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Cyclical downturn or structural disease? The decline of the Italian economy in the last twenty years

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Abstract

Italy is experiencing at present the most serious economic recession of the post-war period. Between 2008 and 2013 national income fell by 9 per cent, per capita incomes by 11 per cent, and industrial production by 25 per cent; and unemployment doubled. In this essay we argue that, while this dramatic situation has been made worse by the policies of ‘expansive austerity’, its origins can be traced back to changes that took place in the 1990s (notably globalization, competition for emerging new markets and the diffusion of new technologies – ICT) to which Italy failed to react speedily or effectively by reorganizing its entire productive system. Instead, many of the reforms that have been introduced with respect to the labour market, for example, have reduced costs but in ways that have encouraged firms to stay in traditional sectors where products are poorly differentiated and of low technology content. If the Italian economy is not to become even weaker, new reforms are urgently needed to encourage innovative investment and push through to completion a restructuring of the industrial system that can no longer be deferred.

Keywords

Italy, investment, recession, stagnation, structural shock, labour marker reform, globalization, austerity, technology, ICT.

Introduction

The Italian economy is suffering from the longest and deepest crisis since the Second World War. The economic downturn started in 2008, and the outlook remains uncertain because the crisis has profoundly damaged industrial potential, resulting in a loss of productive capacity of approximately 15 per cent. It has also led to historically high levels of unemployment, especially in the southern regions, among women and younger workers, leaving more than three million people without jobs and increasing economic inequalities. The consequences of these developments are tearing apart the country’s social and political fabric, causing sharp inter-generational conflicts; and the political system seems incapable of devising or implementing a convincing project for the future generations. Italy is still in the grips of a severe transition that it still struggles to understand.

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The debate on this trajectory of the Italian economy in this period has mainly focused on the negative effects of the prolonged cyclical phase and of policies frequently labelled ‘expansionary austerity measures’. Consequently, explanations of the persistent difficulty of restoring acceptable rates of economic growth and reducing unemployment rates tend to invoke the lack of aggregate demand and call for two principal types of policy. On the one hand, as consensus grows that the austerity measures have been unable to restore confidence and foster economic growth, a number of observers have suggested that public expenditure should become more expansionary, at least on the investment side.¹ On the other hand, others call for political interventions to convince the strong exporting countries of the euro area (i.e. those experiencing a significant surplus in the current account of their balance of payment) to adopt policies to stimulate their own internal demand and imports, thereby contributing to a readjustment of external imbalances.²

The expansion of domestic and external demand would provide only a partial and short-term solution to Italy’s problems, however, because the economic system also suffers from supply-side shortcomings. Increasing and convincing evidence indicates that the current difficulties are primarily the consequence of the structural conditions of the productive sector, which have progressively deteriorated in the last twenty years. The dimensions of the current crisis and the difficulty of guaranteeing a stable recovery can hence be understood only by facing the fact that Italy proved unable to deal with important changes, which started to materialize in the 1990s at the international level. More precisely, three main changes that took place in the first half of that decade totally upset the economic scenario in which firms were operating. First, the increasing integration of (real and financial) markets and the competitive aggressiveness of the emerging market economies deeply changed the international context. Second, the diffusion of new technologies, such as information and communication technologies (ICT), not only radically transformed production processes and communications, but also contributed to market globalization. Third, the creation of the European Monetary Union prevented Italian firms from relying on the main instrument that they had traditionally relied upon to compensate for the competitive losses they were experiencing on a cyclical basis, that is exchange rate depreciation.

