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Summary [*]

With the strengthening of the world and European expansion, the recovery in Italy has also gained pace. In updating its forecasts, the Parliamentary Budget Office (PBO) has revised its outlook for the second half of 2017 upwards, putting expected GDP growth at about 0.5 per cent in the third quarter and about 0.3 per cent in the fourth. These developments point to an increase in GDP for 2017 as a whole of 1.5 per cent (both adjusted for calendar effects and unadjusted), in line with the forecast presented by the Government in the Update of the Economic and Financial Document (the Update). The updating of the PBO projection represents a slight increase on the forecast for 2017 (1.4 per cent on an unadjusted basis) prepared in September on the occasion of the endorsement of the Update.

The Italian recovery reflects the strong performance of the global economy and the impulses of fiscal and monetary policies. The recovery is being driven primarily by domestic demand. Consumption spending, despite broad stagnation in disposable income, reflects the improvement in the labour market and in household confidence. Investment is recovering after the contraction seen early in the year. Economic surveys signal an acceleration in capital accumulation in the second half of 2017, buoyed by the stronger outlook for demand and tax relief measures, against a background of the still slow normalisation of credit conditions for firms. The decline in economic uncertainty (as measured by the PBO index) appears to be benefitting both expenditure on consumer durables and investment. Export growth, although outpaced by imports, remains favourable, confirming the good performance of Italian goods on world markets.

The recovery has been reflected in employment growth, which is essentially being driven by the expansion in fixed-term jobs. The gain in the number of persons in employment has been accompanied by slower growth in the number of hours worked, underscoring the persistence of underemployment, which tends to depress wage growth.

In the more favourable general environment, inflation has yet to revive, reflecting the moderate pressure of production costs. The weak price pressures are accompanied by an only modest increase in the inflation expectations of households and firms.

[*] *Prepared by the Macroeconomic Analysis Department. Information updated to 25 October 2017.*

The international environment

World economic growth continues

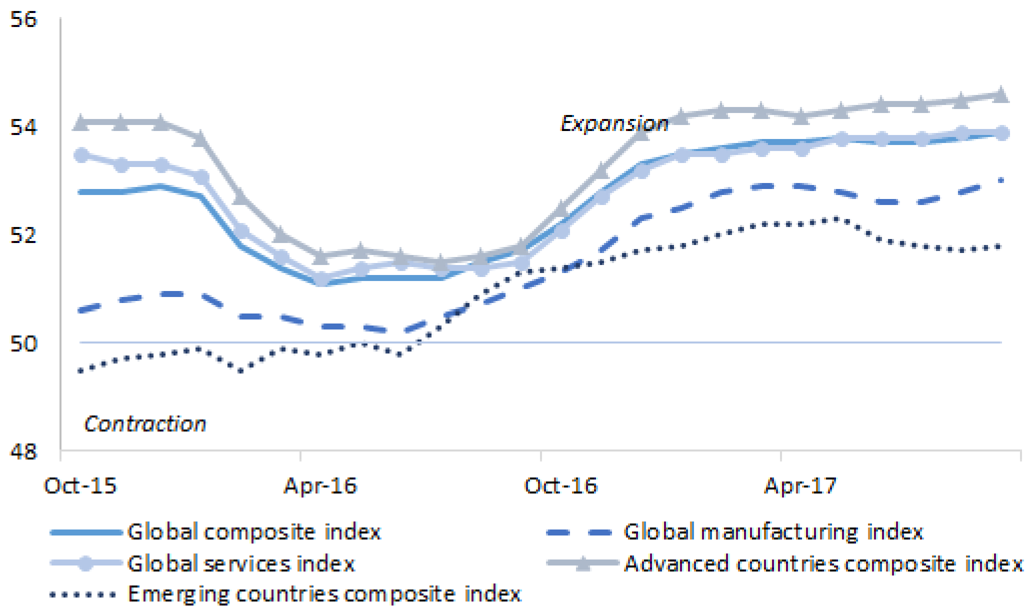
The international recovery has shown increasing signs of robustness in recent months, having spread to virtually all economic areas. This consolidation has been accompanied by an additional acceleration in trade. In its October *World Economic Outlook*, the International Monetary Fund (IMF) revised upwards its forecasts for world growth this year and next. The background of generally more favourable global economic conditions is shadowed by risk factors associated with persistent geopolitical tensions, uncertainty about developments in the economic policies of the leading economies and the overheating of equity markets in the advanced countries.

Recent economic developments

In the United States, GDP accelerated in the second quarter, driven mainly by domestic demand, notably private consumption. This strengthening may have been followed by a temporary easing of growth in the third quarter, primarily reflecting the violent weather conditions that impacted the US economy at the end of the summer (whose effects have already been reflected in a weakening of employment growth in September). In the euro area, the expansion that began in the second quarter of 2013 continued in the second quarter of this year, thanks to the impulse of internal demand. Economic indicators point to a continuation of recovery in the third quarter at the strong pace that has characterised recent months. Among the emerging economies, China saw growth slow in the third quarter (although the rate of growth was still just under 7 per cent), while the gradual improvement in economic conditions in Brazil and Russia continued, with those two economies now appearing to have exited the recession they have experienced in the two or three previous years.

More recent data confirm the positive performance of the world economy, which is expected to continue for at least the rest of the year. Indicators of confidence among purchasing managers (Purchasing Managers' Index – PMI) remained in the area indicating an expansion at both the global level and in the main economic areas (above 50) in September (Figure 1).

Figure 1 – JP Morgan Global PMI (1)
(3-month moving average)



Source: Thomson Reuters.
(1) Confidence indicators based on the assessments expressed by corporate purchasing managers; a value of more than 50 indicates an expansion.

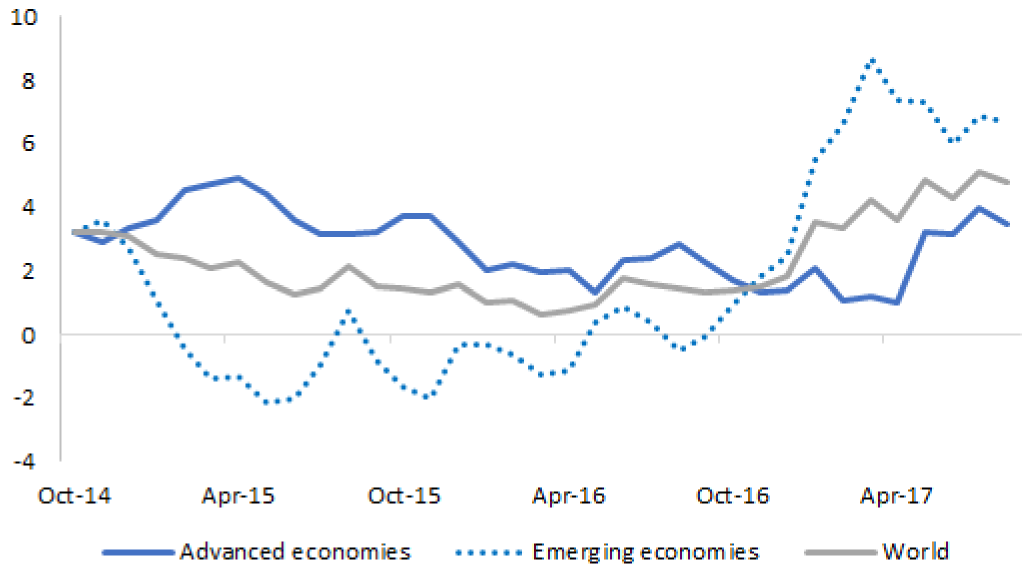
The recovery in world trade continues

After two years of very weak growth, world trade has begun a recovery, expanding - according to the most recent information disseminated by the Central Planning Bureau (CPB) – by about 4.5 per cent, nearly twice the pace registered in 2016. The elasticity of trade to world GDP growth, while increasing from the very low levels reached in the last two years, remains well off the average values for the last decade.[2]

The acceleration in world imports this year has been driven by demand in the emerging markets, accompanied by a slower expansion in the advanced countries as well (Figure 2). According to the leading international forecasters, in 2017 imports in Italy's key markets are expected to increase more than world imports as a whole, fostering a small recovery in Italy's market shares.

[2] Estimates based on quarterly figures show a gradual decline in the elasticity of trade to world economic activity beginning in the last two decades of the last century; see *Report on recent economic developments*, July 2017.

Figure 2 – Growth rate of imports
(annual percentage change in 3-month moving average)



Source: based on Thomson Reuters data.

The world economy in IMF forecasts

In its October forecasts the IMF revised upwards its projection for world growth this year and next compared with its July forecast. Global GDP is expected to expand by 3.6 per cent in 2017 and 3.7 per cent in 2018, an upwards revision of one-tenth of a point for both years (Table 1). The upwards corrections involved most countries. The largest adjustments regarded the euro area (0.2 percentage points higher in both years), and Russia and Brazil (+0.4 and +0.2 percentage points for both in 2017 and 2018 respectively).

The forecasts for world trade (expressed as an average of world exports and imports of goods and services) were also raised from their previous levels (by two-tenths and one-tenth of a point in 2017 and 2018 respectively), mainly reflecting the expected improvement in trade on the part of the emerging economies.

