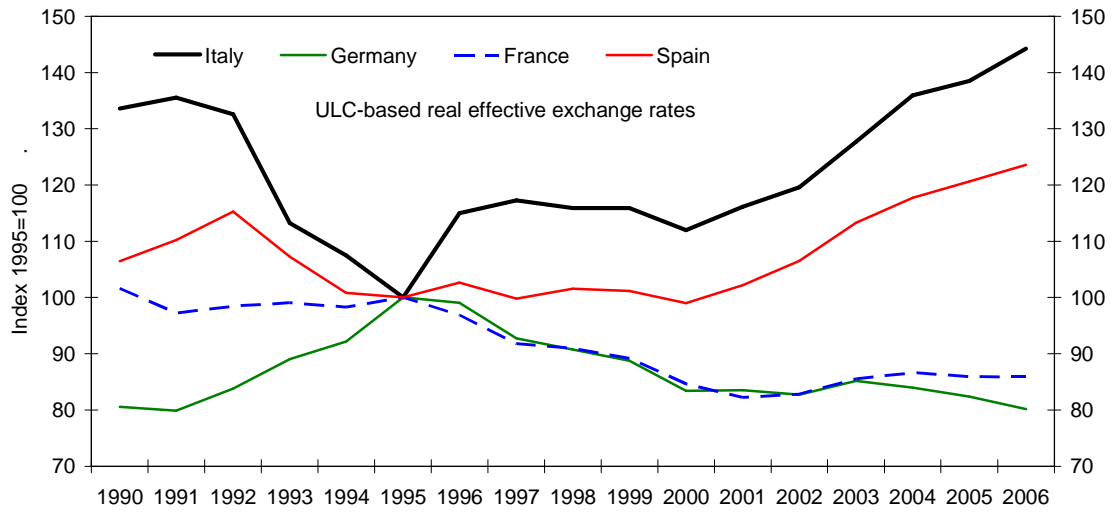
Source: Bank of Italy series based on ISTAT data. Data are at factor cost net of real estate rentals and adjusted for self-employed by attributing to self-employed the average cost of the relevant sectors. The private sector is calculated net of the public administration, health care and education sectors.