These changes dramatically increased competitive pressures on the Italian economic structure and uncovered its structural weaknesses. The depth of the current crisis is a consequence of the fact that Italian firms did not react effectively to these ‘shocks’. This is especially true for those firms in the manufacturing sector and characterized by higher labour intensity, less developed technology and less differentiated products. A large share of Italian firms lost the opportunity to exploit the fall in (real) interest rates following the birth of the euro to invest in innovation and change the composition of their output in favour of higher value-added production and selling to emerging markets products that would be very difficult to imitate, tourism included.
This lack of response can be partly explained by the particular features of the Italian system, which of course also contribute to its structural weaknesses. In particular these include a productive system dominated by firms of very small size; with little ‘distance’ between company management and ownership; a low propensity towards risk; productive specialization that was mostly centred on highly labour-intensive goods. Moving to the overall picture, to these fundamental elements four other key features must be added: (i) a financial system centred on banks; (ii) an inefficient and costly bureaucracy, now under reform; (ii) a high and diffuse system of corruption and fiscal evasion (which is, of course, the other face of an ample underground economy); (iv) a deteriorating physical infrastructure.

Italian firms tried to respond to the rapidly changing economic world by supporting policies directed at the market and (to a smaller extent) institutional reforms. The labour market is an archetypal example of this approach. Over the last twenty years, a sequence of reforms has radically modified the functioning of the Italian labour market, through the expansion of flexible, or ‘atypical’, labour contracts. The increased flexibility progressively introduced in this market, together with recorded changes in the supply of labour mainly due to immigration, have caused wages to fall. But, instead of stimulating investment in innovation and R&D through higher profits, the modification of the price of labour relative to that of capital has encouraged companies to remain in labour-intensive traditional sectors, to employ non-highly skilled workers and to endow them with non-innovative traditional capital. This kind of response has produced negative effects and worsened the existing structural weaknesses. Two are worth stressing right at the start: the slowdown of investment, especially of the ICT type; and (as a consequence) a reduced ability to exploit technological progress.

In this paper, we propose an economists’ interpretation of recent Italian economic history that coherently links all these elements together in a conceptual framework focusing on labour productivity growth. We show that this interpretation enables us, on the one hand, to identify the roots of Italy’s economic decline and, on the other, to explain what prevents the economy from rapidly and persistently returning to high rates of economic growth.

Italy needs to rethink badly formulated reforms without delay to prevent the further weakening of the productive structure and the reliance on outdated industrial policies that eat up public resources without return. Instead, it should focus on removing obstacles and incentivizing the necessary changes in the composition of its productive sectors.

The paper is organized as follows. In the next section, we discuss the dynamics of the main macroeconomic variables, pointing out their tendency to revert to the values they had taken up in the 1990s. In the third section, we propose an interpretation of the productivity slowdown experienced by the Italian economy as the result of reduced capital intensity (especially regarding ICT capital) favoured by the reforms introduced in the labour market. The fourth section compares the data for Italy and for the euro area as a whole to
highlight how the seeds of the decline of the Italian economy were planted well before the economic crisis. The last section summarizes the interpretation provided in the paper and discusses alternative policy options, which could be introduced to stimulate labour productivity and hence also economic growth.

Back to the 1990s: the (inverted) U-turn of the Italian economy

The great recession, which started in 2008 and is still ongoing, has produced a backward jump in the main macroeconomic variables that has brought the economic conditions of Italy back to where they were in the second half of the 1990s, if not before. As shown in Figure 1, at the end of 2013 real GDP (measured at 2005 prices) fell by around 9 percentage points with respect to the level recorded at the end of 2007, following a double-dip pattern and returning to its 2000 level.

In six years of recession, income per head declined by almost 11 percentage points and industrial production fell by around one quarter, returning to the level of 1986. The unemployment rate doubled, from 6.1 per cent in 2007 to 12.2 percent in 2013, with more than three million people without a job, according to the labour force survey conducted by the National Institute of Statistics (ISTAT). As documented by Figure 2, the unemployment rate reached in 2013 a historically unprecedented level, which is bound to increase in 2014. During the crisis (2009–13), employment levels fell in all sectors, with the notable exception of the service sector, in which a small but positive increase was recorded.

The nominal compensation of employees grew in all sectors both before and after 2008, but the pace of growth was reduced during the crisis in agriculture and, more markedly, in the service sectors. The behaviour recorded during the

Figure 1 GDP Evolution (in Billions of Euros, at 2005 Prices).
Source: ISTAT, National Accounts.
crisis was similar for Italy and the EU28 average, but displays larger average yearly rates of change in Italy than in the EU28 in both the pre- and the post-crisis periods. The average rates of change of the real compensation per employee also remained similar in the two periods, being always lower in Italy than in the EU28.

