Summary *

Economic indicators point to a slight strengthening of economic activity in the third quarter, followed by a new deceleration in the final three months of the year. The UPB estimates that GDP increased by about 0.2 per cent in July-September and expects only a slight increase (around 0.1 per cent) in the fourth quarter. These assessments point to GDP growth for 2016, adjusted for the number of working days, of 0.8 per cent. In raw terms, unadjusted for the smaller number of working days compared with 2015, GDP in 2016 is forecast to increase by 0.7 per cent (0.8 per cent according to the Update to the Draft Budgetary Plan).

The Italian recovery thus continues at a modest average pace. This performance has been impacted by an easing of the growth in domestic demand, while developments in exports, although positive, have been limited by the stagnation of global trade. More specifically, the latter reflects a structural weakening of trade's elasticity to global growth. The consumption of Italian households has faltered, growing substantially less than the good performance of disposable income would permit thanks to the favourable developments in the labour market. Investment has failed to take off, despite the improved profitability of firms and the easing of credit constraints. The process of capital accumulation is burdened by the uncertain prospects for any acceleration in demand, which is holding back the expansion of capacity. Nevertheless, expectations of low demand are not slowing investments intended specifically to improve efficiency and defend market share.

The recent revision of the national accounts reveals considerable improvements in manufacturing productivity. This is the result of the reallocation of resources in the recession to the best firms, which were able reorganize with investments in the rationalization of production processes. Manufacturing thus appears to have emerged from the crisis with a smaller number of firms, persistent performance differences between companies by sector and size class, but with a higher level of efficiency.

Labour market conditions are favourable. Figures for the second quarter show that the probability of the unemployed finding employment has improved. At the same time, however, the growth in open-ended hiring has slowed. INPS data on the flagging creation of open-ended jobs point to the effect of the reduction of contribution relief in 2016. Although inflation has turned marginally positive, it is being driven by only modest upward pressure because of the weakness of economic conditions.

* *Prepared by the Macroeconomic Analysis Department. Information updated to 24 October 2016*

The international environment

A slow growth economy

The world economy continued to be characterised by weak growth, which was somewhat slower than the forecasts issued before the summer. The deceleration in the emerging countries proceeded in line with expectations, while the slowdown in the advanced economies was larger than expected.

The US recovery, now in its seventh year, continues at a moderate pace, while Japan is experiencing slow and uneven growth. Euro-area growth slowed in the second quarter, after a good start to the year. The temporary financial instability engendered by the outcome of the British referendum in June (Brexit) subsided rapidly. The action of the European Central Bank (ECB) and the Bank of England helped to ease the tensions. The feared recessionary impact on the British economy, which was suggested in the most adverse scenarios, did not materialise, thanks in part to the support provided by the depreciation of the pound. Expectations of a slowdown for the UK remain, however. Although the consequences of Brexit have been less severe than feared, at least in the short term, there are no signs of an acceleration in the euro area from the average pace registered in the first half of the year.

The global outlook for the coming months will continue to reflect slow growth. Geo-political uncertainty (in the emerging countries and in certain of the major economies awaiting major elections) and persistent financial risks continue to weigh upon the scenario. In this context, the global response of economic policy appears insufficient, having relegated the task of supporting economic activity to monetary policy alone, despite the weakening impulse imparted by this instrument. In underscoring the inadequacy of the policy framework, international organisations – the International Monetary Fund (IMF) and the OECD – have resumed recommending that the advanced countries adopt coordinated fiscal stimulus policies (focusing on investment in infrastructure), with a greater effort for economies that have room to expand, and selective structural reforms that, by boosting long-term potential growth, help support current demand.

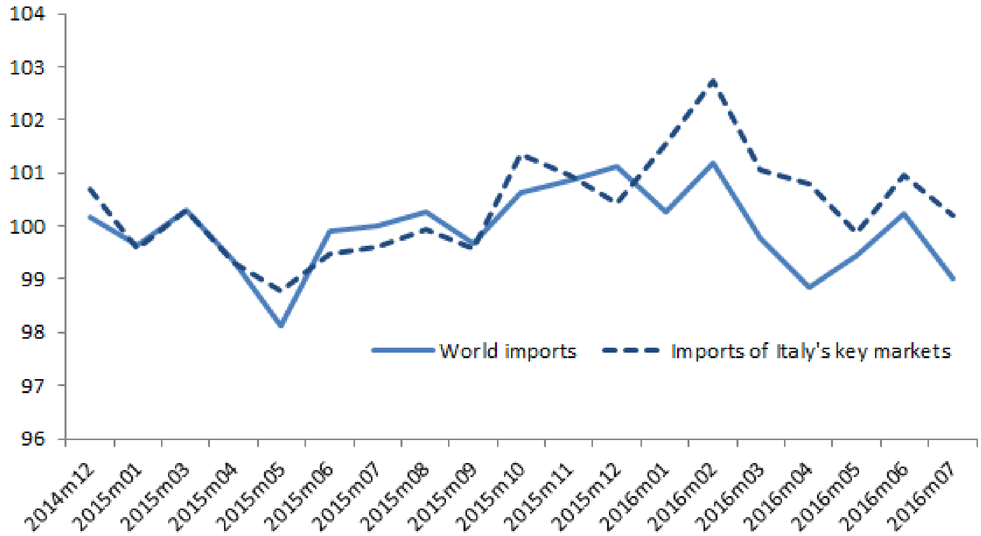
Trade stagnates

The slowdown in international trade has been especially abrupt in recent months. Trade was virtually unchanged on average in the January-July period compared with the second half of 2015. Italy's key markets performed relatively better, but were still marked by pronounced weakness (Figure 1).

The slower growth in international trade compared with economic activity reflects a reduction in the elasticity of trade to global output. The decline in the ratio between the percentage change in trade and that in world GDP is not a recent phenomenon, as it has been emerging over the last decade: compared with growth in global industrial output, that ratio has fallen by almost half compared with the previous decade (Figure 2).