Table 1 – IMF forecasts
(percentage changes and differences in percentage points)

	WEO October 2017		Difference with WEO July 2017	
	2017	2018	2017	2018
World output	3.6	3.7	0.1	0.1
Advanced economies	*2.2*	*2.0*	*0.2*	*0.1*
United States	*2.2*	*2.3*	*0.1*	*0.2*
Euro area	*2.1*	*1.9*	*0.2*	*0.2*
Emerging economies	*4.6*	*4.9*	*0.0*	*0.1*
World trade	4.2	4.0	0.2	0.1

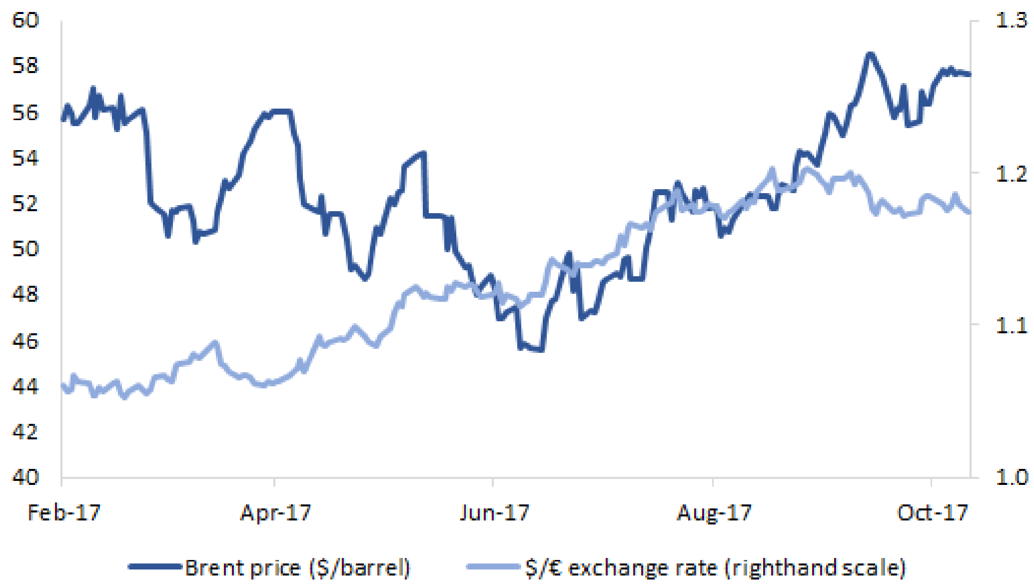
Source: IMF, *World Economic Outlook* (WEO), October 2017.

Oil prices recover and the euro appreciates

After weakening in the first half of the year (with Brent reaching a low of $45 a barrel at the end of June), oil prices began to rise again from mid-July onwards, reaching $56.7 a barrel in October (average of the first three weeks of the month; Figure 3). Driving these developments in the first part of the year was an expansion of supply, due mainly to the increase in the output of shale oil in the United States and the recovery of production capacity in Libya and Nigeria, which undermined the OPEC commitment taken in May to retain their production cuts through the first quarter of 2018. The more recent rise in prices has been fuelled both by the strengthening of the outlook for world economic growth and by a slowdown in US production as a result of severe weather events. Expectations on the forward markets point to broad stability in oil prices in the coming months from their current levels, before a slight decline beginning in the second half of 2018.

On the foreign exchange market, the euro has gradually strengthened since the start of the year again the US dollar, rising from a low of 1.04 in the closing days of 2016 to about 1.18 in mid-October (an increase of about 13 per cent). The rise has reflected a decrease in expectations for a fiscal stimulus in the United States and, at the same time, the emergence of a stronger-than-expected recovery in the euro area. The appreciation of the euro in effective terms (i.e. against a basket of the main currencies) over the same period was less robust (+6 per cent).

Figure 3 – Oil prices and dollar/euro exchange rate



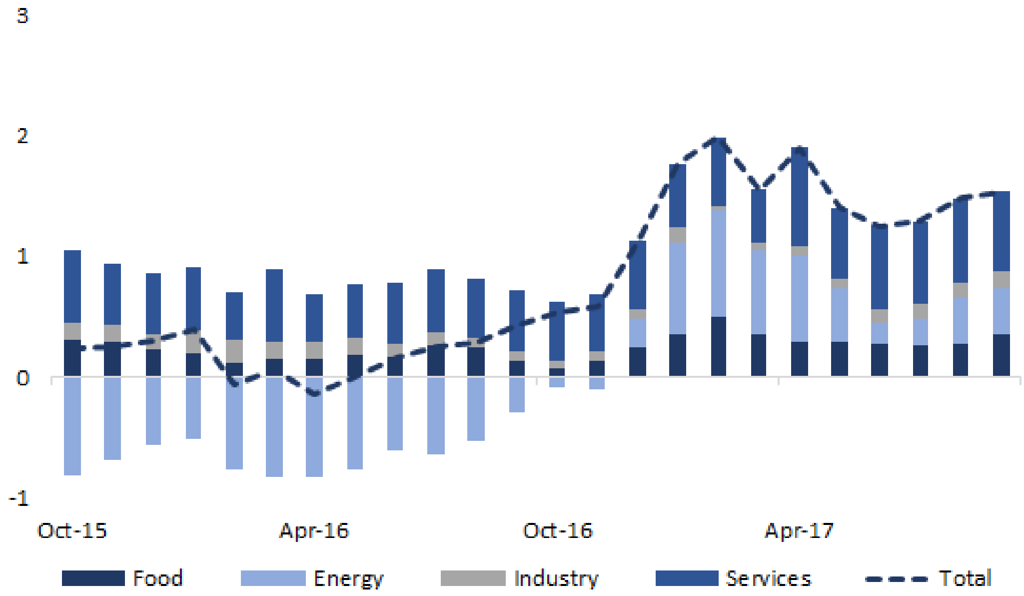
Source: based on Thomson Reuters data.

Euro-area inflation remains weak and the ECB maintains expansionary stance

In September, inflation in the euro area remained at the level posted the previous month (+1.5 per cent), when it had risen slightly. Inflation developments in the recent period have been driven by a larger contribution from food and energy products, while the contribution of the prices of industrial goods and services to the inflationary process has been virtually constant (Figure 4). Reflecting these developments, core inflation (excluding the prices of energy products and unprocessed food) was also unchanged in September from the previous month (+1.3 per cent). Inflation expectations, drawn from inflation swaps at various maturities, show no signs of an appreciable acceleration in the medium to long term (Figure 5).

The persistence of low inflation despite the strengthening of the expansion is indicative of continuing sources of weakness in the euro-area recovery, which are considered by the European Central Bank (ECB) in its conduct of monetary policy. The inverse relationship between inflation and unemployment (known as the Phillips curve) has weakened considerably in recent years in the main advanced countries, including those in the euro area.

Figure 4 – Inflation in the euro area
(percentage changes and contributions)



Source: based on Thomson Reuters data.

Figure 5 – Inflation expectations in the euro area
(inflation-linked swaps)

Source: Thomson Reuters.

The existence of greater labour underutilisation than that suggested by unemployment alone, the role of external shocks, globalisation, inflation expectations and non-linearity in the relationship are the main hypotheses offered to explain the weakening of the link between inflation and unemployment.[3] At the same time, the euro area remains characterised, despite the shared recovery, by considerable disparities in the underlying economic conditions in the individual Member States, which are prompting caution in the expected process of normalisation of monetary policy (see the Box "*Natural rate of interest in the euro-area countries and monetary policy*"). In this environment, the ECB intends to retain its accommodative monetary policy stance, signalling that it will maintain policy rates at their current levels for an extended period of time, past the end of the asset purchase programme. Winding down the latter should begin in 2018, probably with a very gradual tapering of the volume of monthly purchases for a longer period of time.

The Italian economy

Economic activity picks up further in the second quarter

Benefitting from the improvement in international economic conditions and the support of economic policies, the recovery of the Italian economy gathered pace between the end of 2016 and the first half of 2017. The stronger performance emerged only gradually in the quarterly national accounts, becoming evident in August with the publication of the preliminary estimate of GDP growth for the second quarter, which was confirmed with the publication of the annual national accounts in September (Table 2). The most recent release of the quarterly accounts, which was published at the start of the month, showed an additional upward revision of estimated GDP growth in the first quarter of 2017 (+0.5 per cent on the previous period), compared with a small downward correction for the second quarter of the year (+0.3 per cent, from 0.4 per cent in the September edition). As a result of these developments, GDP growth since the start of the year amounted to 1.2 per cent.

Table 2 – Real GDP 2016-T4 – 2017-T2 in the 2017 editions of the national accounts *(quarter-on-quarter growth rates) (1)*

Edition	2006-Q4	2007-Q1	2007-Q2
February (1)	0.2		
March	0.2		
May (1)	0.2	0.2	
June	0.3	0.4	
August (1)	0.4	0.4	0.4
September	0.4	0.4	0.4
October	0.4	0.5	0.3

Source: based on Istat and MEF data.
(1) Preliminary estimates.