The combined effect of the dynamics of real GDP, employment and labour costs translated into the evolution of the income wage share. In addition, owing to the scarcity of second-level agreements and the systematic under-estimation of inflation, in the period 1992–2012 this share sharply fell in the Italian economy’s private sector. If in 1992 labour income represented about 72 per cent of the Italian value added, by around 2000 it had decreased to 64 per cent (a reduction of about 8 percentage points), to increase thereafter to 67 per cent in 2012. In twenty years, the labour share hence decreased by 5 percentage points, with rates of changes larger in Italy than in the EU28 both in the pre- and post-crisis periods.

A lower GDP of course implies a smaller available income, and, in turn, the reduction in income affected households’ consumption, which dropped by 8 percentage points (Figure 3).

Firms’ gross investment is, however, the macroeconomic variable that displayed the worst performance, suffering a dramatic fall of almost 27 percentage points and returning to its 1995 value (Figure 4).

Only net exports helped to cushion the Italian economy from a deeper slowdown, but this result is owed more to the decrease in imports than to an increase in exports.

There are at least two different interpretations of the dynamics of the main macroeconomic variables. According to one interpretation, their negative tendency is the effect of the adoption of the euro and the austerity expansionary policies called for by the European and international institutions due to the
domestic imbalances that were amplified by the financial crisis. From this viewpoint, the prolonged slump of the Italian economy is a consequence of fiscal consolidation. The interpretation we propose here is, instead, that the current recession, certainly deep and amplified by the financial crisis, is the outcome of a process that started twenty years ago with the progressive introduction of flexibility in the labour market through the increased use of atypical contracts. We now turn our attention to this interpretation.

**Labour market changes drove capital accumulation**

After more than a decade of heated debate on the very existence of an economic decline, it is today generally acknowledged that the main cause of insufficient...
Italian growth is the pathological behaviour of both labour productivity and total factor productivity (TFP). We here focus on hourly labour productivity, which, since the second half of the 1990, has remained almost unchanged, while the positive gap with respect to the EU28 average has shrunk, falling from about 4 euros per hour worked in 2000 to zero in 2012. The nominal unit labour cost, which provides a measure of the nominal labour costs corrected by labour productivity, increased in both Italy and the EU28, providing evidence that increases in nominal labour costs are not reflected in corresponding increases in labour productivity. The growth of these costs is larger in Italy than in the EU28 in both the pre- and post-crisis periods; however, the gap in the average yearly rates of change fell after the crisis, from 0.9 percentage points in 2001–2007 to 0.3 percentage points in 2008–12.

There is much less agreement on the causes of the pathological behaviour in labour productivity growth. An early explanation focused on insufficient workers’ effort in both the public and the private sectors, and on the misalignments between productivity and wages, which called for a comprehensive reform of the collective bargaining system. Another popular explanation of sluggish productivity growth, based on well-grounded academic literature (see, e.g., Gomez-Salvador, Stocker, and Turunen 2006) was that labour market rigidity hinders labour reallocation towards more productive firms and sectors.

We believe instead that the unsatisfactory performance of labour productivity is tightly linked to capital accumulation, especially of the innovative type linked to ICT technologies, and to the changes that occurred in the composition of the capital stock, which followed changes in the legal set-up of the Italian labour market (Ciccarone and Saltari 2010). This interpretation, which has only recently found a place in public debate in Italy (Banca d’Italia 2014; ISTAT 2014) is deeply rooted in the literature. First, whereas R&D captures the technological change represented by disembodied new knowledge, investment captures the new knowledge embodied in physical capital, mainly machinery; the endowment of total capital hence affects productivity growth by capturing the embodied technological change. Second, given the total amount of capital, the diffusion of ICT plays a relevant role in affecting productivity improvements (Wilson 2009).