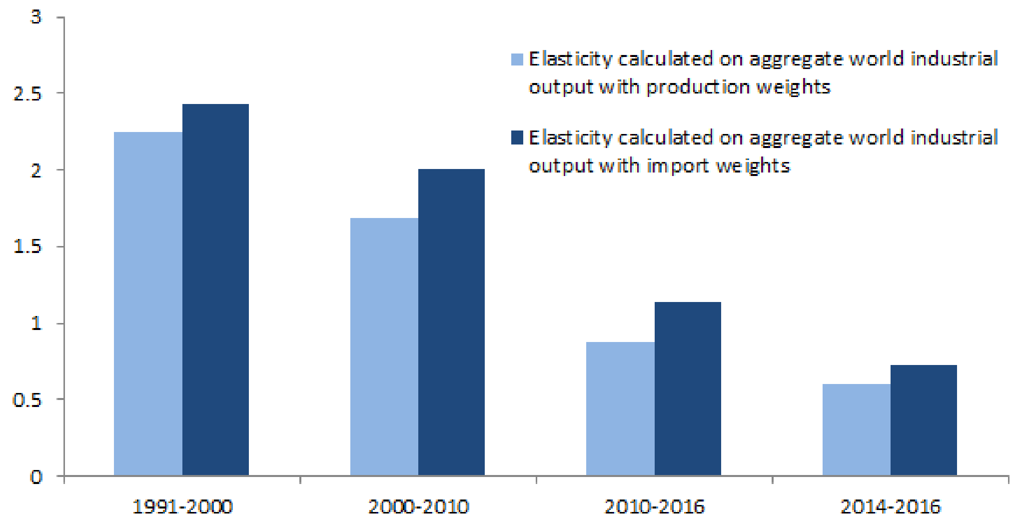
This decline appears to reflect more than just cyclical changes in trade or variations in its geographical composition, with an increase of the weight of economies less open to trade, but is also structural in nature. Possible factors contributing to this development include a decline in the international fragmentation of production processes after a possible excess of offshoring in recent years, the attenuation of the effects of technological progress in transportation (centring on so-called containerisation), the waning of the impulse of past episodes of trade liberalisation and the emergence of more or less explicit protectionist tendencies in some economies. These are presumably not transient developments, which forecasters have begun to take into account in their scenarios, incorporating structurally smaller increases in foreign demand in response to world growth in their models.

Figure 1 – World imports and Italy's key markets
(*indices; 2015 = 100*)



Source: based on Central Planning Bureau data.

Figure 2 – Elasticity of world imports of goods to global industrial output



Source: based on Central Planning Bureau data.

In line with this progressive revision of scenarios, the Update to the Economic and Financial Document (Update) in September contains a marginal downward correction of the forecast for world growth compared with Economic and Financial Document (EFD) published in April (one-tenth of a point, from 3.1 to 3 per cent in 2016 and 3.5 to 3.4 per cent in 2017), while reducing the projection for global trade growth by considerably more (more than a percentage point, from 3.4 to 2.1 per cent this year and 3.7 to 2.6 per cent the next). The new estimates of the Ministry for the Economy and Finance (MEF) fall within the range of the most recent forecasts and are lower than those issued in October by the IMF (Table 1). The recent trends in trade - with a further decrease in the elasticity to output below the already low levels estimated for the current decade (Figure 2) – suggests that even the more conservative assumptions about trade growth may prove to be excessively optimistic.

Table 1 – Forecasts for world growth

	2016				2017			
	Update September 2016	EFD April 2016	WEO October 2016	WEO July 2016	Update September 2016	EFD April 2016	WEO October 2016	WEO July 2016
World output	3.0	3.1	3.1	3.1	3.4	3.5	3.4	3.4
World trade	2.1	3.4	2.3	2.7	2.6	3.7	3.8	3.9

Source: IMF, *World Economic Outlook – WEO* (October 2016); MEF, Update (September 2016).

Oil and exchange rates

The most important new development in raw materials was the OPEC agreement to cut oil production reached at the end of September. This could represent a partial modification of the strategy of maintaining production levels, at the expense of prices, pursued in recent years by major exporters, notably Saudi Arabia. The actual impact of such a change once the agreement becomes operational remains to be seen. Partly due to the slowdown in the consumption of major energy importers, such as China, growth in the global demand for crude oil is expected to remain moderate in the coming years in a market where OPEC's ability to control supply has been structurally weakened by the expansion of non-OPEC production. Oil prices were moderately impacted by the agreement (which will have to be ratified at the end of November), rising to an average of close to $50 per barrel in the first three weeks of October (from the average of $46-47 before the accord). Looking ahead, the response of forward markets was generally modest. On the basis of average forward prices at the end of the last ten days (10-20 October), crude prices are expected to be around $55 in 2017 (€44 in 2016); the assumption adopted in the Update for next year is about 4 per cent lower (while the IMF's October projection is 7.5 per cent lower than forward prices; Table 2).

In the foreign exchange market, after a period of appreciation the euro has weakened in recent weeks against the dollar and, to a lesser extent, against a broad basket of currencies. This recent development reflected the re-emergence of a possible divergence in monetary policies on the two sides of the Atlantic, with the chance of an imminent rise in the US federal funds rate (in December, according to analysts' expectations) and, conversely, the continuation of monetary stimulus in the euro area, which the ECB reaffirmed at its meeting on October 20 as long as inflation is not on a path consistent with the objective of price stability and, therefore, most likely beyond the current planned end to the stimulus measures (March 2017). The euro has also fallen against the dollar on forwards markets in recent weeks (to around 1.10). The forecast in the Update for 2017 ($1.126 per euro) does not differ considerably from the average forward exchange rates for next year registered in the past 10 days (Table 3).

Table 2 – Oil price forecasts

	2016	2017
Update	46.6	52.5
Forward markets (average for 10 October - 20 October)	44.1	54.8
IMF	43.0	50.6

Source: based on Barchart data; IMF, *World Economic Outlook* (October 2016); MEF, Update (September 2016).

Table 3 – Dollar/euro exchange rate forecasts

	2016	2017
Update	1.119	1.126
Forward markets (average for 10 October - 20 October)	1.113	1.116

Source: Based on Barchart data; MEF, Update (September 2016)

The Italian economy

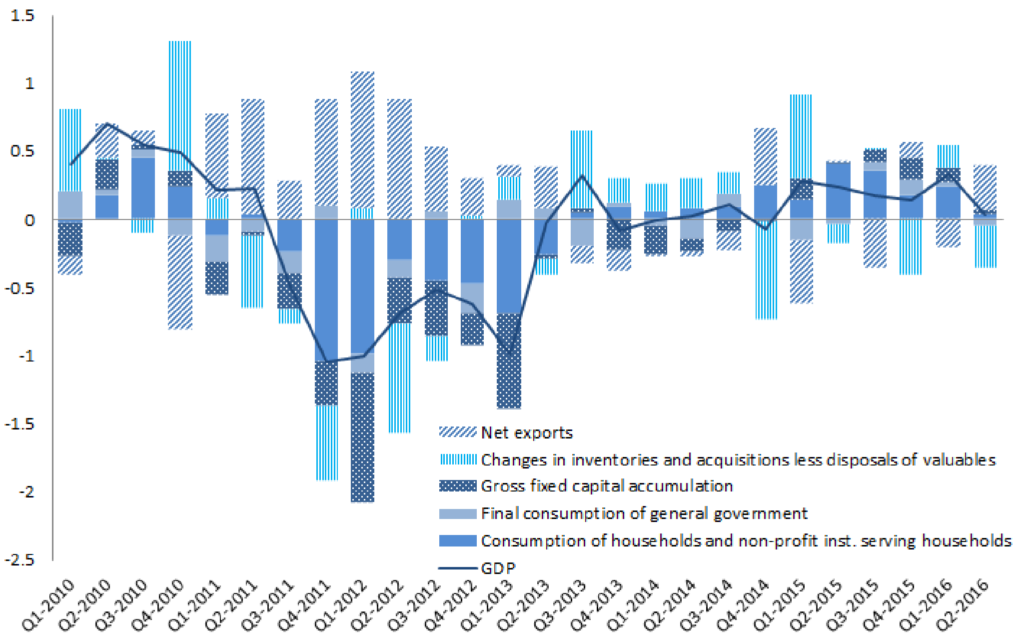
Domestic demand and inventories holding back GDP growth

After five consecutive quarters of moderate recovery at an average pace of 0.2 per cent, Italian GDP slowed in April-June, holding fast at the average level of the previous three months. The growth for 2016 that would be achieved if there were no further changes in the remaining two quarters of the year is 0.6 per cent.