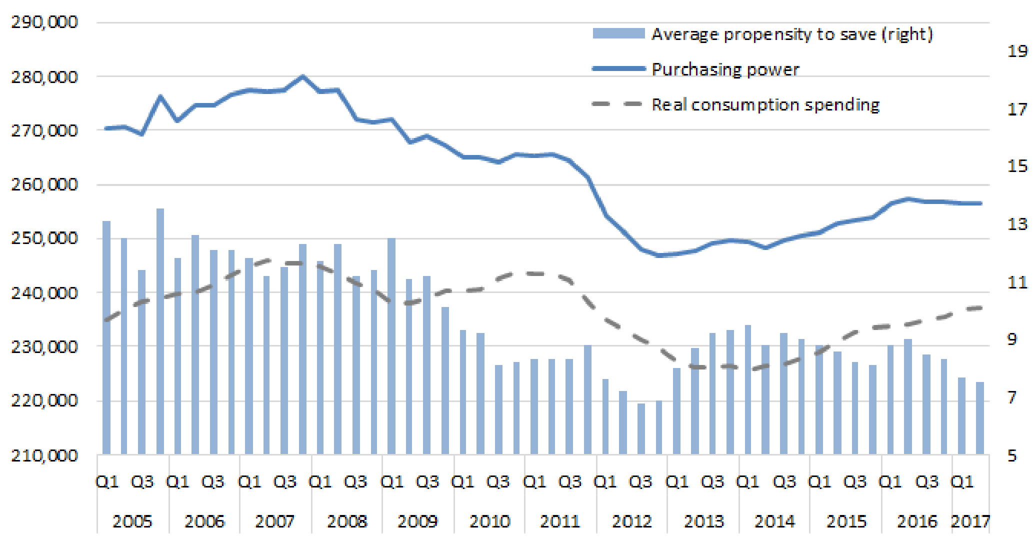
[3] See the speech by V. Constâncio, Vice-President of the ECB, "Growth in a more resilient Euro area", 15 October 2017.

On the supply side, the increase in activity in the second quarter reflecting quarter-on-quarter gains in value added in manufacturing (+0.8 per cent) and services (+0.3 per cent), partly offset by a contraction in construction (-0.5 per cent) and agriculture (-2.4 per cent). Among the components of demand, the contribution of domestic spending to growth remained positive in the second quarter (about 0.3 percentage points), fuelled by developments in investment and household consumption, while general government expenditure made no contribution. Stock-building contributed an additional 0.4 points, while net foreign demand subtracted about three-tenths of a point of growth, reflecting the expansion of imports while exports slowed.

Household spending rises slightly but purchasing power stagnates

Household expenditure, gross of purchases by non-profit social institutions, continued to grow in the second quarter (+0.2 per cent on the previous quarter), albeit at a slower pace than in the previous quarter (+0.6 per cent). The expansion of private consumption was driven by the good performance of spending on services, partly offset by contractions in purchases of other types of goods (durables, semi-durables and non-durables). The new quarterly accounts show that since the start of 2016, the growth in consumption has occurred despite the virtual stagnation of real household disposable income. This has led to a decline in the propensity to save, which in the second quarter fell to 7.5 per cent (two-tenths of a point less than the average for the first quarter and a point and a half less than the same period of the previous year; Figure 6).

Figure 6 – Purchasing power, consumption spending and average propensity to save *(millions of euros and percentages)*



Source: based on Istat data.

The most recent information available from consumer surveys continues to provide positive signals about developments in household spending. Both the overall climate of confidence and that of the various sub-components (general/personal and current/future) registered their fourth consecutive increase in September, giving rise to a sharp improvement in the average level of confidence in July-September compared with the corresponding level in the second quarter of the year.

Investment is recovering

On average between April and June, capital accumulation turned positive (+0.9 per cent on the previous quarter), partly recouping the ground lost in the first quarter. This development partly reflected an improvement in firms assessments of the legislative environment, which after the uncertainty at the end of 2016 concerning the retention of incentives for purchases of capital goods saw the extension of the scope of the super- and hyper-depreciation mechanisms to include machinery due for delivery by June 2018.

The increase in the volume of investment in the spring reflected spending on transport equipment (+8.9 per cent), which resumed growing a pace similar to that seen in 2016, and on plant and machinery (+0.9 per cent). By contrast, investment in construction declined, albeit only marginally (-0.4 per cent), interrupting the gradual recovery that had begun in the early months of 2015.

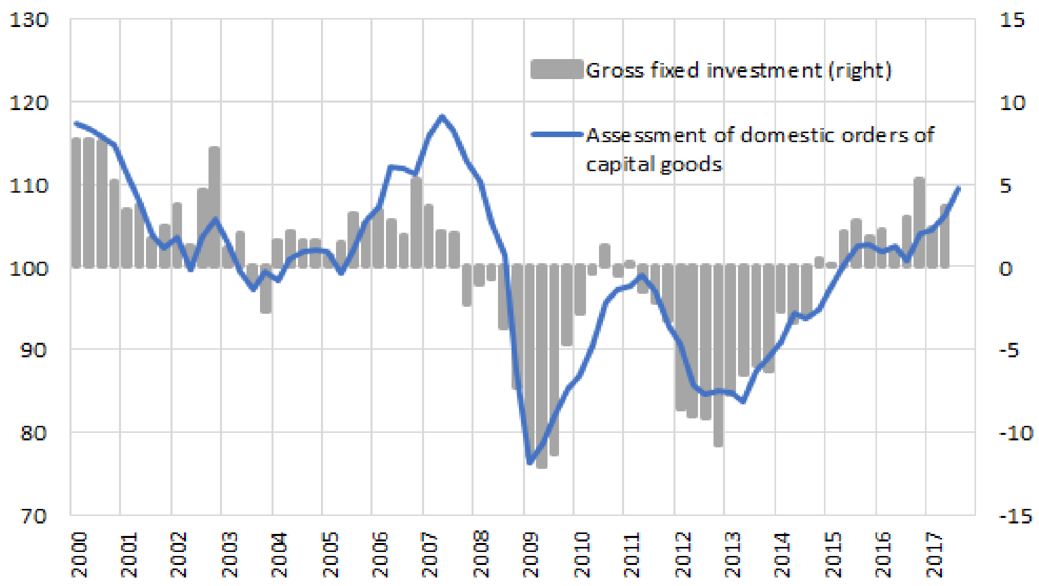
The process of capital accumulation could strengthen in the second half of the year. Indicators of firm profitability, which weakened in the first six months of the year, should improve again, benefiting from favourable borrowing conditions and the moderate pace of production costs. Especially positive signs can be found in economic surveys. Istat surveys show a jump in domestic orders of capital goods in September, which have returned to a level close to that registered at the start of 2008 (Figure 7). The results of the Bank of Italy’s Survey on Inflation and Growth Expectations in September point to a broad expansion of investment plans in the various sectors in the second half of the year. The growth in the volume of investment spending should mainly be driven by firms’ more favourable expectations for demand, with capacity utilisation close to its pre-crisis highs.

Exports continue to perform well

Despite the gradual appreciation of the euro over the course of the year, the volume of exports of goods and services continued to grow in the first half of the year (+2.7 per cent compared with the July-December 2016 average, and +5.8 per cent compared with the same period last year). However, the quarterly developments indicated in the national accounts data released in October reveal a deterioration in the volume of exports compared with the January-March average, driven by a decline in foreign sales of services, which stood in contrast to the positive, although slowing, performance of goods exports (+0.4 per cent).

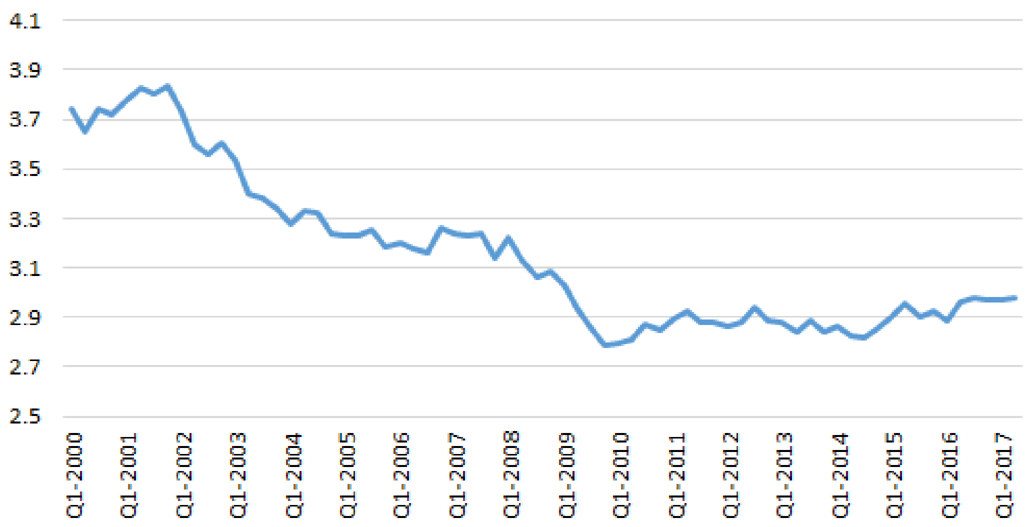
A comparison of developments in Italian exports of goods in volumes terms with world trade data collected by the CPB shows that the slow recovery in Italy's share of world volumes of merchandise exports, which has been under way, with interruptions, since early 2010, continued in the second quarter of 2017 (Figure 8).