Several labour market reforms were carried out, the first being the so-called Treu package in 1997 and then the Biagi reform in 2003. These reforms deregulated the use of fixed-term and atypical contracts, without changing the level of employment protection legislation (EPL) granted to permanent employees, hence increasing the market flexibility of labour (i.e. outside the firm), rather than the flexibility of labour inside the firm, as occurred instead, for example, in Germany (see Ciccarone and Saltari 2010). This process led to an increase in the segmentation of the labour market (often referred to as labour market dualism; see, e.g., Lucidi and Raitano 2009). It involves multiple dimensions, as it is linked not only to the higher flexibility of fixed-term
contracts, but also to the lower coverage for unemployment benefits system and lower social contribution rates (which raises increasing concerns about the adequacy of future pension levels). According to the OECD synthetic EPL index, labour market rigidity in Italy has been steadily falling since the mid-1990s and it is now lower than in Germany and France.

Increased labour market flexibility favoured employment growth, but by reducing the price of labour relative to capital also favoured the adoption of labour-intensive production techniques and hence a slowdown of the capital–labour ratio and an unsatisfactory dynamics of labour productivity (Brandoloni and Bugamelli 2009). This interpretation can be expanded by taking into account that a slow, if not negative, pace in the accumulation of innovative ICT capital also contributes to productivity growth by negatively affecting the reorganization of workplaces required by technical progress. In this way, the ‘conservative’ reaction of Italian firms to national and international developments also negatively affected TFP.

Summing up, the changes that have characterized the Italian labour market since the beginning of the 1990s have produced negative effects on productivity through two main channels:

(i) the slowdown of capital intensity (the capital–labour ratio); and
(ii) the slow dynamics of innovative capital as compared to that of traditional capital, which produced negative effects:
   (a) directly, through the behaviour of the innovative capital intensity;
   (b) indirectly, as it hindered technical and organizational progress and, hence, TFP growth.

As for channel (i), Figure 5 displays a significant and sharp fall in the rate of change of the capital–labour ratio (given by the difference between the rate of change of capital and the rate of change of employment), with the average decreasing from 3.3 per cent in 1981–95 to 1.2 per cent in 1995–2012. The graph shows that this fall came along with a relevant decrease in average labour productivity, from 2.3 per cent in 1981–95 to 0.3 per cent in 1995–2012. This relationship is statically confirmed by the existence of a significant correlation between the capital–labour ratio and labour productivity over the whole period 1981–2012.

The second channel singled out above starts from the observation that the slowdown of capital intensity accompanied a change in the capital composition. Specifically, ICT capital represented in 1980 slightly less than 1 per cent of total capital stock. This ratio doubled at the beginning of the 1990s, remained substantially unchanged until the end of that decade and decreased from the beginning of the 2000s.

Figure 6 depicts the rate of growth of the capital–labour ratio, with reference to both ICT and non-ICT capital. Between the end of the 1980s and 2007, the decrease of the ICT capital–labour ratio is approximately 12 percentage points,
whereas that of the non-ICT capital–labour ratio is about 4.5 points. The former ratio at the end of the 2000s is in the negative terrain, indicating a reduction, while during a crisis it is the latter that should experience a decrease. Figure 2 also shows another key feature: the high variability of the ICT capital–labour ratio closely follows that of labour productivity. Indeed, there exists a higher correlation (statistically significant at 95 per cent) between productivity and ICT (38 per cent) than between productivity and non-ICT (21 per cent).

The fall that occurred in the period 2000–12 in the ratio between value-added and net capital stock at constant prices (usually labelled the ‘apparent’ productivity of capital) in the private sector (excluding property rents) confirms our analysis. If the composition of the capital stock remained unchanged, the fall in capital productivity could be the result of an increase in capital intensity. Yet, between 2000 and 2003 ICT capital intensity decreased by about 7 percentage points (from more than 6 per cent to less than 1 per cent) and subsequently remained in the negative terrain (indicating a reduction of the stock). Instead, non-ICT capital intensity fell by about 1 percentage point, to remain subsequently in the positive terrain (indicating an increase of the stock), but in 2011, the only year of the whole period in which it displays a negative value. Hence, the slowdown of the contribution offered by capital per worker (the worker’s endowment of capital) went hand in hand with the change in its

![Figure 5 Labour Productivity and Capital Intensity (Business Sector, 1981–2012, Yearly Growth Rates).](image)

*Source:* Elaborations on ISTAT data. *Note:* The data refer to the classification Ateco 2002 (the Italian version of Nace Rev1.1). They exclude property rents, economic activity undertaken by households and extraterritorial organizations, and all the economic activities of the Public Administration.
composition, in favour of capital characterized by less technological content and hence lower productivity.