The deceleration in the second quarter reflected the contraction in industry (-0.8 per cent, after a jump of 1.2 per cent in the first three months), compared with moderately positive developments in services and construction (0.2 per cent for both sectors). In terms of the components of expenditure, this performance reflected the decline in inventory building (which subtracted 0.3 percentage points of growth; Figure 3) and the weakening of domestic demand. The contributions of household consumption and investment to GDP growth was zero (whereas in the first quarter they were a positive two-tenths and one-tenth of a percentage point respectively). By contrast, net foreign demand made a positive contribution to output (0.3 percentage points), as export growth (2.4 per cent) outpaced that of imports (1.5 per cent).

Figure 3 – Change in GDP on previous quarter and contributions of the components of demand

(percentage changes and contributions in percentage points)



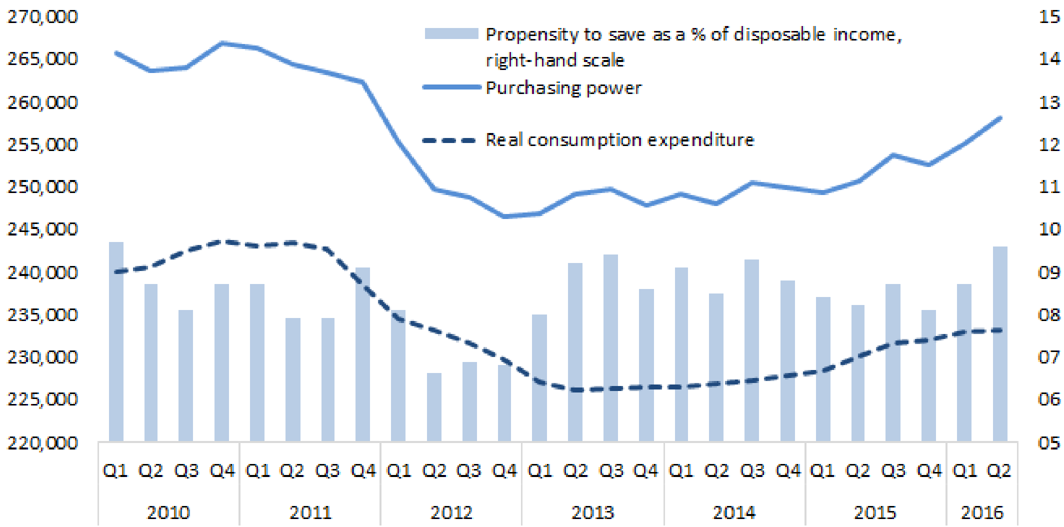
Source: Istat.

Consumption growth eases …

Consumption slowed significantly in the second quarter (to 0.1 per cent, after having grown at average pace of 0.5 per cent in the previous four quarters). The slowdown occurred despite another strong increase in household purchasing power (1.1 per cent in April-June, a rate similar to that experienced in the first quarter), which continued to benefit from favourable developments in the labour market. The deceleration mainly involved purchases of non-durable goods and services. Consumption of durable goods, which had driven the expansion of consumer spending in the last two years, also weakened.

Accordingly, the dynamics of personal incomes and spending produced a further increase – after that registered in the first quarter – in households' average propensity to save (9.6 per cent of disposable income; Figure 4), although this remains distant from the levels that marked the period prior to the crisis (when households saved more than 11 per cent of their income). The deceleration in consumption growth appears to reflect increased uncertainty concerning the overall economic situation, despite the fact that consumers' perceptions of the state of their personal finances are still relatively positive. Household confidence has dropped from the high levels reached at the end of 2015, mainly as a result of downwards corrections in household's views of and expectations for the overall state of the economy.

Figure 4 – Households' purchasing power, consumption spending and average propensity to save
(millions of euros and percentages)



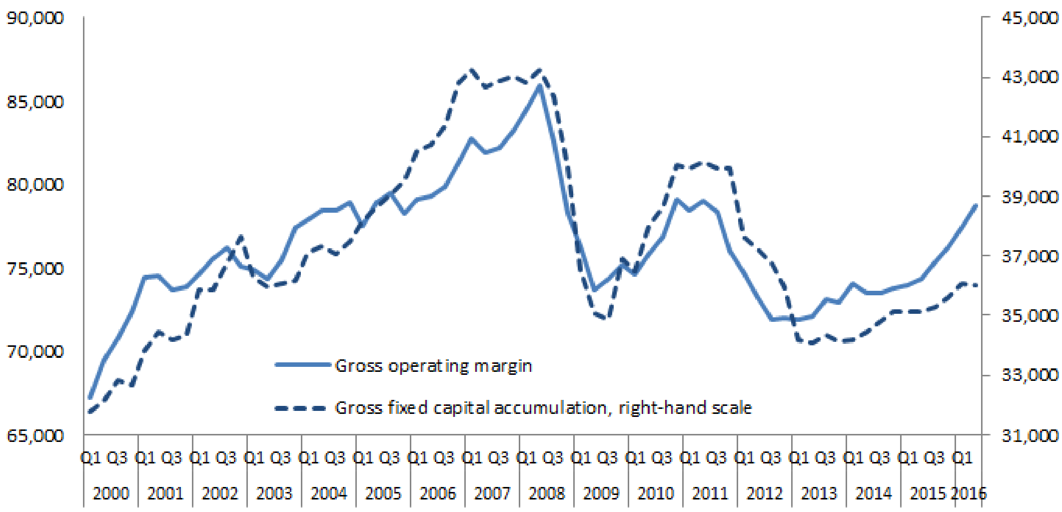
Source: based on Istat data.

… as does investment

Gross fixed investment also slowed in the second quarter (0.2 per cent, after expanding by an average of 0.6 per cent since the beginning of 2015). In view of the positive performance of construction, the slowdown reflected the decline in investment in machinery and equipment and the deceleration in investment in transport equipment. Both of these spending components experienced considerable fluctuations in the early months of 2016 (with a slowdown in late 2015, followed by stronger performance in the first quarter of 2016, especially for transport equipment), possibly impacted by the tax relief measures that entered force at the start of the year.