Figure 7 – Assessment of domestic orders of capital goods and gross fixed investment *(normalised balance with an average of 100 and a standard deviation of 10 and year-on-year percentage changes)*



Source: based on Istat data.

Figure 8 – Italy’s share of world merchandise exports in volume terms *(percentages)*



Source: based on Istat and CPB data.

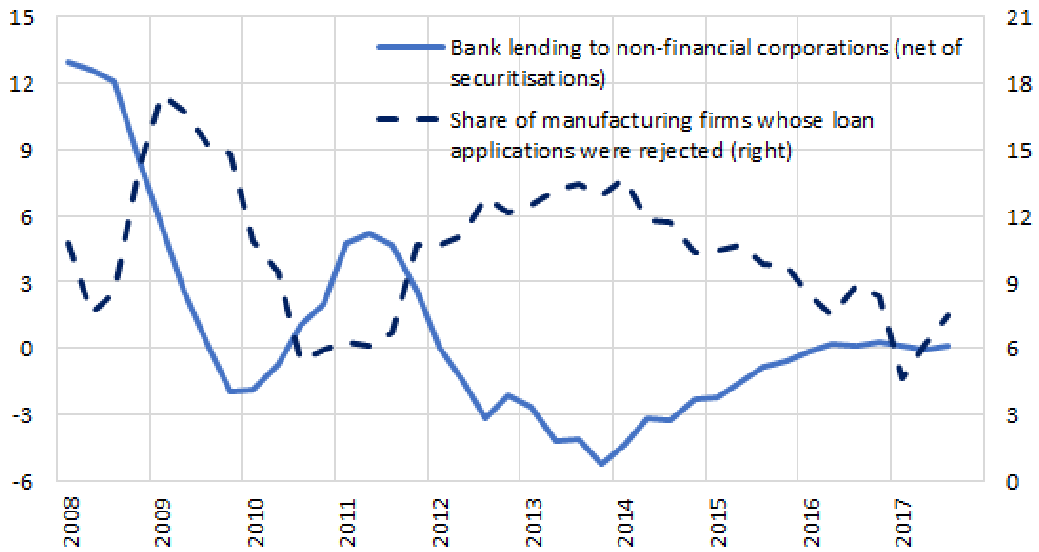
The information available for developments in the second half of the year, relating to July-August, reveal positive signs for exports in value and volume terms (obtained by deflating values with producer prices on foreign markets), which posted increases of 0.7 and 0.8 per cent respectively over the average for the second quarter. In September, growth remained strong in non-European markets. Istat's survey of manufacturing firms conducted in September shows persistently positive assessments of orders on international markets and foreign turnover, pointing to continued growth in foreign sales in the third quarter.

However, the good performance of exports was outpaced by the expansion of imports (+2.7 per cent in the first half and +1.2 per cent in April-June compared with the previous three months), driven by the recovery in domestic demand and the growth of exports themselves (which generate a high level of direct and indirect demand for imported goods and services). The available information on foreign trade (for July-August) indicates a continuation of buoyant growth in imports in the third quarter, especially as regards purchases of capital and intermediate goods.

The improvement in credit conditions takes a pause

As regards the credit sector, the central months of the year were marked by the attenuation of the slow normalisation of credit conditions. According to the Bank of Italy's credit survey, the conditions offered on loans to firms were virtually unchanged in the third quarter from the average for the previous three months. The Istat survey of manufacturing provides a largely similar picture, with the latest survey (September) signalling a slight increase in the share of firms claiming they did not receive the credit they applied for. In addition, banking statistics for August show a stabilization of the stock of credit granted to firms net of securitisations compared with the previous year (Figure 9). At the same time, a pronounced decline in the share of impaired loans as a proportion of total lending was largely the result of the liquidation of the Veneto banks. The average share in July-August, gross of writedowns, was 16.4 per cent, down more than two points compared with the first half of the year (18.5 per cent). Looking forward, the latest findings of the Bank of Italy survey indicate a slight tightening of lending conditions for firms and households, with expectations of a further expansion in the demand for credit.

Figure 9 – Bank lending and firms that applied for bank credit but were rejected
(year-on-year percentage changes and share of total firms reporting they had applied for credit)



Source: based on Istat data.

The latest economic indicators

With regard to trends in the second half of the year, recent developments in economic indicators remains favourable, foreshadowing a continuation of the expansion in the Italian economy. The strong performance of industrial production in the second quarter was followed by further growth in July-August, mainly reflecting a jump in the capital goods and intermediate goods segments.

The increase in the volume of industrial production registered in August (+1.2 per cent on the previous period) recouped almost all of the decline in activity during the last recession, returning the index to close to its level at the end of 2011. The indices for turnover and orders also posted significant gains in August (on the previous period and year-on-year), driven by both the domestic and foreign components. Qualitative indicators also point to a strengthening of economic activity in the short term: in the third quarter, the PMI for manufacturing rose by about half a point from the average for the second quarter. After a downwards correction in May, the Istat confidence indicator for manufacturing firms rose progressively, approaching its pre-crisis level in September. According to PBO estimates, industrial activity should have expanded rapidly in the third quarter as well, at a pace similar to that posted in April-June.

In construction, production rose in July-August, although it remained at the historically low level that characterized 2015-2016. The climate of confidence, however, continues to improve. Favourable signs can also be drawn from the results of the survey conducted by the Real Estate Market Observatory, which show a further increase in the number of sales in April-June (about 2 per cent on a seasonally-adjusted basis), an acceleration compared with the first quarter (+0.7 per cent). The housing market survey conducted by the Revenue Agency, the Bank of Italy and Tecnoborsa in June-July also indicates an improvement in real estate professionals' assessment of sales prices (increasing) and discounts on offer prices (stabilising), pointing to a consolidation in the second half of the year of the reversal in the trend of housing prices observed in the second quarter (+0.3 per cent on the previous period).

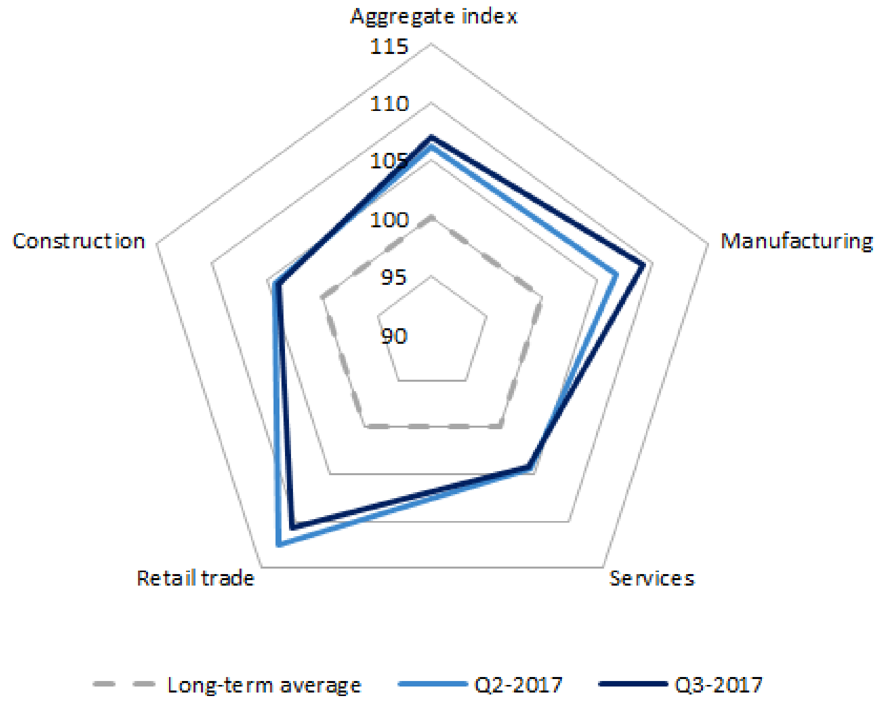
The services sector expanded further in the second quarter of the year, continuing the recovery that began in the spring of 2014. The seasonally-adjusted index rose 0.7 per cent on the previous period (+2.7 per cent year-on-year), returning to the level registered at the end of 2011. Looking at services by segment of activity, especially strong growth was posted by business services, travel agencies, accommodation and food services, wholesale and retail trade and the repair of motor vehicles and motorcycles, transportation and storage services. Conversely, information and communication services and professional, scientific and technical activities stagnated or contracted slightly. At the same time, qualitative indicators offer a moderately positive picture, with the average level of confidence in the market services sector in July-September substantially in line with that seen in the second quarter. An improvement in the climate of confidence is also seen in retail trade, which in September reversed the decline posted in August to return to the level seen in June-July.

For all sectors, the aggregate index of business confidence for the third quarter, obtained as a weighted average of sectoral indices, was slightly higher than the average for the second quarter, remaining well above the long-term average (normalised to 100; Figure 10). More specifically, the chart shows a large improvement in confidence in the manufacturing sector, while market services and construction stabilised and retail trade declined slightly.

Additional positive news comes from the PBO uncertainty indicator,[4] which in the third quarter stabilised at the low average level seen in the second quarter, in line with those recorded in the years prior to the 2008-2009 crisis (Figure 11). Favourable signals also come from the composite economic indices prepared by various institutions. Both the ITA-coin indicator of the Bank of Italy, which accelerated in September for the third consecutive month, and the Istat leading indicator, which rose again in September, suggest that positive economic conditions will persist in the coming months.