Our interpretation is that the composition of the capital stock, together with the ratios between labour and different types of capital, sharply changed in this century because firms, reacting to policy stimulus and exogenous shocks, penalized the more innovative capital. This process reduced not only the apparent, but also the actual, productivity.

The seeds of decline were planted before the crisis

Italian firms had taken the path of reduced innovative capital well before the burst of the current economic crisis. We can support this claim by comparing the Italian economy with the other countries in the euro area. For this purpose we consider only two years, 1997 and 2005, for which there are data in the GGDC Productivity Level Database of the Groningen Growth and Development Centre) that allow for a comparison (Inklaar and Timmer 2008).

To further clarify matter, we consider the market productive aggregate (to be labelled ‘Market’, which includes three macro-sectors: (1) production of goods (manufacturing; construction; agriculture, energy and water); (2) market services (finance; services for firms; personal services); and (3) elecom (electric equipment; mail services; communications). This aggregate does not include Public Administration and real estate services, two sectors whose productivity...
measures are strongly affected by the imputations based on the compensations to production inputs.

Figure 7 shows the existing differences between Italy and the euro area, taking into account both the Market and three productive groups (manufacturing, market services and Elecom) and looking at labour productivity and capital intensity. All the EU-KLEMS data used for the analysis are relative to Italy regarding the euro area average, always set equal to 1. Consequently, the dashed octagon (which measures this unitary value on each axis) represents the euro area average, whereas values greater (smaller) than 1 along the lines imply that the Italian value is greater (smaller) than that average.

The graph highlights two relevant facts. First, between 1997 and 2005, labour productivity decreased in Italy in comparison with the euro area in the Market aggregate and in all three of the productive groups we are considering: the dotted line is inside the continuous line, which, in turn, is inside the dashed line. Second, the capital–labour ratio decreased overall; however, its behaviour in the three productive groups is not homogeneous, showing that the changes that occurred in the relative productivity levels are not uniformly linked to the developments of capital intensity in the three groups.

Figure 8 unveils the cause of this sectoral heterogeneity by highlighting the role played by the change in the composition of the capital stock. Considering the same productive groups, it is evident that in Italy non-ICT capital intensity increases, between 1997 and 2005, with respect to the euro area, but for market services, which experience a minor reduction: the dotted line is (almost) always outside the continuous line, which, in its turn, is outside the dashed line, inside average. ICT capital intensity displays the opposite behaviour, decreasing with respect to the euro area (even though the decrease is smaller as for manufacturing):
the dotted line is always inside the continuous line, which in turn is inside the dashed line.

With reference to the two main channels of influence on labour productivity singled out above (slowing down of capital intensity and modest dynamics of innovative capital relative to traditional capital), the conclusion is clear cut. Overall, that is for the aggregate Market, the fall in Italian labour productivity relative to the euro area average is associated with lower capital intensity, in turn due to a reduction of ICT capital. However, the three macro-sectors behave in different ways. In the Services sector, the fall in productivity dynamics reflects the decrease of both total capital intensity and innovative capital intensity. As for manufacturing and, even more, for Elecom, that fall is due to a re-composition of capital in favour of traditional types, at the expense of innovative types.

