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Summary*

The Italian recovery is proceeding at a slightly more robust pace than assumed in the spring. Real GDP growth, corrected upwards by ISTAT to 0.4 per cent in the first quarter, was estimated by the PBO at 0.3 per cent in the second. The PBO forecasts also point to an easing of growth in the third quarter (0.2 per cent). Overall, these assessments, and assuming growth in the fourth quarter as well, suggest that in 2017 the economy will grow by 1.2-1.3 per cent, more rapidly than assumed in the Economic and Financial Document (EFD) (1.1 per cent).

The faster pace of real growth does not, however, appear to be associated with similarly favourable developments in nominal growth. The decline in the GDP deflator at the beginning of the year neutralized the good performance in real terms, resulting in virtually stagnant nominal GDP. Given the modest carryover effects, the evolution of this variable, which is significant for the public finances, appears to fall short of the EFD forecast for 2017 (2.3 per cent).

The strengthening of the outlook for recovery reflects the favourable international environment and growth in domestic demand. Export growth, although outpaced by imports, is supporting a recovery in the market shares of Italian goods. On the domestic spending side, consumption has picked up as a result of the increase in household purchasing power. Investment, which slowed down temporarily in the first quarter, should revive thanks tax incentives, the slow improvement in access to credit and subsiding uncertainty. With regard to the latter factor, the PBO indicator reveals a sharp decline in recent months.

The improvement in economic activity had been reflected in employment growth. With the expiry of tax relief measures, this has been driven by the expansion in fixed-term jobs. Although the situation is improving, underutilisation of workers remains extensive. One measure of underemployment, which in addition to the unemployed includes inactive people who are willing to work and those who are working less than they would like, indicates a rate of non-working and underemployment of 24 per cent, more than double the unemployment rate. This phenomenon has reduced the pressure on wages, which together with the weakness of oil prices and the appreciation of the euro, is acting to keep inflation low.

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* *Prepared by the Macroeconomic Analysis Department. Information updated to 20 July 2017*

The international environment

International growth is picking up …

The world economy has displayed additional signs of growth in the first half of the year, driven by the acceleration in global manufacturing output and the gradual resumption of investment in the advanced countries. This has been reflected in the revival of international trade. At the same time, this positive turn of events is clouded by the risks associated with geo-political factors and the uncertain direction of economic and trade policies, especially in the United States.

… in all the main economic areas

In the first half of the year, the signs of a strengthening of the expansion in the world economy that began towards the close of 2016 grew more widespread. In the United States, the slowdown in the first quarter is expected, as has happened in recent years, to be a transitory development that will not interrupt the expansion, which according to the NBER's cyclical figures has now been under way for eight years (from the trough registered in June 2009). Economic indicators show the return of the economy to more robust growth. The labour market has seen new improvement in employment growth and the unemployment rate, but no clear signs of wage pressures have emerged. Wage and consumer price inflation remain relatively subdued, enabling the Federal Reserve – which in June raised its target for the federal funds rate by a quarter of a point – to proceed more gradually towards the normalisation of monetary policy for now. The Chinese economy has also been expanding more rapidly than expected a few months ago, reflecting both the recovery in world trade and government support for the economy. Russia and Brazil are gradually emerging from their protracted recessions, although political scandals in the South America country could have an adverse impact on the climate of confidence.

The euro area grew more rapidly than expected at the start of 2017, accelerating to 0.6 per cent in the first quarter. The main factor behind the faster pace of expansion was the uptick in investment, which accounted for half of the strong performance in the early part of the year. The monetary easing of the ECB and the moderately expansionary tenor of fiscal policy among the euro-area countries as a whole helped sustain the recovery in the euro area.[1] In the United Kingdom, a number of qualitative indicators had suggested a possible rebound in the second quarter, but more recent data point to no change in the pace of growth in the British economy.

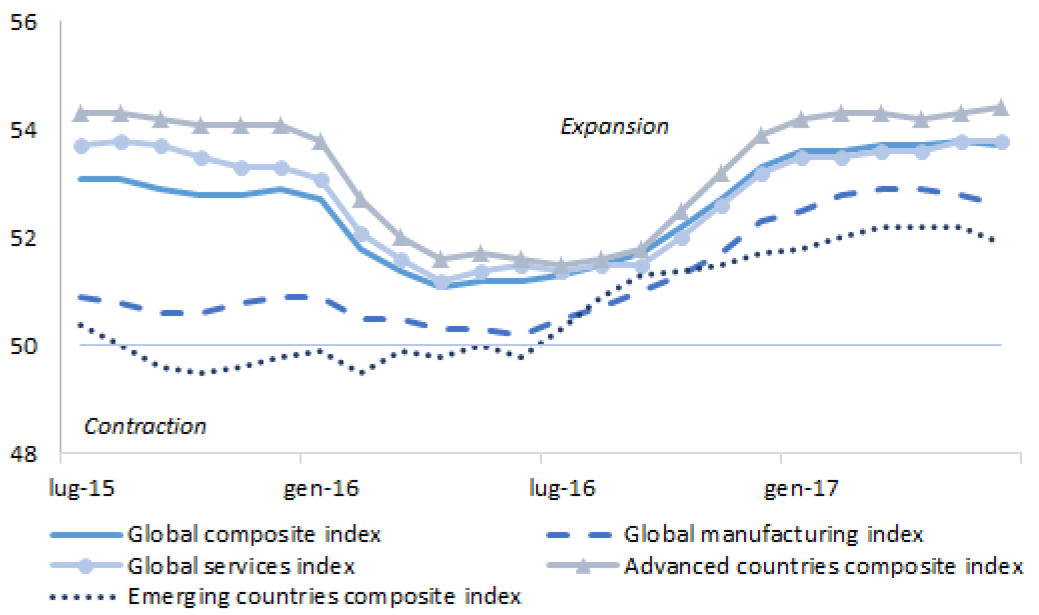
[1] For an analysis of the fiscal stance in the euro area, see the recent report of the European Fiscal Board "*Assessment of the prospective fiscal stance appropriate for the euro area*", 20 June 2017.

The most recent data confirm expectations of solid growth in the second quarter. Industrial output was especially robust in April, while indicators of confidence among purchasing managers (Purchasing Managers' Index, PMI) have been well within the area indicating expansion (above 50) since mid-2016 (Figure 1).

World trade continues to recover

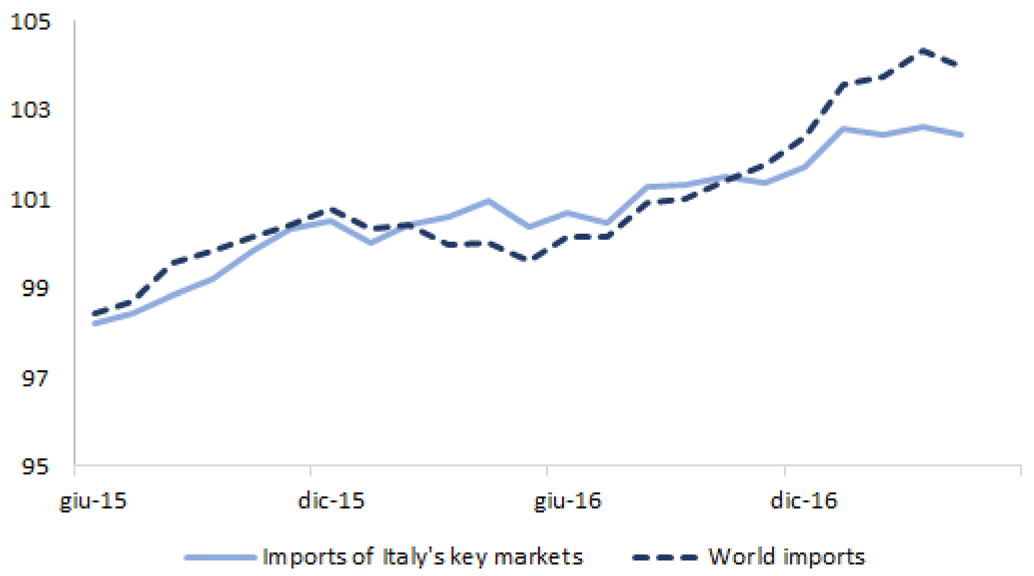
In the first four months of 2017, world trade continued the recovery begun at the end of 2016. More specifically, the emerging economies in Asia posted very strong growth in trade, driven primarily by China. The geographical composition of the revival of international trade, which is centred on the emerging economies, has been relatively less favourable for Italy, which has seen demand in its key markets expand more slowly than world imports as a whole (Figure 2).

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.

Figure 2 – World imports and Italy's key markets
(3-month moving average; indices, 2015=100)



Source: based on Thomson Reuters data.

Despite the recent improvement, which boosted the pace of trade growth above that in output, the weakening of the relationship between output and trade in the last few years is expected to continue. The elasticity of imports to world GDP, which prior to the crisis was equal to or more than 2, has declined to about 1.5 since 2008 and is expected to remain around this level in the coming years (see the Box *The elasticity of international trade to global economic activity*).