The sluggish recovery of capital formation does not seem to be connected with inadequate corporate profitability. Although the environment is highly diverse, with expanding firms coexisting with others still in distress, profit indicators have been improving on average for at least two years (Figure 5). In manufacturing, the most recent data show that this gain has been even larger than previous information suggested, thanks to an appreciable rise in productivity from the lows reached during the recession of 2009, against a background of substantial wage moderation (see the Box "The state of manufacturing industry in the light of the new national accounts").

Figure 5 – Non-financial companies: gross operating margin and gross fixed capital formation
(millions of euros)

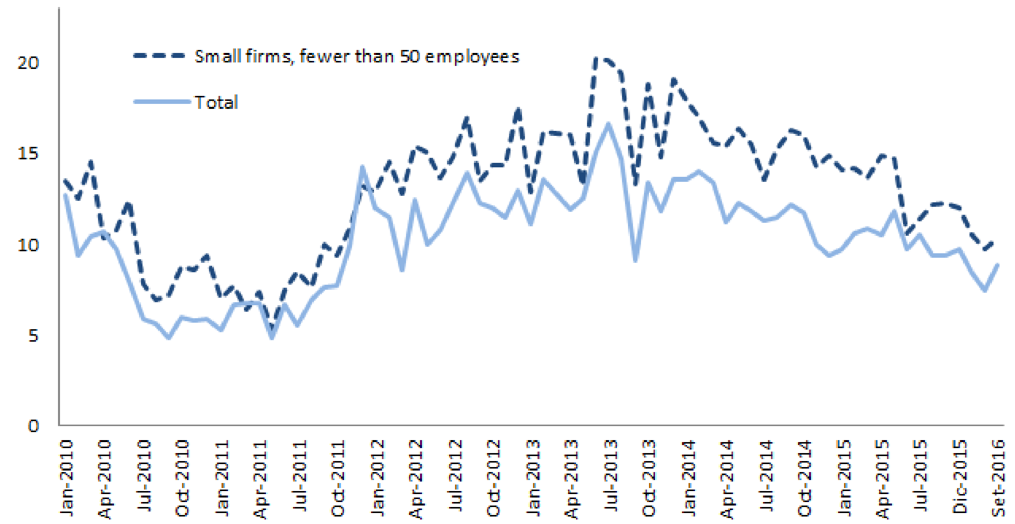


Source: Istat.

Restrictions on credit have become progressively less stringent, although availability has not yet returned to the levels that characterized the period before the crisis. Business surveys show a slow improvement in firms' assessment of the accessibility of bank financing, but with differences by sector and size class. The situation has become more favourable for manufacturing enterprises, particularly exporters, the more innovative companies and larger firms. Industrial companies with fewer than 50 employees report more widespread credit rationing (Figure 6). In construction, however, a large percentage of companies that say they still cannot obtain the credit they need (over 60 per cent, although that figure was 78 per cent at the beginning of 2013). The sector also exhibits significant differences depending on the type of activity engaged in by firms: the easing of credit conditions has been appreciable for civil engineering firms, but less perceptible for those operating in building and specialized construction (Figure 7).

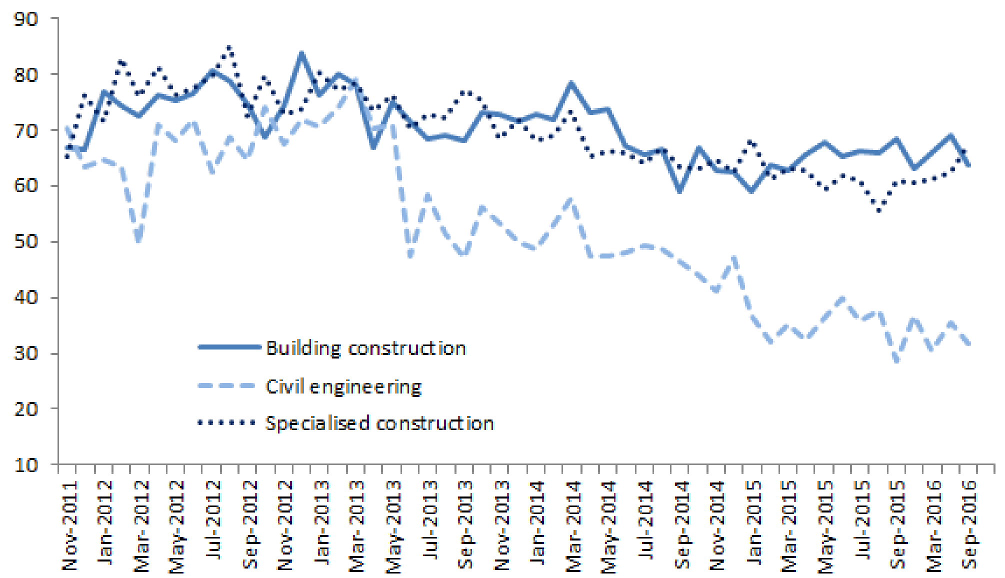
Ultimately, even taking account of the credit constraints that still remain in certain segments of the economy, the main obstacle to a more rapid recovery in investment appears at this stage to be uncertain expectations for any acceleration in demand, both in the domestic market and abroad. The possibility of weaker expansion of markets, after the sharp decline in recent years, does not in itself constitute an obstacle to investment in rationalisation – for which the modest expectations for growth could be a spur to seek greater efficiency and defend market share - but it decisively discourages investment to expand capacity.

Figure 6 – Manufacturing firms that applied for credit but were rejected
(percentage of firms that applied)



Source: Istat.

Figure 7 – Construction firms that applied for credit but were rejected
(percentage of firms that applied)



Source: Istat.

Most recent economic developments

After contracting in the second quarter, industrial production rebounded in July-August. This trend was confirmed by turnover and orders, which also jumped significantly during the same period. These developments were driven by the improvement in both foreign markets and the domestic market. In assessing the summer data, account must be taken of the particular conditions prevailing in that period, with a smaller number of working days and very low levels of economic activity. However, even allowing for a decline in industrial production in September, the third quarter would still close with a significant increase (according to PBO estimates, a rise of 0.8-0.9 per cent on the previous three months). The evidence for the latter part of the year points to a continuation of the recovery in industrial activity at a substantially slower pace than that registered in July-September, reflecting the weak impulse of international and domestic demand.