This shows that the weakness of the Italian productive system started to materialize well before the beginning of the current economic crisis. During this crisis, labour productivity fell in all sectors, especially in the construction sector, which was, however, also displaying negative rates of change before the crisis. On the contrary, labour productivity growth remained positive in agriculture and, to a lesser extent, in industry. The average yearly rates of growth of per capita GDP and labour productivity continued to be lower than the European ones. Yet, whereas the gap in the pace of change of the product remained similar to the one of the pre-crisis period, that of the pace of change of labour productivity has (slightly) shrunk since 2008. At first glance, there is hence no evidence that the gap in Italian labour productivity worsened during the crisis, nor that the gap in its misalignment with nominal labour costs accelerated: the gap in the nominal compensation per employee remained broadly unchanged throughout the period, while employment reduced more

Figure 8 ICT and Non-ICT Capital–Labour Ratio in Italy and in the Euro Area (Euro Area = 1).
Source: Elaborations on EU KLEMS Data.
strongly in Italy than in the EU28. The fall in labour productivity went hand in hand with a further reduction in ICT capital. Figure 9 shows in fact that the ratio of ICT investment on total investment kept falling in the period 2005–09.

To conclude, it must not be forgotten that the explanation of the difference between Italy and the European average continues, at least in part, to be due to the different components measured by TFP, including the level of education of entrepreneurs and the different organization required by the production techniques based on innovative capital.

**Summary and policy options**

To sum up, our interpretation of the low growth of the Italian economy in the last twenty years is that the lower labour cost, at the margin so to say, produced by changes in the labour market increased the incentive for firms to remain in traditional labour-intensive sectors, with negative effects on technological investments, R&D and productivity growth. The years of wage moderation that followed the reform of collective bargaining occurred in 1993; increased labour market flexibility and important changes in the labour supply (e.g. increase in immigrant workers) pushed a large share of Italian firms to expand the use of labour, which had become cheaper relative to capital. Consequently, employment rose more than GDP, but innovative investment lagged behind. The internal reorganization of firms, strictly necessary to increase the productivity of innovative capital, was also discouraged. The capital–labour ratio fell, especially as for ICT investment, with negative consequences on technical progress and TFP. The growth rate of total capital per worker decreased and the same occurred to the average growth rate of ICT capital endowment per worker. The composition of capital thus turned towards
‘traditional’ equipment, coherently with the chosen sectoral composition of production.

The stagnation of Italian labour productivity has prompted a wide-ranging debate about possible policy solutions (Tronti 2013). Three main options have emerged as the best means to foster productivity and growth through wage bargaining. A first suggestion is to improve and extend the two-level wage-bargaining system, distributing the realized firm-specific productivity increases between workers and firms. In an economic environment characterized by the small size of firms and a dual labour market, this approach does not, however, provide firms with incentives to move away from traditional and labour-intensive sectors. In the light of these difficulties, the second suggestion is to couple the second level of wage bargaining with ‘social agreements’ aimed at fostering high-performance work organization. The supporters of social agreements believe that the social partners can agree on guidelines (on new technologies, flexible work organization, high-performance labour relations) aimed at reorganizing firms’ production technologies and job places and have the power to ‘impose’ these guidelines on firms, perhaps with the support of industrial policies undertaken by the Government (and the EU).

Recognizing that such social agreements have rarely achieved their targets, a third proposal, known as ‘planned productivity’, is achieving increasing consensus (Ciccarone 2009; Ciccarone and Saltari 2011; Antonioli and Pini 2012, 2013; Ciccarone and Messori 2013). It aims at solving the Italian economy’s incentive problem by designing wage bargaining so as to make it convenient for firms (with low propensity to change) to sustain the costs of technological and organizational innovations. ‘Planned productivity’ addresses this issue by conditioning expected profit growth to the actual increases in productivity realized by firms. More in detail, the government and the social partners set a programmed target of productivity growth over a medium timeframe. If the actual rate of productivity growth is below the programmed one, wages automatically increase. This fosters productivity growth, as firms know that, if they do not meet the productivity target, they will experience higher wage costs, higher unit labour costs and lower profit margins. This should induce them to increase investment in innovative technologies and to introduce organizational changes able to guarantee the efficient exploitation of ICT investment.