Oil prices decline and the euro appreciates

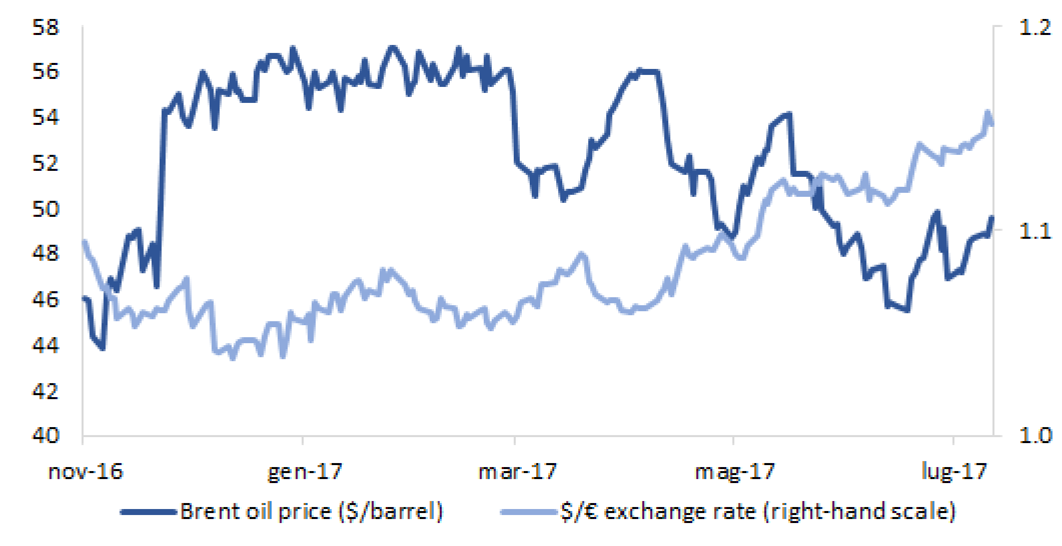
The OPEC agreement at the end of 2016 (recently renewed and extended through early 2018), which between the end of last year and the first few months of 2017 had enabled the price of Brent to rise above \$55 a barrel, does not seem able to curb global supply and thereby impact prices. More specifically, downward pressures on oil prices have kept them below \$50 a barrel since the start of June, with a partial reversal of the trend only emerging in recent days (Figure 3). The main cause of the general weakness in the oil market is the expanding supply of US shale oil. Improvements in extraction technology have in recent years lowered the breakeven price of this energy resource from \$80 to less than \$25 a barrel, with more room for improvement remaining. According to the estimates of certain analysts, shale oil will enable the United States to surpass many OPEC countries as an oil exporter by 2020.

The euro has been appreciating since mid-April. Various internal and external factors have contributed to the rise in the European currency. Internally, the stronger-than-expected expansion and the results of the elections in France combined to improve market perceptions of the greater strength of economic conditions (with a consequent rise in expectations of a gradual correction of the expansionary monetary stance) and the political situation (with the spread of proposals to reboot the euro area). Externally, contributing factors include the delay in implementing the economic policies announced by the new US administration and the slowdown in the US economy at the start of 2017. This triggered an appreciation of more than 7 per cent in the euro against the dollar between mid-April and mid-July, with the exchange rate reaching $1.15 to the euro in recent days (Figure 3).

Euro-area inflation remains weak

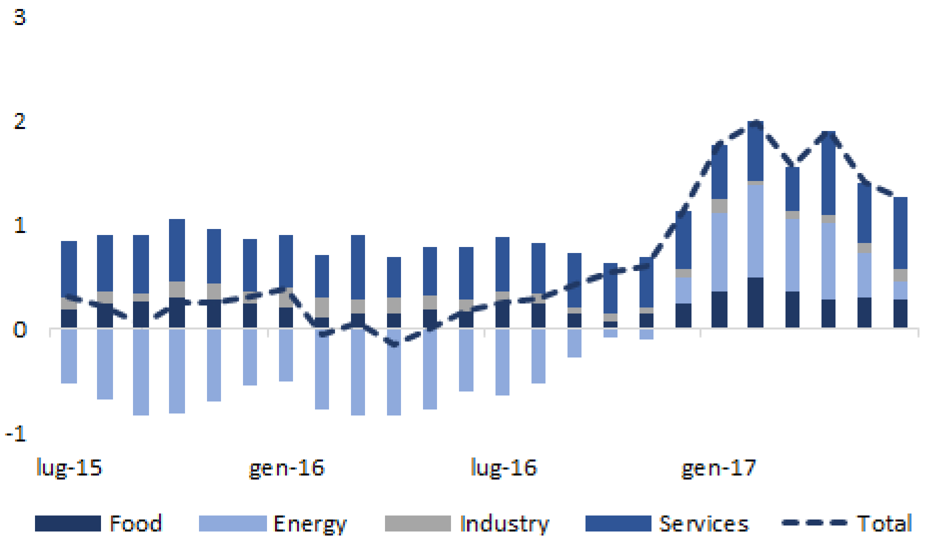
After reaching 1.9 per cent in April, inflation in the euro area eased in the two months that followed, largely due to developments in oil prices and exchange rates. While in the first four months of the year the contribution of energy products to the increase in the consumer price index was about seven-eight tenths of a percentage point, in May and June, this declined first to four and then two-tenths of a percentage point. In June, the year-on-year increase in the general price index was 1.3 per cent (Figure 4). Core inflation (excluding the prices of energy products and unprocessed food), which in May had slipped below 1 per cent, rose to April levels in June (1.2 per cent). According to the ECB, the substantial underutilised resources that have continued to characterise the euro area even during the recovery are containing inflationary pressures in the area.

Figure 3 – Oil prices and dollar/euro exchange rate



Source: PBO based on Thomson Reuters data.

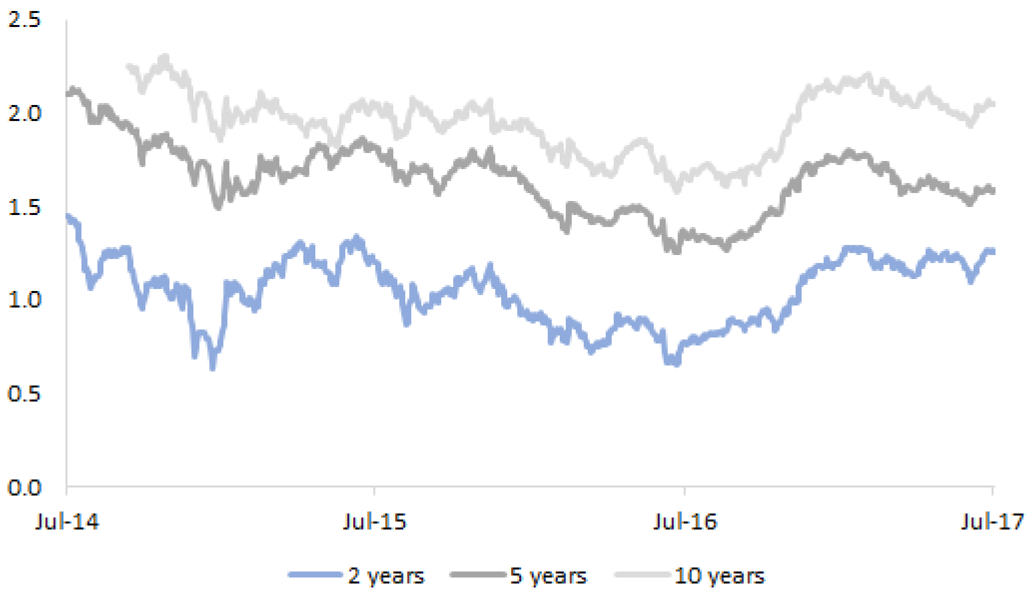
Figure 4 – Inflation in the euro area
(annual percentage changes and contributions)



Source: PBO based on Thomson Reuters data.

Underscoring the persistent underlying weakness of European inflation, euro-area inflation expectations as drawn from financial instruments at various maturities have remained low and are still relatively distant from the central bank's target level (Figure 5). In this environment, the ECB expects to retain its accommodative monetary policy stance. More specifically, the financial asset purchase programme will continue at its current scale until December 2017 and possibly beyond that date unless there has been a lasting adjustment of inflation towards the ECB target. At the same time, official rates will remain at their present levels for an extended period of time, past the end of the asset purchase programme. Nevertheless, the stronger performance of the economy and the approach of the end of the current ECB asset purchase programme at the end of 2017 have prompted operators to shift their expectations towards a gradually less expansionary monetary policy stance, with an impact on market interest rates for European government securities and the exchange rate of the single currency.

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



Source: Thomson Reuters.