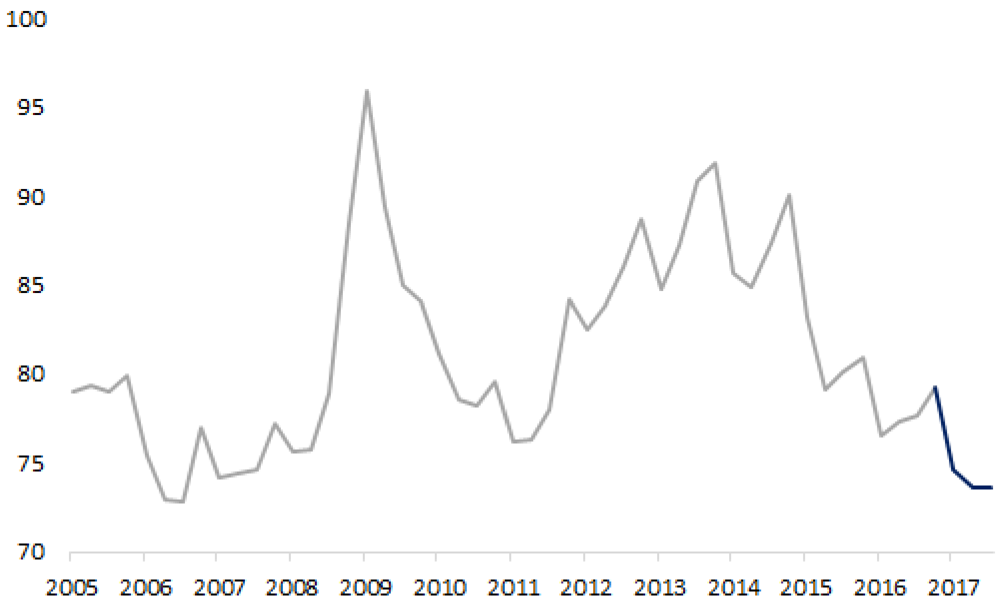
[4] For a discussion of the method used to construct this indicator, please see the *Report on recent economic developments* for April 2017.

Figure 10 – Confidence in productive sectors (1)
(index; average January 1998 – September 2017=100)



Source: based on European Commission and Istat data.
(1) The aggregate confidence indicator is constructed by applying the weights used by Istat to produce the Istat Economic Sentiment Indicator (IESI) to the time series (standardised) of sectoral confidence indicators of the European Commission.

Figure 11 – PBO indicator of uncertainty in the Italian economy
(index, 1993 Q1=100)



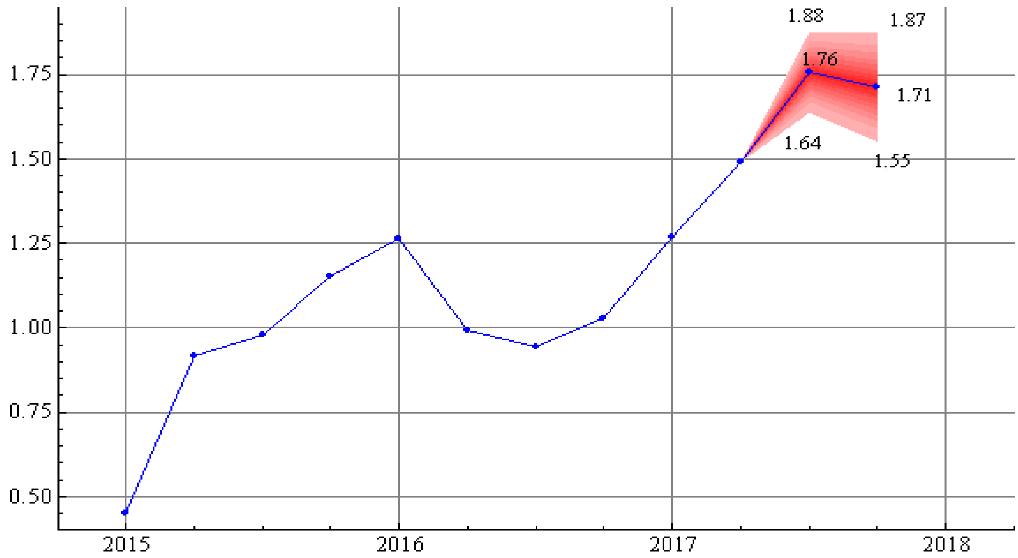
Source: based on European Commission data.

Short-term forecasts

The favourable indications offered by cyclical data suggest that growth will have accelerated in the third quarter of the year, followed by a slight slowdown in late 2017. More specifically, on the basis of the forecasts produced with the PBO's short-term models, it is estimated that GDP may have risen by about 0.5 per cent quarter-on-quarter in the third quarter of 2017 (this value falls within an error band of 90 per cent with a maximum limit of 0.6 per cent and a minimum of 0.4 per cent), mainly driven on the demand side by the components of domestic spending and on the supply side by the good performance of industry and services. A slowdown is expected for the fourth quarter (with a quarter-on-quarter increase of 0.3 per cent, with an error band ranging from a high of 0.5 per cent and a low of 0.2 per cent), consistent with a moderation in domestic demand and a slowdown in exports, which would reflect the appreciation of the euro in the past few months. The year-on-year growth rate would be about 1.8 per cent in the third quarter, before subsiding to 1.7 per cent in the last three months of the year (Figure 12).

Overall, taking account of the developments observed by Istat for the first half of the year (with GDP growth rates of 1.2 per cent in the first quarter and 1.5 per cent in the second), the short-term PBO forecasts for the third and fourth quarters would produce real GDP growth for 2017 as a whole of 1.5 per cent, seasonally adjusted and corrected for calendar effects. The "unadjusted" GDP growth figures, despite reflecting fewer working days in the year (two fewer than in 2016), would also give an expansion of 1.5 per cent, which is in line with the Government's projections in the Update. This revision of the PBO projections slightly increases (by around four-hundredths of a point) the PBO's September forecast for 2017 (+1.4 per cent, rounded to the first decimal place) on the occasion of the endorsement of the scenario presented in the Update.

Figure 12 – Forecasts for year-on-year GDP growth and standard error (1)



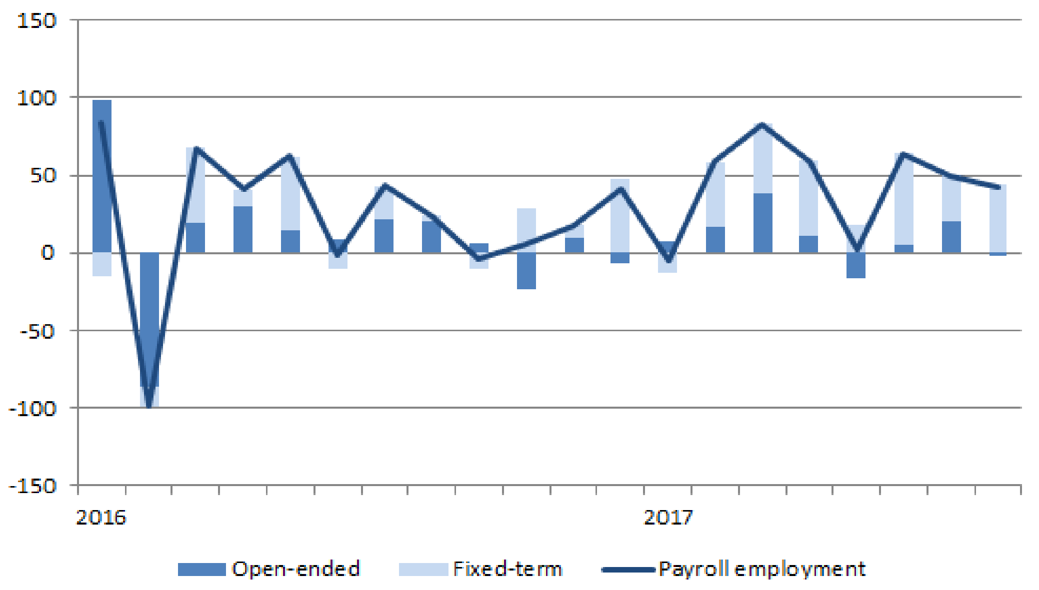
Source: PBO estimates.
(1) The error bands regard a confidence interval of 90 per cent.

Employment returns to pre-crisis levels, driven by the fixed-term component

The strengthening of economic activity has been accompanied by a further improvement in labour market conditions. Thanks to the acceleration recorded in the summer months, employment has returned to its pre-crisis levels. This recovery was driven by a pronounced increase in workers on fixed-term contracts, with a positive but smaller contribution from permanent employment. This development reflected the dissipation of the effects of the contribution relief for new open-ended hiring (since January 2017). At the same time, the increase in temporary payroll employment was boosted by the considerable expansion in flexible forms of contract.

Based on the latest information from the Labour Force Survey, the improvement in overall employment continued in July (+0.3 per cent over the previous month) and August (+0.2 per cent). On average for the two-month period, the new acceleration in employment (+0.5 per cent compared with the second quarter of the year, +108,000 people) continued the trend observed in the first two quarters of the year. The increase recorded in the summer months is largely attributable to growth in payroll employment (an average of +0.7 per cent in July-August, or +115,000 posts). The latter was marked by the considerable growth in the temporary component (+3.6 per cent), which represented 85 per cent of new payroll employees registered in the two-month period (69 per cent in the first three months of the year). Permanent employment rose slightly (+0.1 per cent, or +17,000 people) (Figure 13).