Figure 12. Migration influx versus changes in full-time equivalent employment



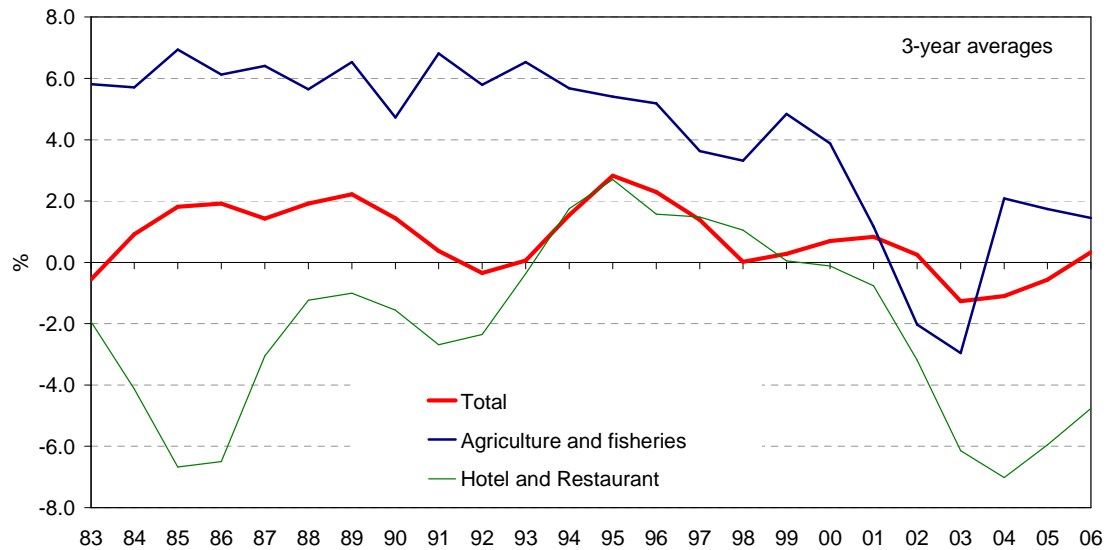
Source: ISTAT and Bank of Italy

Figure 13. The unit labour cost gap has widened



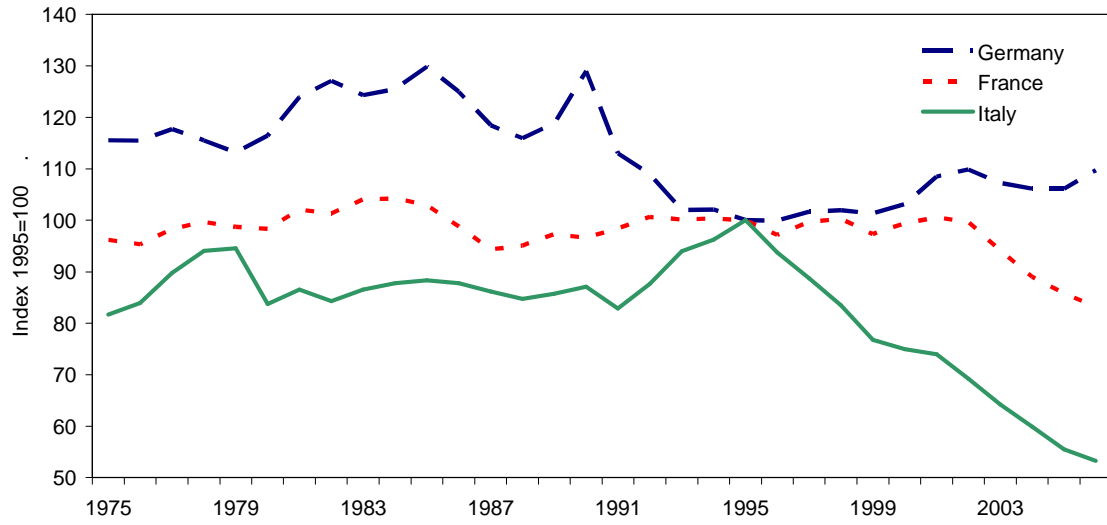
Source: IMF and own calculations.

Figure 14. Contribution of total factor productivity to value added growth



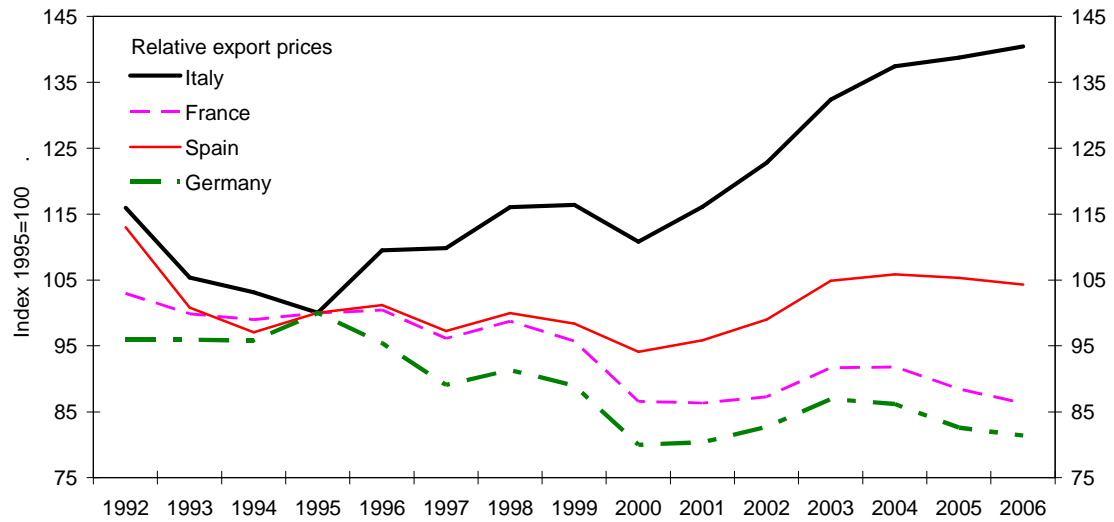
Source: ISTAT and own calculations.

Figure 15. Index of export performance relative to market



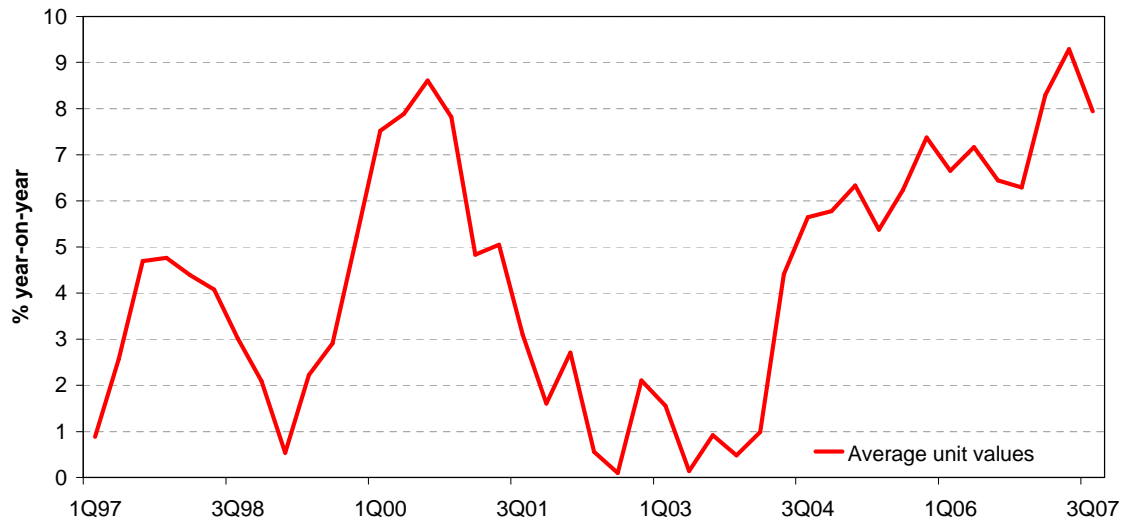
Source: OECD and own calculations.

Figure 16. Italian exporters have been able to increase prices



Source: OECD and own calculations

Figure 17. Strong rises in average unit values



Source: ISTAT