The Italian economy

Recovery in economic activity accelerates in first quarter

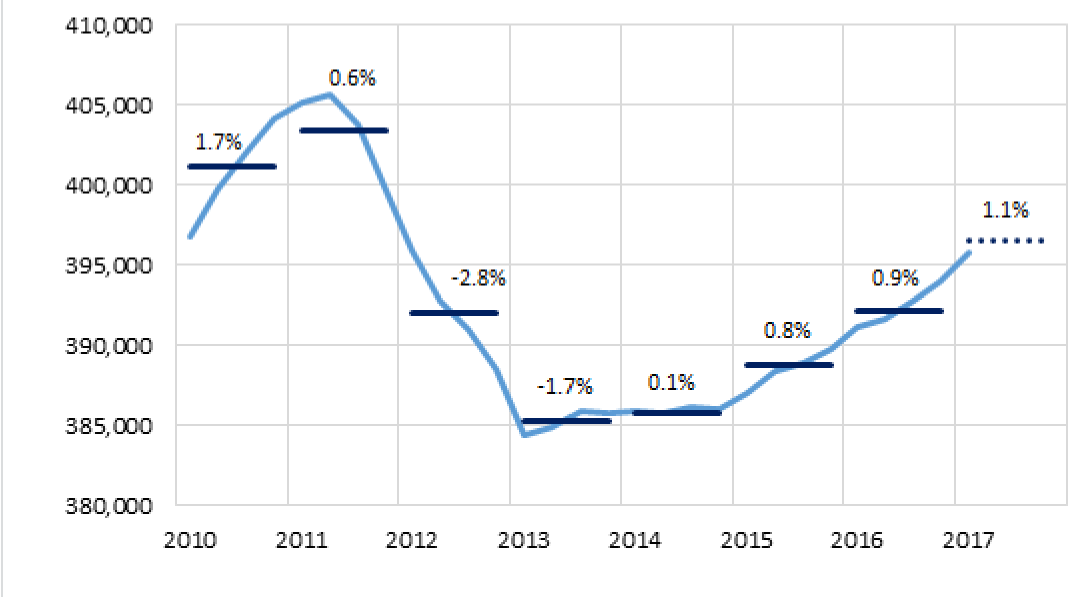
The national accounts figures released by Istat in June underscore the consolidation of the gradual recovery in the Italian economy under way since the central months of 2013, with GDP growth in the first quarter (+0.4 per cent on the previous quarter) outpacing analysts' expectations and markedly faster (about two tenths of a point) than the flash estimates issued at the start of May. As we discuss below, this prompted most analysts to revise their growth forecasts for the full year. Despite the acceleration at the start of the year, the pace of growth of the Italian economy is still slower than the euro-area average.

Following the first quarter performance, the annual growth that would be achieved in 2017 if there were no further changes is 0.9 per cent, not far from the forecast contained in the EFD published last April (+1.1 per cent, Figure 6). However, the stronger real growth has not been accompanied by a corresponding improvement in nominal growth. At current prices, GDP contracted by 0.1 per cent on the previous quarter, a consequence of the sharp fall in the deflator (-0.6 per cent). On the demand side, the latter development reflected the steep decline in investment in machinery and equipment (-3.8 per cent), while on the supply side it reflected the weakening of domestic inflationary pressures (both unit labour costs and unit profit margins, with a consequent decrease of 0.3 per cent in the deflator of value added at basic prices), and the substantial decline in the deflator of net indirect taxes (-3 per cent).

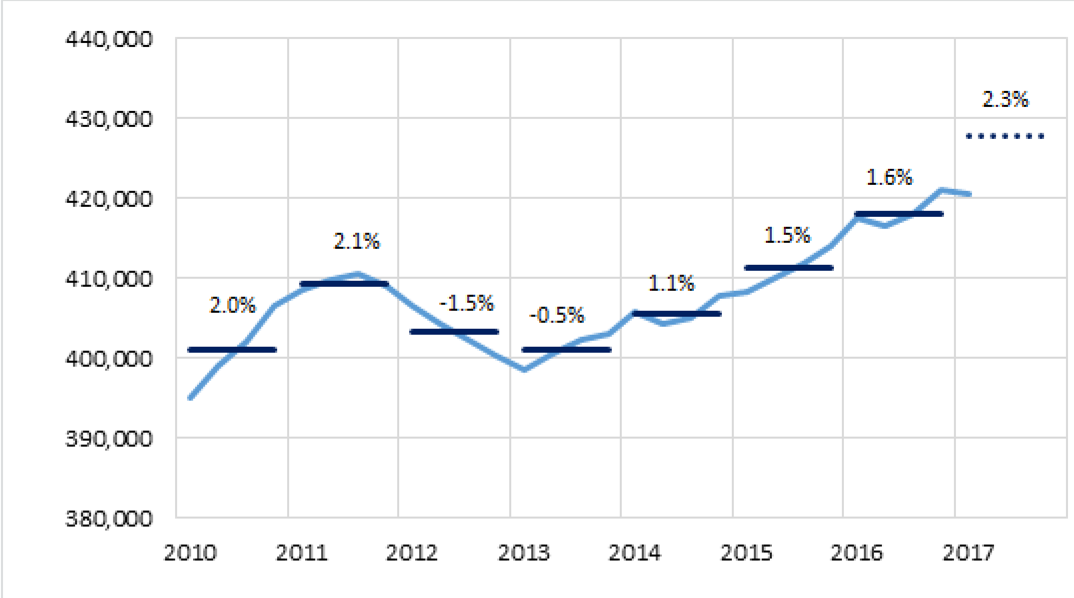
The consequent rise in nominal GDP, a key indicator of the sustainability of the public finances, that would be achieved if there were no further changes, would be small (just over 0.5 per cent) and well below the policy target of the Government for the entire year (+2.3 per cent, Figure 6).

Figure 6 – Real and nominal GDP (1)
(millions of euros and annual growth rates)

Chain-linked values; base year=2010



Nominal values



Source: PBO based on Istat and MEF data.
(1) The dashed lines give the annual growth rate in the policy scenario in the EFD published in April 2017.

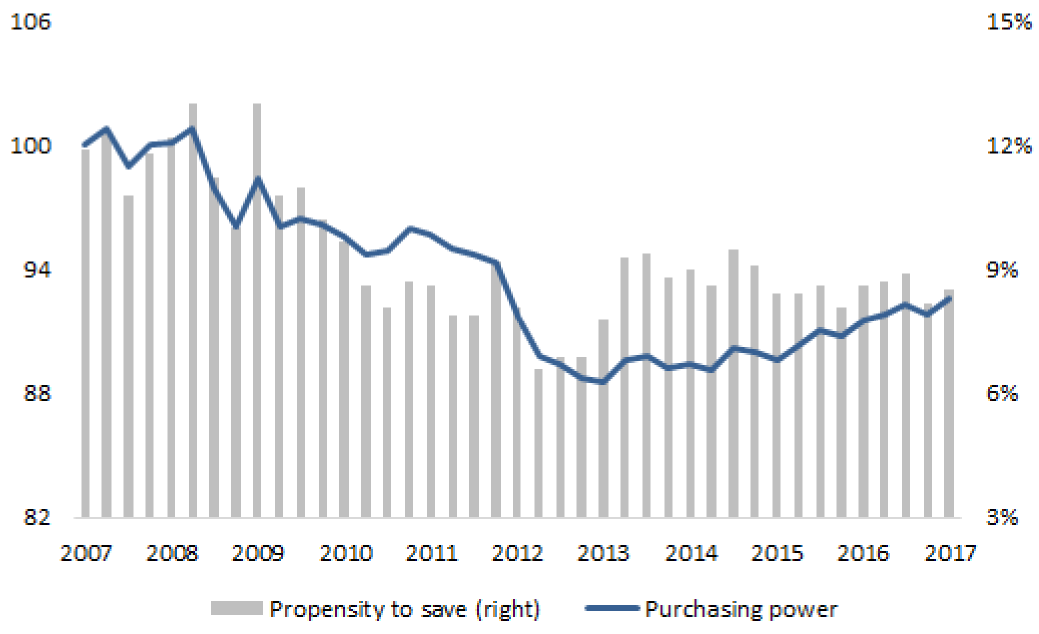
The increase in the volume of activity in the first three months of 2017 reflected the jump in value added in agriculture (+4.2 per cent) and the smaller increases in services and construction (+0.6 and +0.5 per cent, respectively). Industry excluding construction ran against this trend, contracting by about half a percentage point from the figure registered at the end of 2016. With regard to the components of demand, the contribution to growth of domestic spending (about 0.4 percentage points) remained positive and in line with the fourth quarter of 2016. Stock-building made a similar contribution, while gross fixed investment subtracted more than one-tenth of a point of growth. The negative contribution of net exports (about one fourth of a percentage point) reflected the rapid expansion of imports, which outpaced what had been the persistently faster growth of exports.

Household spending picks up ...

Following the slowdown that characterized the second half of 2016, household expenditure, gross of purchases by non-profit institutions, revived in the first three months of 2017 (+0.5 per cent on the previous quarter), buoyed by purchases of durables and semi-durables. The increase in household purchasing power (+1.2 per cent year-on-year and +0.8 per cent on the last quarter of 2016), against the favourable background of the good performance of the labour market and the stabilisation of confidence, had a positive impact on the recovery in private consumption. The larger increase in income compared with that in household expenditure was translated into an increase in the average propensity to save, which during the first quarter rose to 8.5 per cent of disposable income, three-tenths of a point higher than the average for October-December (Figure 7).