Figure 13 – Change in payroll employment
(absolute year-on-year changes, thousands of labour units)



Source: based on Istat data.

These dynamics are confirmed in an analysis of the entire January-August period, when the rise in employment (+1.2 per cent over the same period of 2016) was driven by the exceptional gains in fixed-term work (+10.8 per cent), which was about five times greater than the growth recorded by that component in 2016. The contribution of open-ended employment was much smaller (an increase of 0.6 per cent, about one-third the figure registered last year).

In the first eight months of the year, the recovery in employment involved both the male and female components of the labour market. By age class, employment growth among 50-64 year-olds (+3.9 per cent) reflected demographic trends and the effect of the increase in the retirement age. The rise in employment for workers aged up to 24 years (+2.5 per cent) was probably boosted by the progressive expansion of fixed-term positions, which account of an especially large proportion of employment in this age class (an average of about 59 per cent for the first two quarters of 2017). Demographic developments explain the reduction in employment in the 35-49 age group (-1.2 per cent).

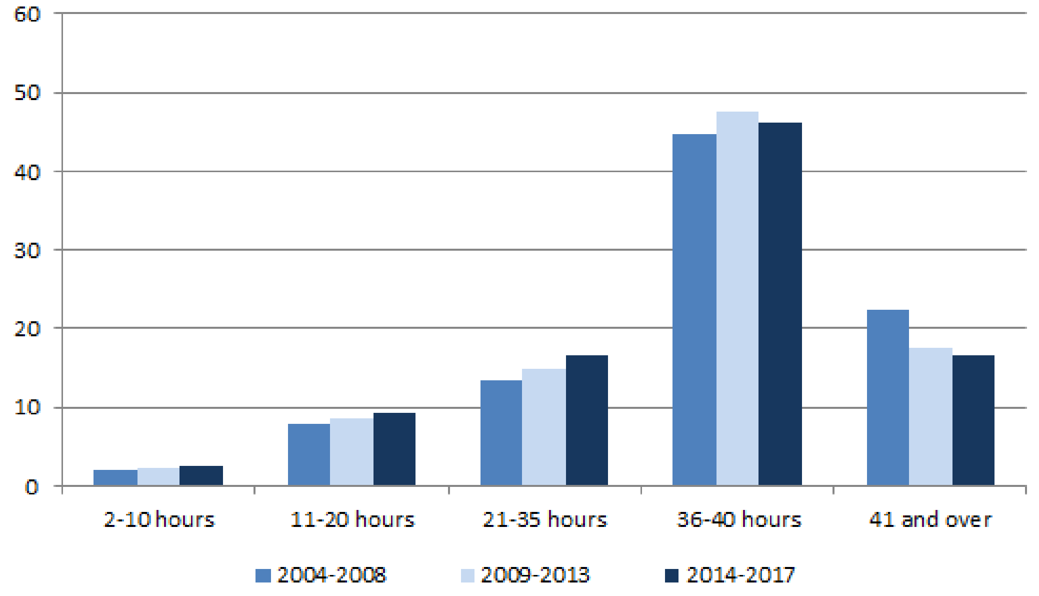
With regard to working hours, the information available for the second quarter indicates that employment growth was sustained by the expansion of full-time employment (+0.6 per cent year-on-year, slower than in the first three months) and to an even greater extent by the increase in part-time positions (+1.2 per cent), marked by the increasing proportion of people voluntarily opting for such jobs. The latter has been primarily driven by the female component of employment (which accounts for over 80 per cent of this type of employment). The proportion of involuntary part-time workers fell slightly again (to 60.6 per cent of part-time employees, four-tenths less than in the first three months of 2017).

In the second quarter, the increase in total hours worked closely tracked the increase in overall employment. Hours worked by payroll employee were therefore virtually unchanged. At the same time, overall hours worked still fell considerably short of their pre-crisis levels, signalling - as in various other euro-area countries - a persistent level of underemployment.

So the recovery in employment, which has returned to pre-crisis levels, has not been accompanied by an adjustment of working hours. Signs of a decline in average working hours can be drawn from employment statistics for hours worked in the reference week. The redistribution of employees towards shorter working days, which began in the last two recessions (from the first quarter of 2009 to the fourth quarter of 2013), continued in the most recent recovery. The gradual exit from the crisis (starting in the first quarter of 2014) saw a rising proportion of jobs at reduced working hours (11-20 hours, 21-35 hours), with a further decline in the share of employees working longer hours (36-40 hours, 41 hours and over; Figure 14).

An additional indication of the rise in employment levels is provided by flow data from the Observatory on Insecure Employment of the National Social Security Institute (INPS).

Figure 14 – Employees by weekly working hours.
(percentage shares)



Source: based on Istat data.

Between January and August, new hiring in the private sector (+19.2 per cent compared with the same period of 2016) outpaced terminations (+15.9 per cent), with a net change of 994,000 new jobs, largely accounted for by fixed-term positions (where the balance between new hiring and terminations amounted to about 652,000 positions). The net change in open-ended contracts (including transformations of fixed-term jobs and apprenticeships) was virtually nil. The substantial expansion of fixed-term hiring also reflected a growing contribution from temporary and part-time labour contracts (temp contracts, on-call work), which almost doubled over the course of a year. This phenomenon seems to reflect the demand for casual supplementary employment by firms previously met through the voucher system, a mechanism was sharply cut back last March.

In the summer, an increase in labour market participation followed the favourable developments in employment, buoyed by the strengthening of the economic recovery. The slight rise in the number of job seekers (+18,000 units July-August compared with the second quarter) did not significantly impact the unemployment rate, which was unchanged from the previous three months (11.2 per cent, with an average of 11.4 per cent over the first eight months of the year). The decline in the inactive population (more than 400,000 compared with July-August 2016) followed the smaller decline in the second quarter, entirely attributable to the decline in the number of those who are not seeking a job but declare themselves available to work. In addition to the decrease in the number of discouraged workers, the decline in this component of the inactive population reflected a reduction in the number of people who have withdrawn from the labour force and those who are waiting for the results of past job search activities. Overall, considering the underemployed in addition to the potential labour force and the unemployed, the rate of underemployment is still high (at 23.1 per cent in the second quarter, down about a percentage point from at the same period of 2016).

The short-term outlook for the labour market remains broadly favourable. The employment expectations of firms, drawn from Istat surveys in September, foreshadow further employment growth in manufacturing (in the consumer goods and capital goods segments in particular) and a recovery in construction. Employment levels should also rise in market services. By contrast, employment in retail trade is expected to remain stable.

Inflationary pressures remain weak

Despite the consolidation of the recovery, inflationary impulses remain weak. This reflects the persistence of under-utilisation of resources and the consequent slow growth of production costs.

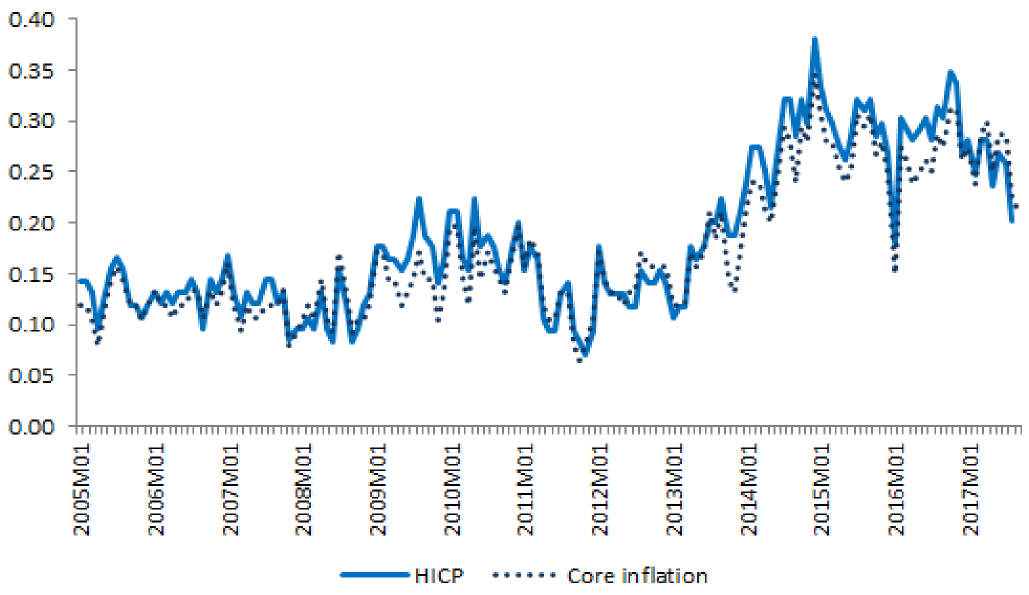
In September, consumer price inflation (the harmonised index) stood at 1.3 per cent, down slightly on the previous month (+1.4 per cent). The pace of growth in the prices of goods remained stable at the levels reached in August (+1 per cent), reflecting the slowdown in energy prices (from 4.5 per cent to 3.4 per cent) and the uptick in food price inflation (from 0.7 per cent to 1.3 per cent), the latter mainly driven by the prices of fresh vegetables (up 4.8 per cent, from 0.1 per cent in August). However, the prices of services decelerated (the rate of change fell to 1.3 per cent from 1.6 per cent in August), due to the slowdown in the prices of transportation services (2.7 per cent, from 4.4 per cent) and, to a lesser extent, of those for recreational, cultural and personal care services (1.5 per cent, down from 1.6 per cent in August), partly reflecting seasonal factors.