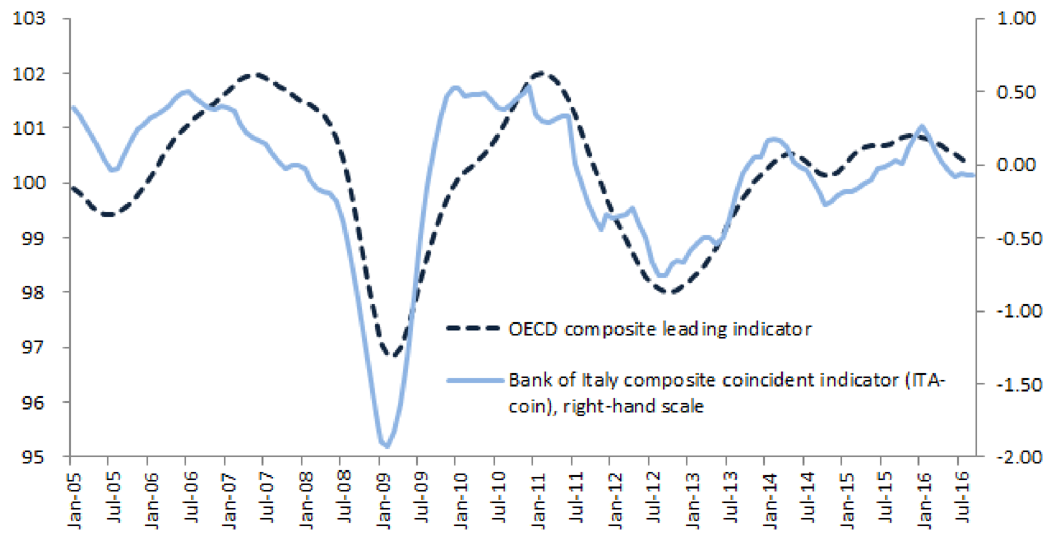
The latest information on the construction industry confirms the gradual improvement under way. Although the sharp rise in output in August (+3.4 per cent) is partly influenced by the same problems of statistical volatility observed for the analogous index for industry, it still reflects growth in the third quarter after the stagnation of previous months. Property sales continued to post stronger numbers, with a significant rise on the third quarter of 2015. The improvement in the climate of opinion among construction firms also continued, reaching a historically high level in the third quarter.

In the services sector, the available information shows growth still lagging, reflecting the moderation of the recovery in domestic demand. Confidence declined in the third quarter for both market services firms and those in the trade segment. The index of retail sales by volume for the average of the three months ending in July was essentially unchanged on the previous quarter.

Finally, the coincident and leading composite indicators of the business cycle[1] developed by various institutions show that the recovery remains modest overall. In September, the (coincident) ITA-coin index of the Bank of Italy was essentially unchanged at the low levels to which had fallen in June; the (leading) index developed by the OECD began to decline at the beginning of the year, signalling a slowdown in economic growth (Figure 8).

[1] These indices are termed composite indicators because they use statistical methods to extract a composite view of developments in economic conditions from multiple sources of qualitative and quantitative economic information for both the current period (for coincident indicators) and future periods (for leading indicators).

Figure 8 – Leading and coincident indices of the business cycle



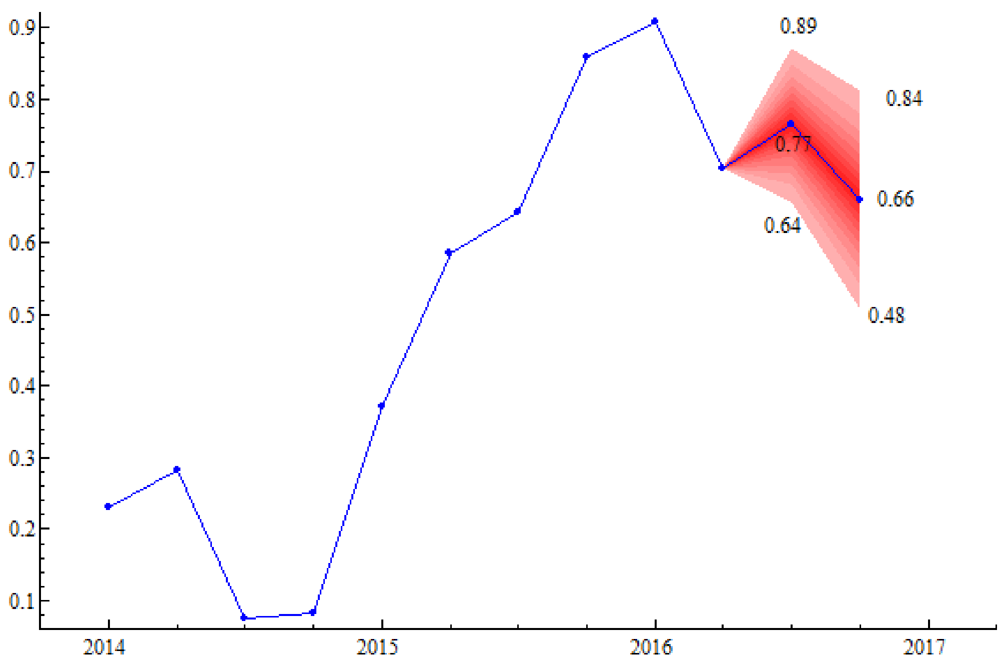
Source: Bank of Italy and OECD.

Short term forecast: GDP growth turns positive in the third quarter, slows in the fourth

Taken together, these indications point to irregular GDP developments in the second half of the year, with the weak recovery continuing. More specifically, pending release of Istat preliminary data on actual performance in the third quarter (which will be issued on November 15), according to the estimates generated using the PBO's short-term models, GDP is expected to have increased by around 0.2 per cent in July-September, a reflection of moderately positive trends in all the main sectors. Growth should slow in the fourth quarter, when the forecast gain in economic activity is only marginally positive (around 0.1 per cent). Given this environment, the trend rate of GDP growth should be around 0.8 per cent in the third quarter and about 0.7 per cent in the fourth (Figure 9).

These dynamics imply a growth rate for the economy, adjusted for the number of working days, of 0.8 per cent on average in 2016. Not correcting for working days (2016 has two fewer than the previous year), the "raw" increase in GDP according to the PBO would be 0.7 per cent (0.8 per cent in the macroeconomic scenario in the Update).

Figure 9 – Short-term GDP forecasts and standard error (1)
(percentages)

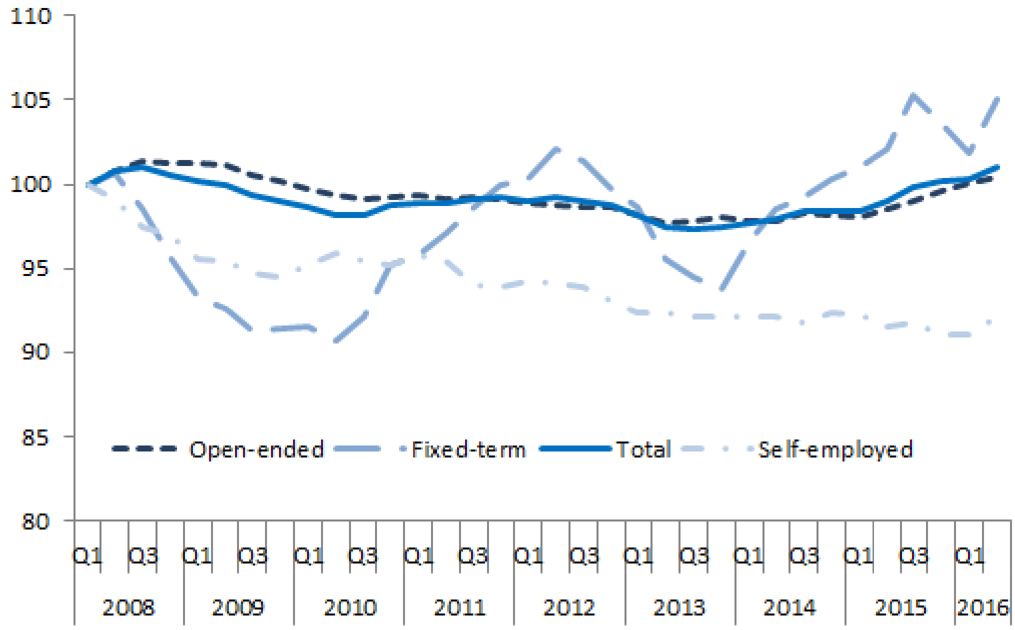


Source: PBO.
(1) 95 per cent probability.