The most recent information from consumer surveys point to a slight deterioration in the average climate of confidence in the spring. The signs are more favourable in the assessments of survey respondents in the most recent month available: the June figures show a recovery in the confidence indicator overall and in the various sub-components (general/personal and current/future).

Figure 7 – Household purchasing power and propensity to save
(indices - January 2007=100; percentages)



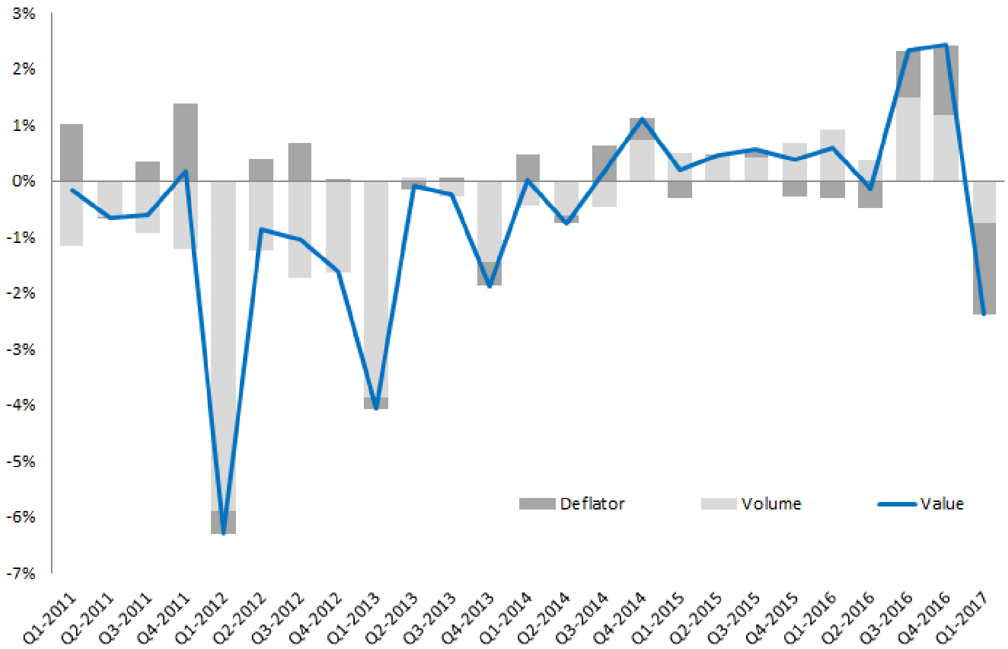
Source: based on Istat data.

... but capital accumulation slows temporarily

The acceleration in economic activity at the start of the year did not have a corresponding positive impact on capital accumulation. Despite the favourable legislative environment, investment in both volume terms and, especially, value terms contracted from its level at the end of 2016 (Figure 8). The decline in volume in the first quarter (-0.8 per cent on the last quarter of 2016) largely reflected the contraction in spending on plant and machinery (-2.2 per cent). Expenditure on transport equipment also declined (-0.8 per cent), reversing the buoyant growth registered in 2016. Conversely, investment in construction continued to increase, albeit only moderately (+0.6 per cent), in line with the gradual recovery that began in the final months of 2014.

The slowdown in capital accumulation in the first quarter should be temporary, however. After weakening at the start of the year, indicators of firm profitability should begin to improve again, benefitting from moderate growth in production costs and favourable borrowing conditions. The results of the Bank of Italy's Survey on Inflation and Growth Expectations point to an expansion of investment plans in all sectors in the second half of 2017. Firm's spending plans should be boosted by the upward revision of expectations for demand, with capacity utilization close to its pre-crisis high.

Figure 8 – Change in gross fixed investment on previous quarter
(percentage change on previous quarter)



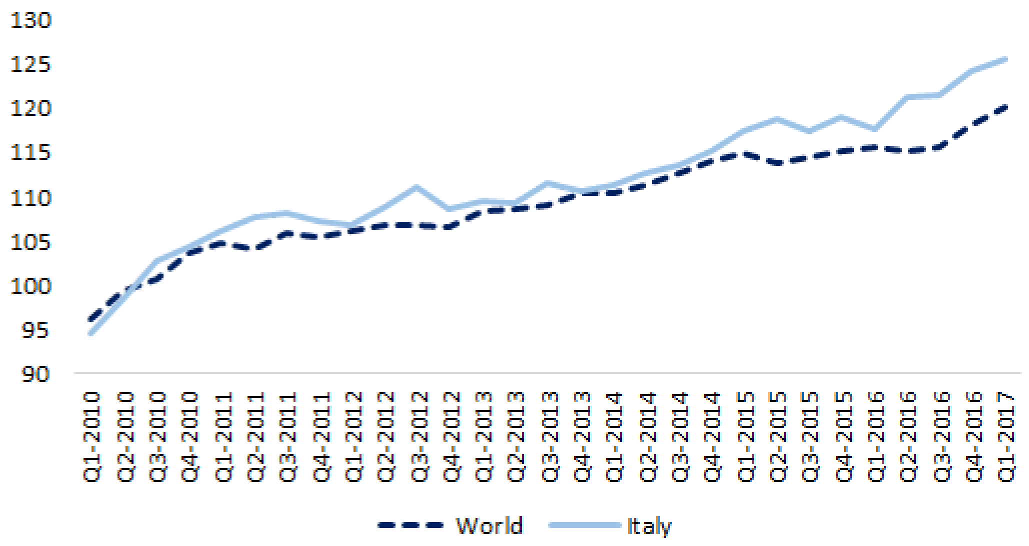
Source: based on Istat data.

Good performance of exports continues

Exports continued to grow in the first quarter of the year (+0.7 per cent on the previous quarter), thanks to the especially strong expansion of merchandise exports (+1.7 per cent). The overall growth in volume terms of Italian merchandise exports over the last four quarters (+6.8 per cent according to national accounts data) was greater than that in world exports (about +4 per cent according to CPB data; Figure 9), signalling the resumption of the process of gradual expansion of market shares (in volume terms) that has been under way (albeit with interruptions) since 2010. As noted earlier, the favourable performance of exports in the first three months of the year was outpaced by the stronger growth of imports (+1.6 per cent), causing net foreign demand to subtract from GDP growth.

The figures on exports after the first three months remain positive. On average in April-May, merchandise exports at current prices increased by 0.8 per cent compared with the first quarter (with an increase of 0.5 per cent in volume terms, obtained by deflating the data in value terms with producer prices in foreign markets). Istat surveys of assessments of foreign orders and turnover in markets abroad point to a continuation of the growth.

Figure 9 – Italian and world merchandise exports in volume terms
(index; 2010=100)



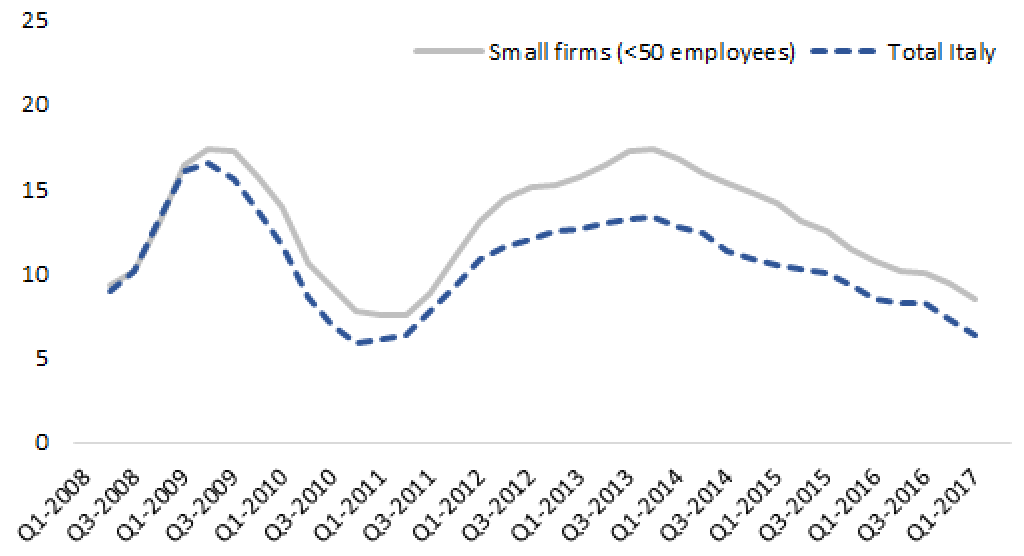
Source: based on Istat and CPB data.