Core inflation, net of energy and unprocessed food products, which most closely reflects domestic price pressures, fell by three-tenths of a point in September from the previous month, to 0.7 per cent, mainly reflecting the slowdown in the prices of services.

Despite the low inflationary pressures, the downward trend in the share of goods and services whose prices are decreasing continues. In September, the share of products in the basket of the consumer price index whose prices are still decreasing was 20 per cent, down ten points from the same period of 2016 (Figure 15), with the share of items with prices rising by less than 1 per cent also declining. By contrast, the share of items whose prices rose by less than 0.5 per cent was virtually unchanged on September 2016.

Inflation in the upstream stages of the inflationary process has shown some signs of picking up, as reflected in the prices of industrial goods sold on the domestic market, which rose by 1.6 per cent in August (up from 0.9 per cent in July), mainly reflecting developments in the prices of intermediate goods. The trend nevertheless remains much more subdued that that observed before the summer, when producer prices on the domestic market were rising at an average year-on-year rate of more than 3 per cent.

Figure 15 – Proportion of goods and services in consumer price index (HICP) experiencing deflation
(percentages)



Source: based on Istat data.

The appreciation of the euro has helped contain the prices of imported industrial products, which fell in August (-0.1 per cent on the previous month) for the fifth consecutive month.

Import price inflation has also weakened on a year-on-year basis, falling to 1.3 per cent from 1.8 per cent in July), reflecting developments in the prices of energy products and intermediate goods. Conversely, the producer prices of services began to rise again, increasing by 0.4 per cent in the second quarter compared with the previous period (+1.3 per cent year-on-year, after the -0.6 per cent posted in the first quarter), thanks to the contribution of higher prices for the air transport of goods (+10 per cent on the previous year) and passengers (+3.7 per cent).

The Istat survey of price expectations reveals a slight increase in household inflation expectations, even though most consumers are forecasting slower inflation. In the third quarter, the percentage of those who do not know or do not want to respond to the survey decreased (by 4.1 percentage points compared with the second quarter). This decline increased both the share of households expecting faster future consumer price inflation (to 32.6 per cent, compared with 29.9 per cent in the second quarter) and, to a lesser extent, the share of those expecting increases slower increases, no change or even declining prices (61.5 per cent, compared with 60.1 per cent in the second quarter). Firms are expecting inflation to rise, with the share of those expecting sales prices to rise in the next 12 months increasing (with the balance rising to 6.4 points, up from 5.6 in August) in the intermediate and capital goods sectors. By contrast, expectations of price rises among producers of durable and non-durable consumer goods diminished.

Box – Natural rate of interest in the euro-area countries and monetary policy

Ten years after the start of the financial crisis, the euro area once again appears to be growing at a good pace, recouping the loss of output suffered during the last two recessions.[5] In recent years, the monetary policy implemented by the ECB has played a key role in counteracting the effects of the crisis and contributing to recovery: between 2007 and today, in parallel with the reduction in official interest rates to zero (for refinancing operations) or below zero (for liquidity deposited by banks with the ECB), the central bank's assets have quadrupled (reaching €4,500 billion, or 40 per cent of the area's GDP), mainly due to the unconventional measures adopted in the last few years (notably the asset purchase programme launched in 2015).

While the renewed vitality of the European economy begins to raise the question of when to begin the normalisation of monetary policy and how quickly to pursue it, the persistence of differences in the speed of growth in the individual members of the monetary union complicates the ECB's job. Based on the latest data available (second quarter 2017), Italy's GDP is still well below its pre-crisis peak (-6.4 per cent compared with the first quarter 2008), Spain's has risen just over that level (+0.7 per cent), while France and, above all, Germany have seen GDP rise well above their pre-crisis levels (+5.8 and +9.8 per cent respectively). Such dynamics reflect the still uneven situation within the euro area, which tends to complicate the path of monetary policy.

One way of highlighting possible differences in the monetary conditions that would be most appropriate to the cyclical positions of individual member states is to employ the concept of natural interest rate (NIR). This is the real interest rate that balances supply and demand for liquidity in situations where output is at its potential level and inflation is at the target pursued by the monetary authority. It is influenced by a variety of factors that impact both the demand for and supply of savings, such as demographic trends, technological progress, the relative price of investment goods, inequality in the distribution of income and wealth, and the relative scarcity of so-called safe assets.[6] In recent decades, and even more so in the recession, these factors appear to have operated so as to increase the propensity to save and, at the same time, reduce the propensity to invest, thereby lowering the NIR and causing persistent downward pressure on nominal interest rates, pushing them to the minimum possible for policy rates.[7]

Like potential GDP, NIR is not an observable variable, and its estimation is subject to considerable uncertainty, requiring the use of hypotheses and specific methods. One of the most widely used approaches is that proposed by Federal Reserve economists Thomas Laubach and John Williams for the United States and more recently applied to other economies, including the euro area as a whole.[8] In what follows, the approach is used to estimate the NIR for the four major euro-area economies (Germany, France, Italy and Spain) for the 1999Q1-2017Q2 period. The estimation strategy is based on the use of a multivariate Kalman filter applied to the (log level) series for real GDP, core inflation (i.e. the rate of change in the level of prices excluding energy products) and

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[5] GDP in the second quarter of 2017 was 4.1 per cent higher than the peak reached before the crisis (first quarter of 2008).

[6] The NIR influences monetary policy decisions. For example, the Taylor rule for determining policy interest rates calls for setting them as a function of the deviation from the inflation target, the output gap, expected inflation and the natural interest rate, in accordance with the following relationship: *policy interest rate = NIR + expected inflation rate + 0.5 x (current - target) + 0.5 x output gap*. When inflation is at the target and the output gap is zero, the policy rate is equal to the NIR plus expected inflation. For more on the determinants of the NIR in recent years, see, among others, Summers L. H. (2014) "US Economic Prospects: Secular Stagnation, Hysteresis and the Zero Lower Bound" Business Economics vol. 49, no.2.

[7] In the words of ECB President Mario Draghi: "*The natural rate of interest […] has fallen over time, to very low or even negative levels […] whatever the drivers behind this, Central Banks have to take it into account and cut their policy rates to commensurately lower levels*", Berlin 25 October 2016.

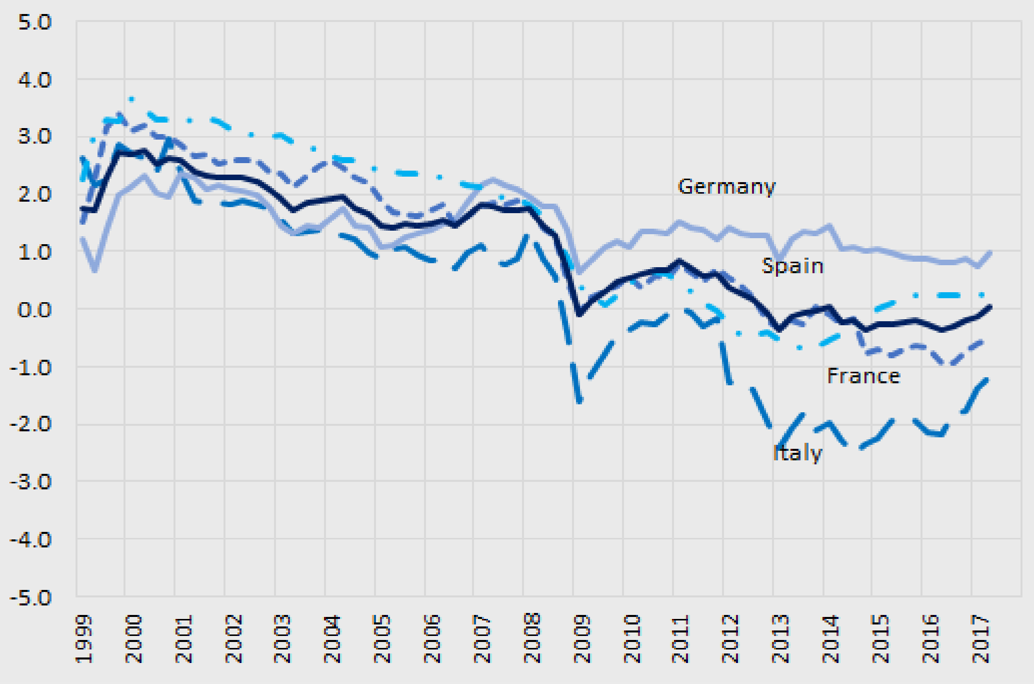
[8] Laubach T., Williams J. (2015) "Measuring the natural rate of interest", Review of Economics and Statistics, 85(4), 1063-1070. Estimates for the euro area are given in Holstom K., Laubach T. and Williams J. C. (2017) "Measuring the natural rate of interest: International trends and determinants", Journal of International Economics, 108(S1), 59-75.

the real interest rate (defined as short-term interest rate adjusted for expected inflation, the latter expressed as the average inflation rate observed in the previous four quarters).[9]

Figure R.1 shows the estimated NIR for the four economies (light blue lines) and the weighted average (weighted by GDP) as the proxy for the euro-area economy as a whole (dark blue line).