There is of course no single programmed rate of productivity growth that could be applied to all Italian firms, independently of size, sector and territory. Wage contracts at the firm/territory level should set the target for each firm. Based on these contracts, the national contracts should construct homogeneous classes of programmed productivity and group in these classes all types of firm (including those that have not signed local contracts). As the probability of achieving the productivity targets also depends on the externalities faced by firms, the Government should contribute to this policy. It should remove in the shortest possible time the external obstacles that increase the cost of firms’
innovations and favour, through fiscal incentives, the growth of innovative capital and associated change in the organization of the workplaces.

R&D, innovation, faster accumulation of innovative capital and reorganization of firm will realize a progressive change in the sectoral composition of output able to couple the production of high-quality ‘made in Italy’ goods with knowledge-based and green products. The increase in investment spending will make productivity increases and improved competitiveness, on the supply side, compatible with increased aggregate demand and employment. The demand for labour will be redirected towards skilled human capital, asking for changes in the education and training system. The returns to education and training will increase, activating a process of economic growth based on the knowledge economy rather than on wage competition and social dumping.

We believe this project can be realized. An effective industrial policy must, however, be rapidly identified, as the reorganization of production takes time and may find bottlenecks in the low elasticity of supply of educated entrepreneurship and in the characteristics of the labour supply. It took more than a decade to recognize the decline of the Italian economy. The rapidly deteriorating competitive position of Italian firms does not allow policy-makers to maintain such bad habits.

Notes

1 This should, however, be made compatible with the need to reduce the huge public debt accumulated by Italy in the last thirty years.

2 The political tension generated by this debated is fuelled by the resistance of some countries to contribute in this way to the readjustment of external imbalances and by their claim that the deficit countries should instead reduce their labour costs by cutting wages and/or increasing labour productivity.

3 The dimensional structure of the Italian firms – which has changed very slowly over the years, maintaining a rather stable average size of fewer than four employees – has contributed to the low rates of productivity growth experienced in Italy. Several empirical findings consistently show that labour productivity grows with firm size. The industrial districts economy, which used to represent the main feature and strength of the Italian manufacturing system, especially in the production of high-quality traditional goods, is now facing the challenge of low-cost producers and emerging markets. The small firm size, once considered a comparative advantage of the Italian system, has progressively become a constraint on productivity enhancement and economic growth.

4 The idea behind these measures was that large, credible and decisive spending cuts to rescue budget deficits have frequently been followed by economic growth by restoring confidence of households, firms, savers and investors.

5 The nominal unit labour cost is defined as the ratio between the nominal compensation per employee and gross value added per employment.

6 Based on this viewpoint, several measures were introduced in order to foster the diffusion of firm-level and territorial contractual agreements.

7 According to the definition of ISTAT, which we adopt here, ICT capital stock is composed of three types of capital: office machinery, communication devices and software.
The embodied nature of technological change was first pointed out by Salter (1960), who suggested that technological progress is incorporated in new vintages of capital introduced through additional investment, or replacement of scrapped capital. Kaldor (1957) and Solow (1960) both argued that the relevance of embodied technological change is so high as to make investment the key determinant of economic growth. Recent empirical investigations confirmed that this type of technological change is the main channel through which new technologies translate into economic growth (Greenwood, Hercowitz, and Krusell 1997).

The penetration of atypical employment has increased in the last decades (the share of fixed-term contracts over total employees reached 13.2 per cent in 2013), especially among younger workers in the age bracket 15–24 years (46.7 per cent in 2010).

This evidence notwithstanding, other measures were introduced after the beginning of the crisis aimed at further increasing labour market flexibility.

The importance of human capital aside (Gu et al. 2002), the key role played by new managerial practices and organizational investments for productivity growth is known to the literature. See, for example, Gu and Wang (2004), Bloom, Sadun, and Van Reenen (2005) and Crespi, Criscuolo, and Haskel (2007).

For a theoretical analysis of the ICT impact on Italian productivity growth, see Saltari and Travaglini (2006) and Saltari, Wymers, and Fedrici (2013).

Non-ICT capital is composed of six typologies of capital goods. Among them, investments in constructions and in machinery represent 75 per cent of total fixed gross investments.

References