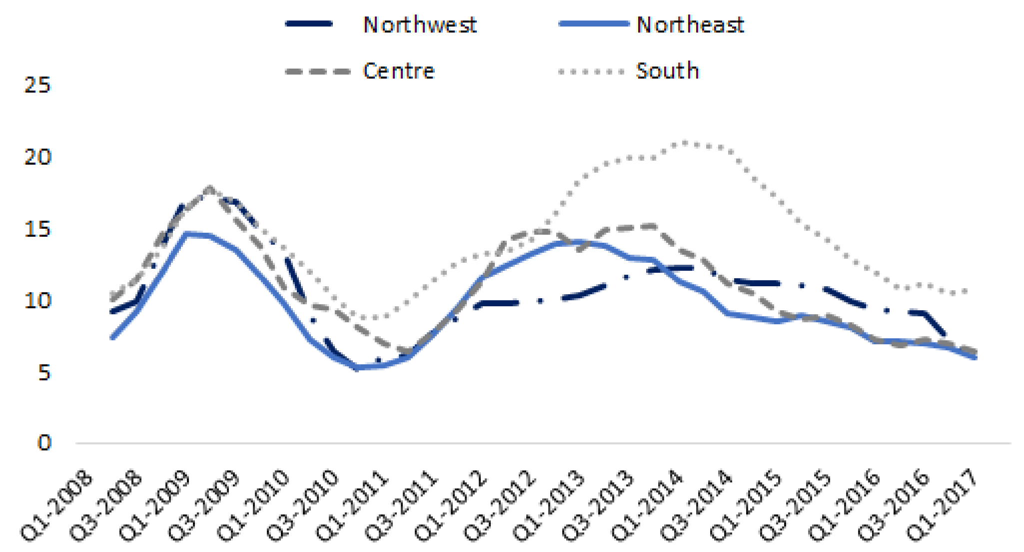
Credit market recovering

In recent months the restructuring of the Italian banking system has accelerated, partly in response to Government measures to resolve the crisis at Monte dei Paschi di Siena and the Veneto banks. The decline in the risk perceived by investors with regard to the soundness of the Italian banking system has been partially reflected in the recent increase in the stock prices of listed banks. However, the banking system remains burdened by a very large volume of impaired loans and low profitability.

On the other hand, relatively encouraging signs can be found in the results of surveys of firms and banks. The Istat survey signals a continuation of the decline, under way since 2014, in the percentage of manufacturing firms whose access to credit has been rationed (i.e. those claiming that they did not receive the credit they applied for; Figure 10). More specifically, less stringent lending conditions appear to be spreading to smaller firms, with the trend extending at the geographical level as well (with the partial exception of the pause registered in southern Italy beginning at the end of 2016). For the current quarter, the Bank of Italy survey points to an increase in firms’ demand for credit while lending conditions are slightly less accommodating than the average for April-June.

Figure 10 – Manufacturing: firms that applied for credit but were rejected
(percentage of firms that applied; 3-term moving average)





Source: based on Istat data.

The latest economic indicators

The most recent economic data suggest that economic activity continued to expand in the central months of the year, although quantitative and qualitative indicators performed quite erratically. The increase in the volume of industrial output in May (+0.7 per cent on the previous period) almost entirely reversed the declines registered in April and, above all, January, returning the index to a level close to that seen at the end of 2016. According to PBO projections, industrial activity should also expand at a modest pace in the coming months: on average in the second quarter, industrial production is estimated to have risen by 0.3 per cent compared with the first quarter.

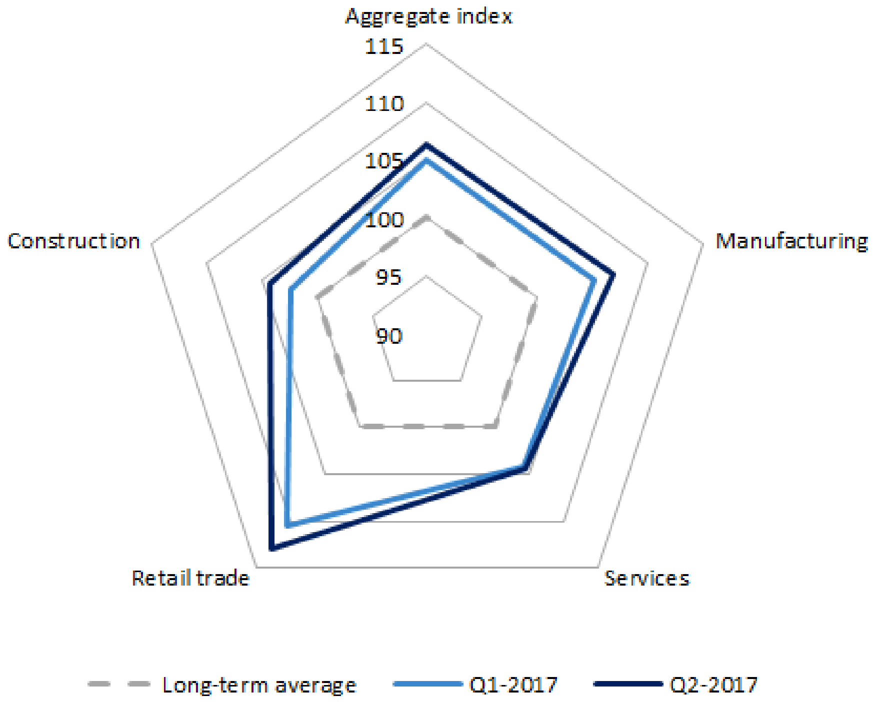
Qualitative indicators point to a strengthening of economic activity in the short term, albeit against a background of conflicting signals: after five consecutive increases, in May the Purchasing Managers' Index (PMI) for manufacturing declined by more than one point, before steadying in June. After the downward correction in May, the confidence index for manufacturing firms continued to strengthen in June, reaching a level similar to that prior to the 2008 crisis.

The erratic developments that have characterized construction output for more than three years continued in May: the production index rose by nearly three percentage points on the previous period, at least partially recouping the sharp decline posted in April. Information drawn from the Revenue Agency's Real Estate Market Observatory show a further increase in the number of sales in the first three months of 2017 (+8.6 per cent compared with the same period of 2016), which was not accompanied by an increase in prices, which overall remained unchanged on the previous period and year-on-year. In the spring, however, confidence among construction firms improved sharply (by nearly 5 points compared with the average for the first quarter), with the index returning to a level similar to the average for the first half of 2008.

The services sector performed well in the first quarter of the year as well. The seasonally adjusted index of turnover in value terms accelerated (+1.6 per cent, compared with +0.5 per cent in the fourth quarter of 2016), benefitting from the expansion in business services and travel, transport and storage services, trade and repair services of motor vehicles and motorcycles. Smaller increases were registered in accommodation and food services, professional, scientific and technical services and information and communication services. Less satisfactory performance was registered in retail sales (in both volume and value terms), which in May were still at historically low levels. By contrast, the assessments of the confidence of retail and service firms remain largely positive, pointing to expansion in these sectors in the central months of the year.

For all sectors, the aggregate index of business confidence for the second quarter, obtained as a weighted average of sectoral indices, was in line with the first quarter, remaining well above the long-term average (normalised to 100; Figure 11). More specifically, the chart shows a broad improvement in confidence in the various productive sectors, with the exception of the market services segment, which was essentially unchanged on the average for January-March.

Figure 11 – Confidence in productive sectors (1)
(index; average January 1998 – June 2017=100)

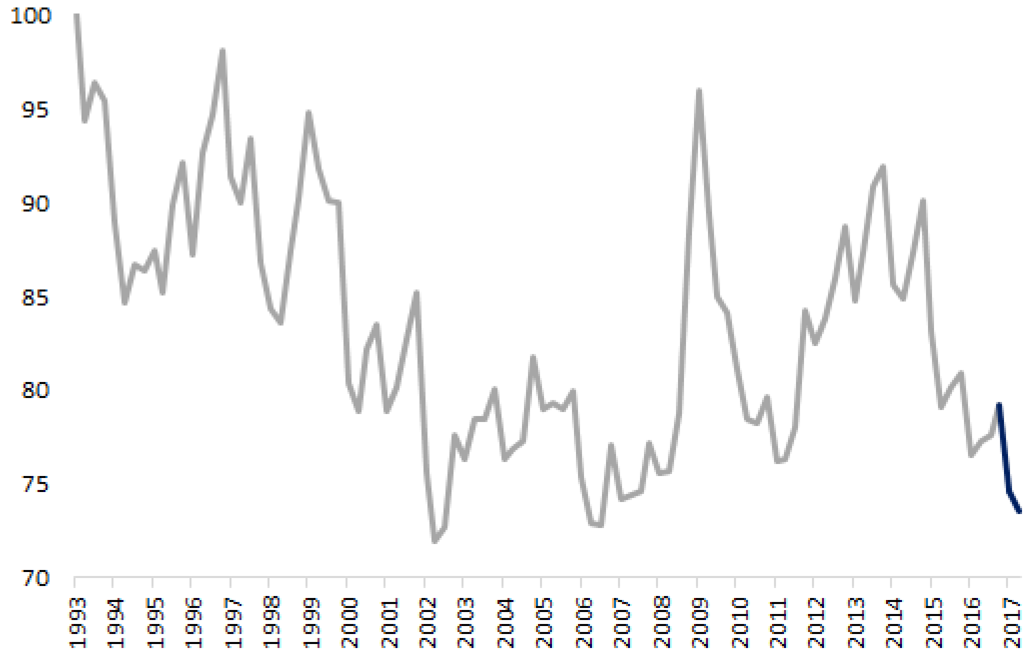


Source: PBO based on European Commission and Istat data.
(1) The aggregate confidence indicator is constructed by applying the weights used by Istat to produce the Istat Economic Sentiment Indicator (IESI) to the time series (standardised) of sectoral confidence indicators of the European Commission. For the confidence indicator for all productive sectors and the individual sectoral indicators, the chart compares the average for April-June (dark blue line) with the average for the indicators for January-March and the long-term average (calculated as from January 1998).