The results indicate that the trend decline in the natural interest rate observed in the major economic areas is also reflected in the countries considered. More specifically, the downward trend in NIRs in the pre-crisis period (1999-2007) appears to have continued even more rapidly during the so-called Great Recession (2008-2009). The developments in the NIRs appear to be broadly synchronous even in the recovery in the two years (2010-2011) preceding the sovereign debt crisis (2012-14), a period in which, however, the divergence between the trends in the NIRs of the four economies under examination is estimated to have increased. In particular, the estimate of the NIR for Germany tends to stabilize (around 1 per cent), while in France and, above all, in Italy, the estimated NIR follows a downward trajectory, turning negative (with the lows estimated at around -1 and -2.5 per cent respectively). The estimated course of Spain's NIR is characterised by a downturn through the first half of 2014, followed by broad stabilisation. In the years in which unconventional monetary policy measures were employed (from 2015 onwards), the estimates show the rate stabilising in the French and Italian economies, followed by a partial recovery, in contrast to the substantially flat trend for Germany and Spain.[10]

Figure R.1 – Natural interest rate (NIR) for the four main euro-area economies *(percentages)*



Source: based on OECD data.

[9] Other approaches to estimate the natural interest rate exist, ranging from simple univariate analyses to dynamic general equilibrium modelling. In general, the various methods, while sharing the uncertainty in the estimate due to the fact that the rate cannot be observed, reveal the decline in the NIR experienced in the main advanced economies; see Gerali A. and Neri S. (2017) "Natural rates across the Atlantic", Banca d'Italia, Temi di discussione no. 1.140, September, and Ferrero G. and Neri S. (2017) "Monetary Policy in a low interest rate environment", Banca d'Italia, Questioni di Economia e Finanza, no. 392, September.

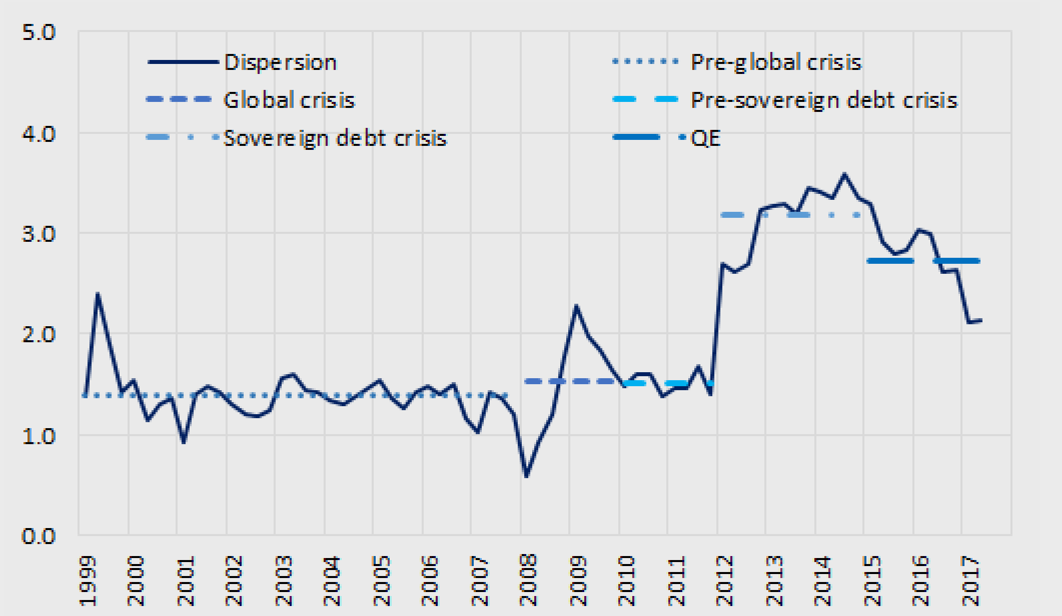
[10] Overall, these developments produce an average weighted NIR (proxy for the euro area, dark blue line in Fig. R.1) that is virtually coincident with the estimated NIR for the euro area obtained by Laubach and Williams (available through this *link*). The results are also qualitatively comparable with those obtained by Fries S., Mésonnier J., Mouabbi S. and Renne J (2016) "National natural rates of interest and the single monetary policy in the euro area", Banque de France, Working Paper, no. 611.

With regard to dispersion, measured as the difference between the maximum and the minimum value in each quarter of the period (the dark blue line in Figure R.2), the estimation points to a prolonged period of stability until the leap registered in the years of the debt crisis, which was only partially recouped in the most recent period, in conjunction with the adoption of unconventional monetary policy measures and the spread of the recovery among the area's economies.

The persistence of a relatively large dispersion among the national NIRs, which is higher than the average observed in the period prior to the sovereign debt crisis, is a factor appears to counsel a gradual approach on the part of the CB to normalising monetary policy. This would seem especially desirable in the case of Italy in the light of developments in the last five years in the differential between the observed real interest rate (the policy rate adjusted for inflation expectations for the country) and the NIR (real interest rate gap), an indicator that measures the effective stringency of monetary policy in relation to cyclical conditions in the economy. More specifically, a positive value for this indicator would indicate a restrictive monetary stance for the country involved, while a negative value would indicate an expansionary stance. Figure R.3 shows that, in the period before the Great Recession, the real interest rate gap for Italy was broadly similar to that of France, lying between Germany (the upper bound) and Spain (lower bound).

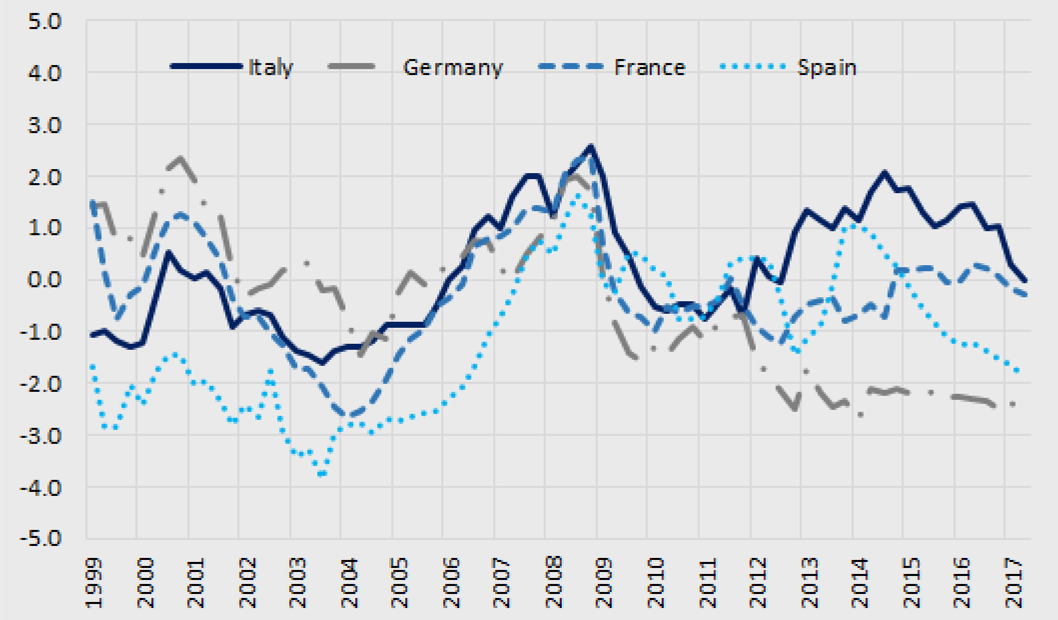
During the 2008-2009 crisis and the subsequent partial recovery in 2010-2011, developments were virtually the same in the four countries. However, after 2011 Italy diverges from the other economies considered in the analysis. According to these estimates, the conduct of monetary policy, as represented by the policy interest rate, has been expansionary for Germany and (since 2014) for Spain, and generally neutral for France. For Italy, however, the emergence of a positive gap (increasing until 2015), which is a sign of comparatively more restrictive monetary conditions, reflecting both the estimated deterioration in the NIR and the increase in the real interest rate actually observed, due to a decline in inflation expectations. Only in the most recent period, starting from 2015 and especially in the first half of 2017, has Italy's divergence appeared to be shrinking, with the gradual installation of a more neutral monetary stance thanks to the partial recovery in both the NIR and inflation expectations. These more favourable developments have contributed to the strengthening of the Italian recovery seen in the last year.

Figure R.2 – Dispersion of NIR estimates
(percentages)



Source: based on OECD data.

Figure R3 – Real interest rate gap: difference between the observed real interest rate and the estimated natural interest rate
(percentages)



Source: based on OECD data.

Ultimately, given the significant internal differences that still affect the euro area (with particular regard to Italy, but not only), a gradual path to the normalisation of ECB policy would permit the process of reducing the dispersion in the monetary conditions in the main countries to continue, with greater convergence towards levels close to those prevailing in the pre-crisis period.