Employment continues to perform well; growth in open-ended jobs slows

After pausing early in the year, the labour market showed improvement in the second quarter. Employment increased considerably (0.8 per cent on the previous three months according to the Labour Force Survey and 0.5 per cent in terms of the standard labour units used in the national accounts), driven by a sharp recovery in fixed-term employment (3.2 per cent). The improvement in this component, characterized by pronounced cyclical fluctuations, at least partly reflected the effects of the restructuring of contribution relief, with the transition in 2016 to only partial relief for new open-ended contracts. While open-ended contracts continued to grow (0.3 per cent), the pace of increase declined compared with previous quarters. Overall, payroll employment expanded further in the second quarter (0.7 per cent, or 121,000 units) after two quarters of slower growth, returning to pre-crisis levels (Figure 10). The rise in overall employment appeared to involve both males (0.9 per cent) and females (0.7 per cent), the major age groups (with no change among the population aged 35-49 years) and geographical areas.

Figure 10 – Components of employment
(*indices; first quarter of 2008 = 100*)

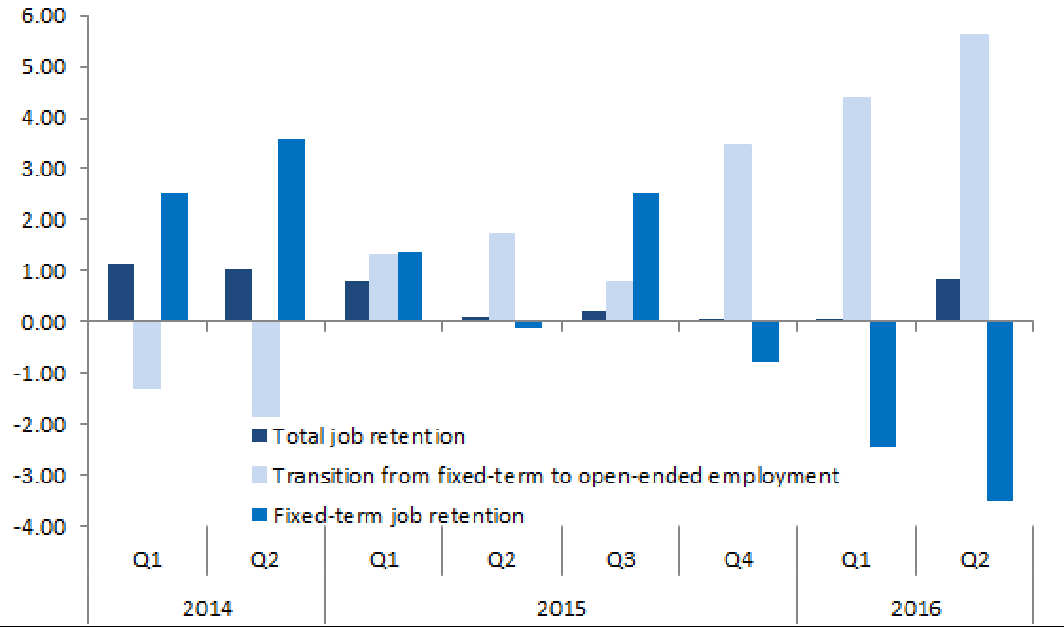


Source: based on Istat data.

The consolidation of favourable labour market conditions can be seen in the flow data on changes in labour market status. The retention rate among the employed increased further (by almost one percentage point, to 94 per cent for transitions observed between the second quarter of 2015 and second quarter of 2016 compared with the same flow recorded a year earlier). In the same period, the retention rate for those in fixed-term employment declined, reflecting an increase in transitions to open-ended employment (Figure 11).

In the two months from July to August, total employment lost ground (-0.1 per cent on the previous three months), owing to the sharp decline in self-employment (-1.3 per cent), which was only partially attenuated by an increase in payroll employment (0.3 per cent). The latter essentially reflected the growth in fixed-term employment (0.9 per cent). The slight slowdown in July and August was still not enough to jeopardise the growth achieved previously, so that in the first eight months of this year the number of persons in employment increased by 1.3 per cent overall compared with the same period of 2015.

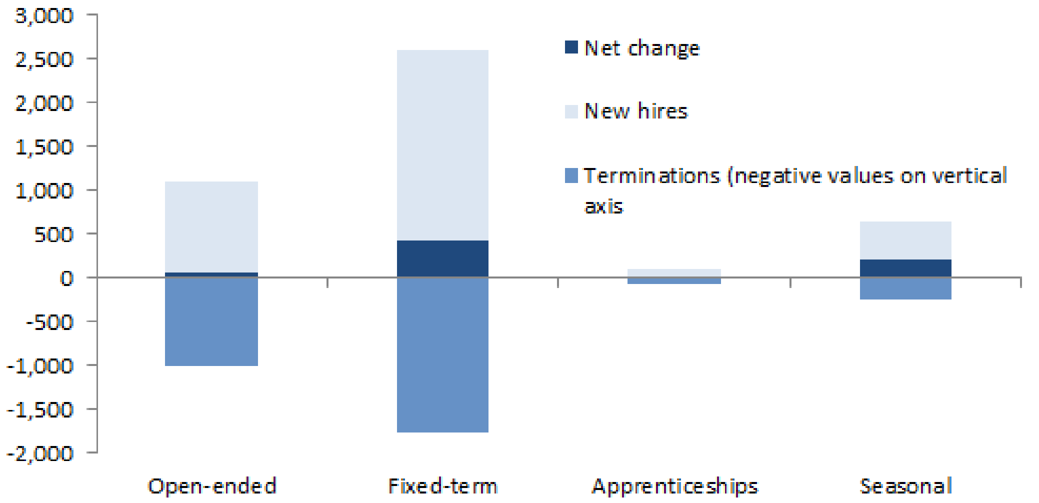
Figure 11 – Job retention, retention and transition of workers in fixed-term employment
(differences in percentage points between flow data over one year)



Source: based on Istat data.