Additional positive news comes from the PBO uncertainty indicator,[2] which fell markedly in the first half of this year (the blue segment in Figure 12) and has returned to a level similar to that in the years preceding the 2008-2009 crisis. By stimulating investment and consumption and increasing demand for the factors of production, lower uncertainty represents a necessary condition for sustaining the recovery in the second half of 2017.

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

Figure 12 – Indicator of uncertainty in the Italian economy
(1993 Q1=100)

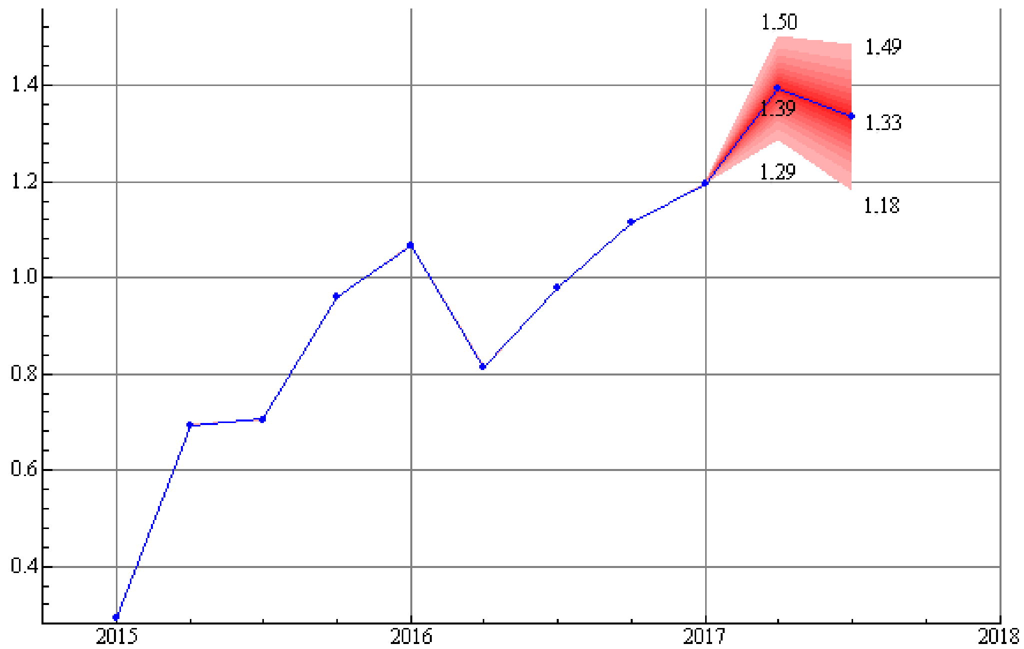


Source: PBO based on European Commission data.

Short-term forecasts

The overall assessment we can draw from the economic indicators points to the consolidation of the cyclical recovery of the Italian economy, which is reaping the benefits of the improvement in external conditions and the generally positive developments in the domestic situation. 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 0.3 per cent quarter-on-quarter in the second quarter of 2017 (this value falls within an error band of 90 per cent with a maximum limit of 0.4 per cent and a minimum of 0.2 per cent). Growth is expected to slow slightly in the third quarter (close to 0.2 per cent, within an error band ranging from 0.4 per cent to 0.1), consistent with somewhat more moderate growth in domestic demand compared with the start of the year. The year-on-year growth rate would be about 1.4 per cent in the second quarter, easing to 1.3 per cent in the third (Figure 13). Overall, these short-term forecasts, assuming growth continues in the fourth quarter as well, point to real GDP growth of 1.2-1.3 per cent in 2017, faster than that envisaged in last April's EFD (1.1 per cent). This is two or three-tenths of a point faster than the previous PBO forecast (1 per cent) issued in April as part of the endorsement exercise for the macroeconomic scenario of the EFD. The correction essentially reflects the upward revisions made by Istat, especially for the first quarter, while in the second quarter the growth profile is substantively unchanged on that underlying the April forecast.

Figure 13 – Forecasts for year-on-year GDP growth and standard error (1)



(1) The error bands regard a confidence interval of 90 per cent.

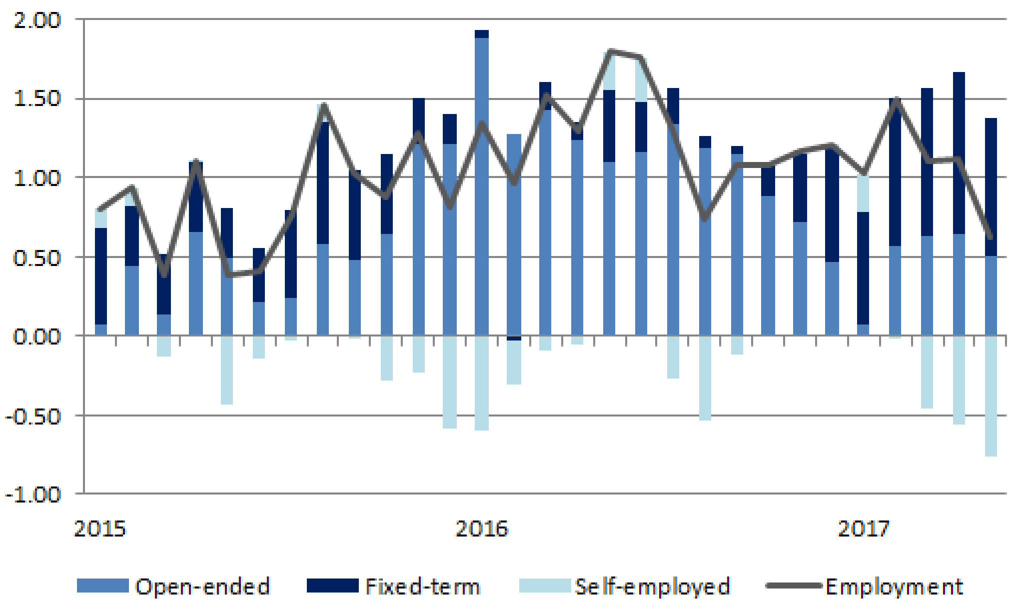
Employment continues to grow, driven by the fixed-term component

In the spring, with economic activity gathering strength, employment growth reflected the considerable increase in workers on fixed-term contracts, attributable in part to the expiry in January of the contribution relief for new hiring on open-ended contracts. After coming to a halt in the months spanning the end of 2016 and the start of 2017, permanent employment began to grow again but at a slower pace. By contrast, developments in self-employment, which have been highly discontinuous, slowed the growth in overall employment.

According to the most recent data drawn from the Labour Force Survey, the number of persons employed increased in April (+0.3 per cent on the previous month), followed by a decline in May (-0.2 per cent). The average for the two month period showed employment continuing to expand (+0.3 per cent compared with the average for the first three months of the year, +59,000 workers). Contributing to the rise was an increase in fixed-term employment (+3.3 per cent compared with the first quarter), an acceleration on the first three months, when the growth was also significant (+2.1 per cent). Open-ended employment also grew (+0.3 per cent in April-May, up from +0.2 per cent in the first quarter). Overall, in the first five months of the year, employment expanded by an average of 1.1 per cent over the same period of 2016. With the leap in fixed-term employment (+8.6 per cent), which considerably outpaced the expansion in permanent employment (+0.7 per cent), the contribution of fixed-term jobs to the growth in the overall number of persons in employment increased further (0.9 percentage points on average for January-May, compared with an average of 0.2 percentage points in 2016) (Figure 14). The employment gains were sustained by both the male and female components of the labour market (with both expanding by just over 1 per cent) and primarily involved workers aged from 50 to 64 (+4.2 per cent).

With regard to working hours, the most recent data for the first quarter of the year show employment growth being driven by the increase in full-time workers (+1.3 per cent year-on-year); the expansion of part-time positions (+2.1 per cent), attributable to people voluntarily opting for such jobs, fostered a decline in the proportion of involuntary part-time employment (equal to 61.0 per cent of part-time workers, 2.4 percentage points lower than in the first quarter of 2016). The overall number of hours worked, while rising (+0.8 per cent year-on-year), slowed down compared with previous quarters, reflecting a decline in average working hours.

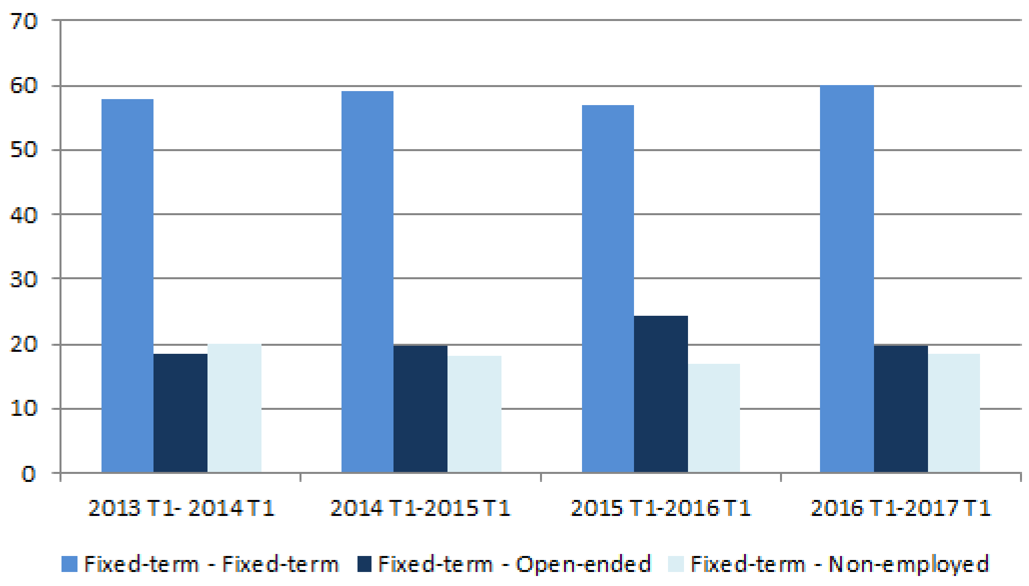
Figure 14 – Contributions to the change in employment
(percentage points; percentage year-on-year changes)



Source: Istat.

The improvement in labour market conditions was reflected in an increase in the probability of remaining in employment (almost entirely attributable to the male component). Flow data, which are available up to the first quarter of 2017, underscore the changes following the expiry (at the end of 2016) of tax relief measures for new permanent jobs.[3] More specifically, the probability of transitioning from fixed-term payroll employment to an open-ended position declines (19.6 per cent between the first quarter of 2016 and the first quarter of 2017, compared with 24.2 per cent one year earlier). The probability of remaining in a fixed-term position rose to levels similar to those registered between the first quarter of 2014 and the first quarter of 2015 (60 per cent; Figure 15), reflecting sharply differing developments by gender. The retention rate increased by more than 10 percentage points for males (to 64.2 per cent). The decline registered among women (to 55.5 per cent, more than 4 percentage points lower than the previous 12 months) was associated with an increase in transitions to non-employment status (unemployed, inactive).

Figure 15 – Transition of workers in fixed-term payroll employment and retention in fixed-term positions
(percentage 12 months later per 100 employed in fixed-term jobs at Q0)



Source: Istat.

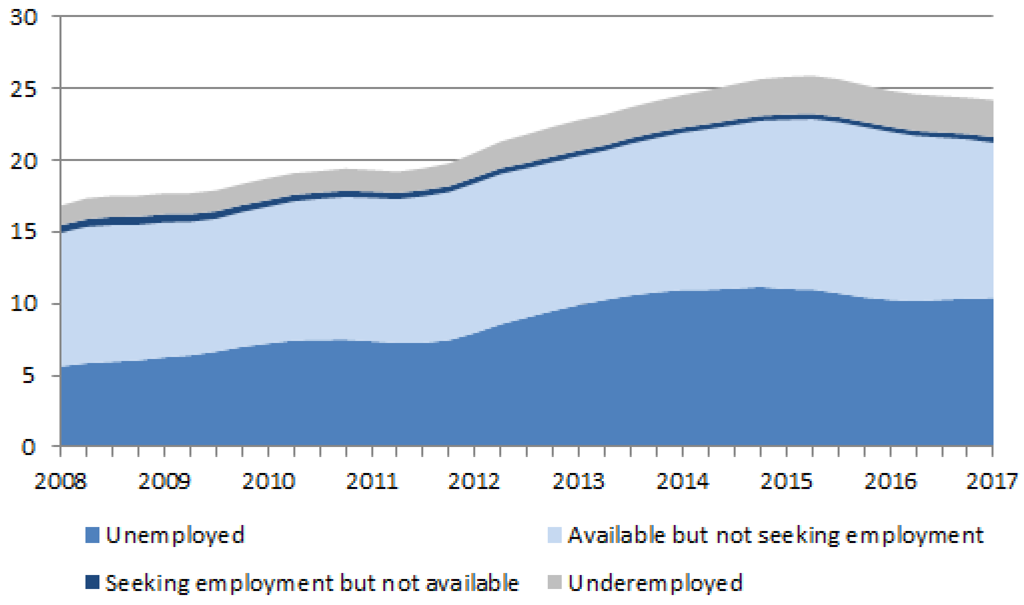
[3] The flow data are calculated as a percentage of workers in the original status category and can be interpreted as the probability that someone will transition from one job status category to another, or remains in the same status category, over one year.

The information from the Observatory on Insecure Employment of the National Social Security Institute (INPS) confirms the increase in employment, with a shift in composition towards temporary and part-time jobs. In January-April, new hiring by private-sector employers (+17.5 per cent compared with the same period of 2016) exceeded terminations (+10.5 per cent), with a net change of about 559,000 new jobs (an increase of 168,000 on the same period of 2016). The increase in new positions was driven by fixed-term jobs (24 per cent) and seasonal positions and apprenticeships. The termination of contribution relief for open-ended hiring reduced the attractiveness of this form of employment for employers (it contracted by 4.5 per cent in the first four months of the year). A similar development impacted transformations of fixed-term contracts into open-ended positions (-2.4 per cent, reflecting the decline in the open-ended hiring of apprentices). The result of these developments was a substantial decline in open-ended hiring as a proportion of total new employment relationships (20.1 per cent, 4.6 percentage points lower than in the same period of 2016).

The improvement in economic conditions and the good performance of employment have encouraged greater labour market participation, which has slowed the decline in the unemployment rate (an average of 11.2 per cent in April-May). Data for the first quarter show a substantial decline in the inactive population (473,000 people compared with the same period of 2016) by gender, geographical area and age group. This is mainly attributable to the decrease in the number of people classified as available to work (290,000 fewer people compared with one year earlier). These are people, some of whom are discouraged, that began seeking to re-enter the labour force in the last quarter of 2015, i.e. with the emergence of the first signs of the recovery. The group most estranged from the labour market (those not seeking a job and not available to work) also contracted (183,000 fewer people compared with one year earlier).

Despite the improvement in the labour market, underemployment remains extensive and, as in the rest of the euro area, considerably more widespread than indicated by unemployment figures. One measure of underemployment that can be used to determine excess labour supply (extended labour force) includes the underemployed, i.e. those who are working fewer hours than they would like (about 800,000 people in the first quarter of the year), in addition to the potential labour force and the unemployed. Combining this information (Figure 16), in the first quarter of 2017, the rate of underemployment was 24.5 per cent, down from the peak recorded in mid-2014, but still more than twice the official unemployment rate. A significant role in developments in this indicator is played by the proportion of people who are not seeking employment because they do not believe they can find a job, despite being available to work.

Figure 16 – Estimated underemployment as a percentage of the extended labour force
(4-term moving averages)



Source: based on Istat data.

Inflation declines; tourism sustains the prices of services

Based on Istat estimates, consumer price inflation declined for the second month in a row in June (-0.1 per cent compared with May), to 1.2 per cent year-on-year (from a peak of 1.9 per cent in April). The main factors in this development were the slowdown in the prices of unprocessed food (primarily fruit and vegetables) and unregulated energy products. Conversely, the prices of transport services accelerated (+4.1 per cent, up from +3.2 per cent in May), returning the inflation differential between services and goods to positive territory (+0.6 percentage points).

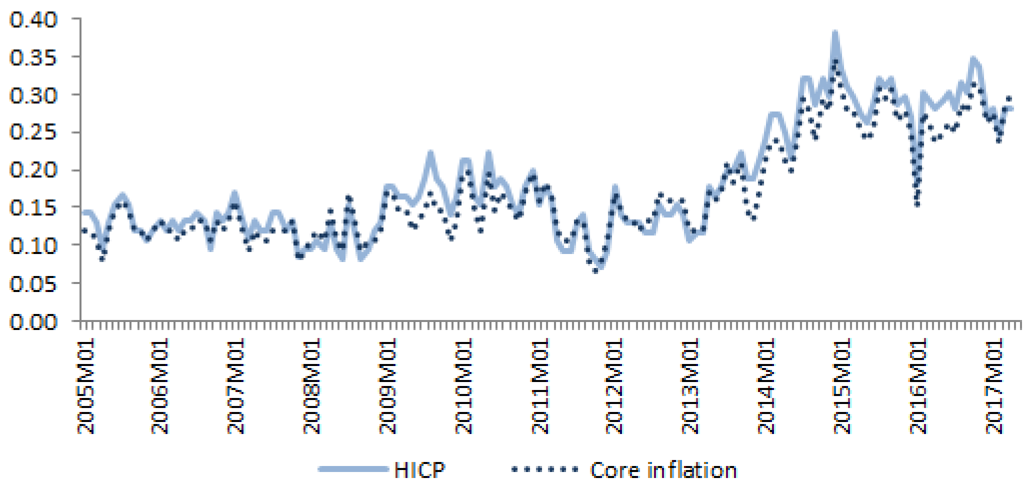
Core inflation, which excludes the prices of energy products and unprocessed food, rose by two-tenths of a percentage point, to 0.9 per cent, in June. This reflected increases in the prices of air and maritime transport services (+22.7 and +36.3 per cent respectively on a year-on-year basis), attributable to seasonal effects, as well as the revival of tourism, which drove the prices of accommodation and food services (+2.2 per cent over June 2016). The year-on-year change in the industrial goods segment (excluding energy, food and tobacco products) remained negative (-0.1 per cent, following the -0.2 per cent posted in May). Overall, internal inflationary pressures remain subdued, partly reflecting moderate wage pressures attributable to widespread underemployment and the practice (recently adopted in a number of major bargaining agreements) of linking wage increases to changes in past (and lower) inflation.