The flow data for changes in employment relationships (new hires, transformation of contracts, terminations) provided by the Observatory on Insecure Employment of the National Social Security Institute (INPS) have continued to show net growth in new hiring but at a substantially slower pace than the previous year. In the first eight months of the year, the balance between new hires and terminations was still positive, amounting to 703,000, but with a decrease of 110,000 jobs compared with the same period of 2015 (-13.5 per cent). There were declines in both new hires (-8.5 per cent) and terminations (-7.3 per cent). Open-ended employment contributed little to the overall net change (only 53,000 contracts), reflecting a significant decline in new employment relationships (-32.9 per cent compared with the same period of 2015) and in transformations of fixed-term contracts to open-ended jobs (-35.4 per cent). This reflected the sharp decline in new hires and transformations to open-ended status benefiting from the - less favourable - contribution relief mechanism (32.8 per cent of all the new hires and transformation to open-ended contracts; the share was 60.2 per cent in the same period of 2015). The greatest contribution to net hiring came from fixed-term employment (over 425,000 contracts), which showed a modest increase in new hiring (2.3 per cent) compared with a decrease in terminations (5.2 per cent). Seasonal employment, up sharply since the spring, also drove the overall net increase (Figure 12).

Figure 12 – New hires, terminations and net change in jobs by contract type
(*January-August 2016; thousands of contracts*)



Source: based on INPS data.

The improvement in labour market conditions has produced an increase in the labour market participation rate. In the second quarter, the number of job-seekers posted another modest gain (0.1 per cent), similar to that registered in the first three months of the year, as a result of a further reduction in the inactive population. The more positive trend in employment did not prevent a slight decrease in the unemployment rate in the second quarter (11.5 per cent), which continued in July and August (11.4 per cent on average in the two months). The flow data show a year-on-year increase in the likelihood of the unemployed finding a job (a rise of 5.5 percentage points to 29.4 per cent between the second quarter of 2015 and the second quarter of 2016). The long-term unemployment rate fell further (by about 1 percentage point).

Business surveys show an improvement in expectations for labour market conditions, particularly in industry excluding construction, construction and trade. By contrast, expectations deteriorated in market services.

Inflation turns marginally positive as energy prices rise, while internal price pressures remain weak

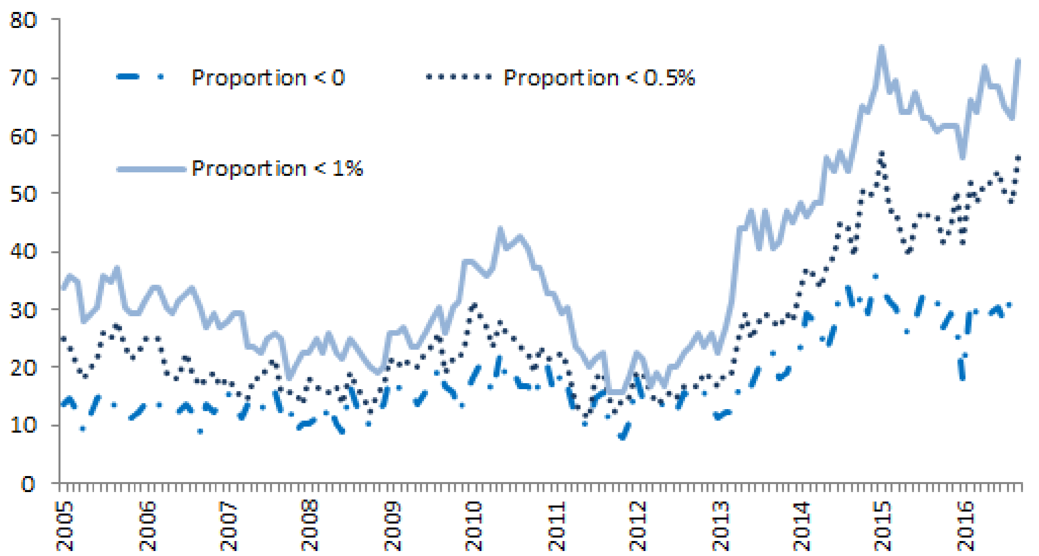
In September, the year-on-year rate of inflation turned (barely) positive (0.1 per cent) after seven consecutive months of decline. This reflected the year-on-year rise in the prices of energy products, whose decline was roughly halved compared with the previous month. On average in the third quarter, inflation as measured by the harmonised price index remained slightly negative (-0.1 per cent, two-tenths less than in the second quarter).

The persistence of weak inflationary impulses in the economy was underscored in September by the large share of items in the HICP basket whose prices are still decreasing (31 per cent) and the increase in the share of items whose prices rose by less than 0.5 per cent (56 per cent) and 1 per cent (73 per cent) (Figure 13).

Confirming the weakness of inflationary pressures, in September core inflation (excluding the prices of energy and fresh food products) was stable at a very low rate (0.5 per cent; at the start of the year it was just under 1 per cent). In the upstream segments of retail trade, prices trends remained negative. Producer prices of industrial products sold on the domestic market continued to decline (-1.1 per cent in August). The price of consumer goods produced for the domestic market also continued to contract (-0.4 per cent in August), while the prices of durable goods rose moderately.

Household inflation expectations as reported in surveys increased in September compared with previous months, presumably also reflecting the rebound in the prices of energy products. The share of those expecting an increase in prices rose to 41.5 per cent, up from 36.8 per cent on average in the January-August period. The share of households expecting stable prices also declined to 48.1 per cent, from 56.2 per cent in August. By contrast, firms in all the major productive sectors reported expectations of essentially stable sales prices in the coming months.

Figure 13 – Proportion of goods and services experiencing deflation or low inflation
(as a percentage of total elementary items of the HICP)



Source: based on Istat data.

Box – The state of manufacturing industry in the light of the new national accounts

Istat's recent releases of the national accounts offer a more positive picture of Italian manufacturing in recent years that was previously thought to be the case. The information that has progressively become available has prompted revisions of a number of key variables of industrial performance, such as productivity and profitability indicators. Among the information that has driven the changes is structural data on firms, which Istat has made a major effort to expand in recent years.[2] Since September 2014, when the national accounts adopted ESA2010 rules, the structural information has had an impact on the accounts on two occasions, in September of 2015 (with reference to 2013) and 2016 (with reference to 2014). In 2016, the information on firms produced a re-evaluation of growth in manufacturing value added (six-tenths of a point in volume terms), which, together with a similar revision for services, led to a correction of 2014 GDP growth from a contraction (-0.3 per cent) to a small expansion (0.1 per cent).

Figure B1 examines the situation of manufacturing on the basis of the picture provided by the quarterly accounts releases for December 2014, December 2015 and October 2016.[3] The variables considered are hourly labour productivity (panel A), profit share (panel B), the mark-up on variable costs (Panel C) and unit labour costs (panel D).

In brief, the most recent data reveal substantially different developments in labour productivity (value added per hour worked, panel A). While the information available at the end of 2014 (and, in part, that at the end of 2015) signalled a deterioration, the latest indications show productivity rising. Between the first quarter of 2009 (the minimum point) and the second quarter of 2016 (latest data available), labour productivity has increased at an average pace similar to that registered in the 2003-07 expansion (0.7 per cent on average per quarter). In comparing the two phases, it must be borne in mind that the most recent includes the severe recession of 2012-13. It should also emphasized that the growth in post-2009 productivity has been slowed by the regression found in the provisional 2015-16 figures, for which it will be necessary to verify the impact that structural information on firms will have when it becomes available (at the end of 2017 for 2015).

The improved performance of productivity has been accompanied by faster growth in profit shares (as a proportion of value added, panel B) than seen in the earlier statistics. Compared with previous estimates, profit shares contracted by less during the last recession, and started growing again at the beginning of 2013. In the second quarter of 2016, profit shares had returned to the levels seen in the third quarter of 2008.

Additional information about manufacturing performance is given by the mark-up indicator produced by Istat (the ratio of the output deflator to unit variable costs, panel C). The improved performance of profit shares was associated with a substantially larger increase in the mark-up per unit of output than was previously thought. This measure of unit profits started to increase again in late 2012, rising above pre-crisis levels at the beginning of 2016. This better performance appears to have been fundamentally affected by unit labour costs (panel D), which in the old estimates rose but with the new statistics appear to have been broadly unchanged since 2012.

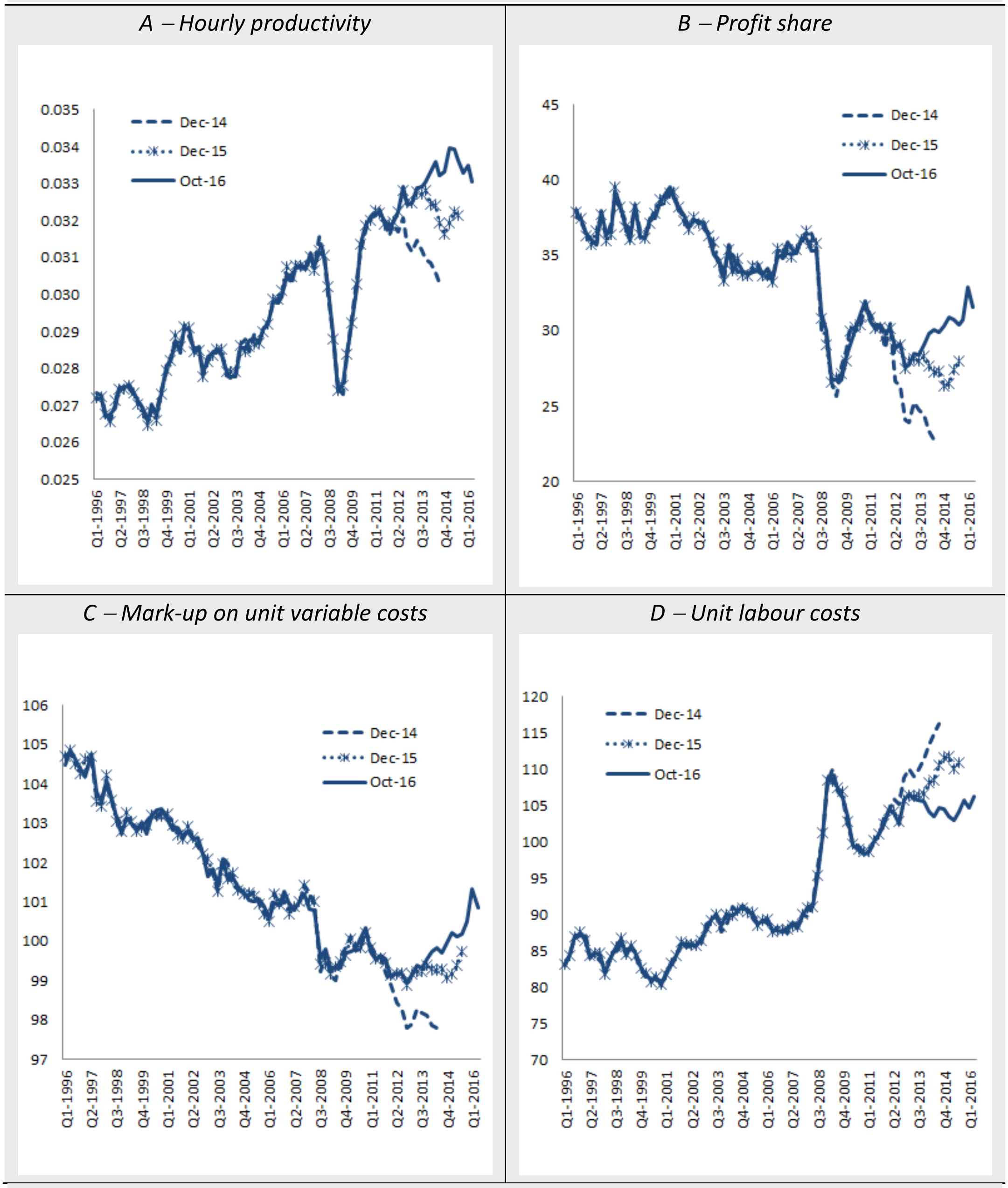
Taken together these statistics show a manufacturing sector that, although shrunken by the crisis, had already begun to increase its level of efficiency and profitability during the recent recession. This appears consistent with the results of recent analyses of micro-data on firms by

[2] We refer to the new Frame-SBS statistical register on firms; see Monducci R., "*Nuove informazioni statistiche ufficiali sulle imprese: coerenza micro-macro, multidimensionalità, integrazioni tra fonti*" Istat, report at the 12th National Conference of Statistics, Rome, 22-24 June 2016.

[3] Since September 2014 there have been eleven quarterly releases with more or less significant revisions on the basis of the set of available information. To simplify the situation for readers, the text focuses on releases subsequent to releases of the annual accounts incorporating structural statistics on firms.

Istat-Bank of Italy,[4] which show that during the recession significant resource selection and reallocation occurred, especially in the industrial sector. The exit of less efficient firms and the expansion of the best performing companies have had a beneficial impact on the sector's aggregate productivity.

Figure B1 – Manufacturing: hourly productivity, profit margins, mark-up and unit labour costs (1)



Source: Istat and calculations based on Istat data.
(1) Hourly productivity = value added in volume terms per hour worked; profit share = percentage ratio of gross operating margin (value added at current prices minus income from employment) to value added at current prices; mark-up = ratio of the output deflator to unit variable costs; unit labour costs = labour costs per unit of output.

[4] Linarello A., Petrella A. "*Productivity and reallocation: evidence from the universe of Italian Firms*". Banca d'Italia (2016), "*Questioni di Economia e Finanza"* no. 353, September.