In May, the share of products in the basket of the consumer price index whose prices are still decreasing was 24 per cent, a decline on the previous months of 2017 (Figure 17), while the share of items whose prices rose by less than 0.5 per cent also decreased (to 43 per cent from 46 per cent in April). The share of items with prices rising by less than 1 per cent edged downwards (to 64 per cent from 65 per cent in April).

Inflation in the upstream phase of the inflationary process remains modest. In May, prices in industry slowed compared with the previous month (-0.4 per cent on the domestic market and -0.1 per cent abroad), reflecting the deceleration in energy prices and the continuing weakness of demand-side pressures. The pace of increase in the import prices of industrial products fell considerably in May (to +2.7 per cent, after increasing by about 5 per cent in the previous four months), a reflection of developments in the prices of energy products. The producer prices of services also fell in the first quarter 2017, contracting by 0.6 per cent on the previous quarter and by 0.3 per cent year-on-year.

Household and business expectations point to a continuation of moderate inflation. In June, the balance reported in the Istat survey of consumers on price expectations in the next 12 months increased (to -3.7 from -14.1 the previous month), with rises both in the number of those expecting an acceleration (1.9 percentage points) and those expecting current trends to continue (2.6 percentage points).[4] Firms appeared less optimistic, with the share of those expecting sales prices to remain stable over the next 12 months increasing (with a balance of 4, from 6.1 in May). Expectations of an increase in the prices of energy declined, while firms were moderately optimistic about developments in the prices of consumer durables (a balance of 8, up from 5.8) and non-durables (6.4, from 5.4), reflecting recent increases consumption in those segments.

Figure 17 – Proportion of goods and services in consumer price index (HICP) experiencing deflation
(percentages)



Source: based on Istat data.

[4] The question and responses in the Istat consumer survey are as follows: "Compared with their current level, do you think that consumer prices in Italy in the next 12 months will: increase more; increase by the same amount; increase less; remain broadly stable; decrease; don't know".

Box – The elasticity of international trade to global economic activity

World trade has decelerated sharply since the start of the financial crisis. Following the collapse in the 2008 recession, until mid-2016 world merchandise trade expanded at an appreciably slower pace than it had before the crisis (Figure R1). More recently, with the strengthening of the recovery at the global level, trade appears to have become more buoyant, accelerating considerably. According to the Central Planning Bureau, in April the year-on-year increase in the 3-month moving average for world trade was 3.9 per cent, compared with a low (post-collapse) of 0.8 per cent at the start of 2016.

Various studies[5] have sought to determine whether the slowdown following 2007 was purely cyclical in nature, i.e. caused by the deceleration in economic activity, or structural, i.e. associated with a more lasting change. Among the factors in favour of the cyclical interpretation, the decline in investment is cited as a key element, given the large import-generating capacity of this component of spending. Factors that would suggest that the slowdown is a structural phenomenon include the waning of the impulse of trade liberalisation, in part due to the limited scope for further opening of trade and in some cases the emergence protectionist tendencies, as well as the slowdown in the development of global value creation chains as a consequence of what are now narrow opportunities for reducing transaction, transport and communication costs. These factors could hinder a return to the pace of trade expansion experienced before 2008. Another factor[6] in the slowdown could also be the change in the geographical composition of global economic activity, in which a greater role is being played by countries (forest and foremost, China) with lower elasticities of imports to GDP.

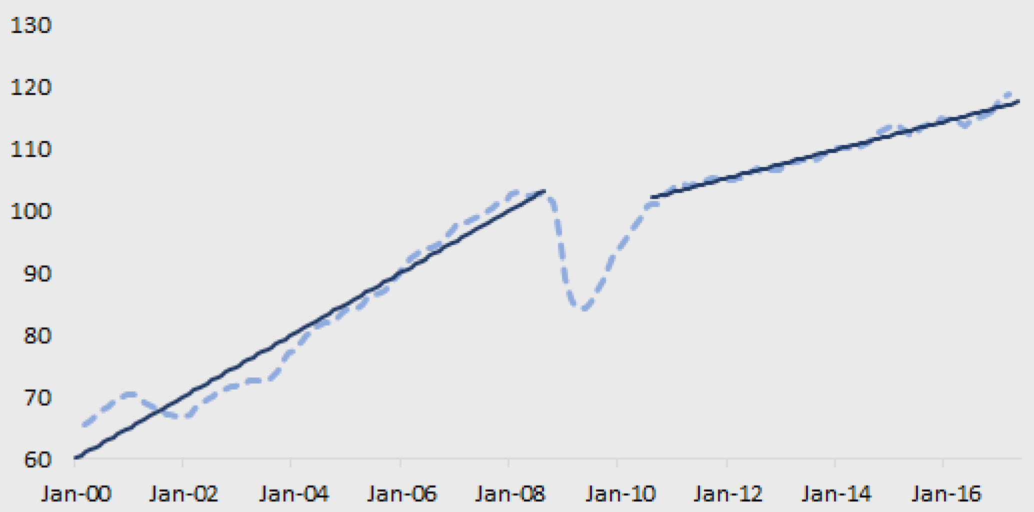
In addition to helping us understand what happened ex post, understanding the nature of the decline in the rate of expansion of world trade could shine a light on future developments in the role that trade will play in sustaining global growth. Prior to the financial crisis, world trade was expanding at twice the rate of output, representing in turn a major driver of economic activity. Since the start of the crisis, however, this function has weakened (Figure R2).[7]

[5] See, for example, IMF (2016) "Global Trade: What's Behind the Slowdown?", chap 2 WEO, October; Costantinescu, C. Mattoo, A. and M. Ruta (2005) "The Global Trade Slowdown", in *The Global Trade Slowdown: A New Normal?*, VoxEU.org eBook; Ollivaud P. and C. Schwellnus (2016) "Does the Post-Crisis Weakness of Global Trade Solely Reflect Weak Demand?", OECD Economic Department Working Papers No. 1216.

[6] Stratford K. (2015) "Why has world trade been so weak in recent years?", Bank of England - Bank Underground Blog.

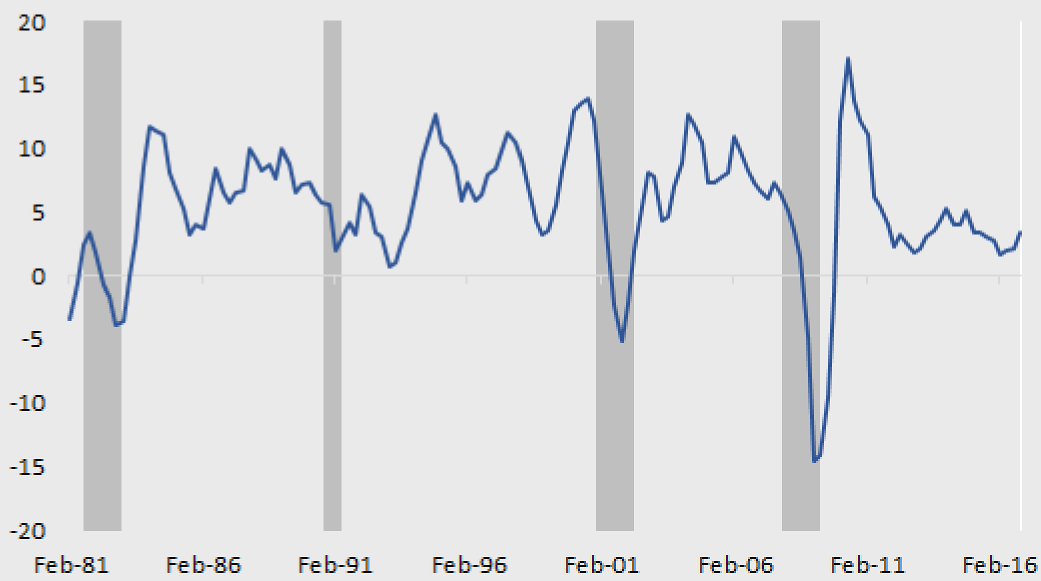
[7] The vertical grey vertical bands in Figure R2 represent global recessions obtained using the procedure in Hardig D. and A. Pagan (2002) "Dissecting the Cycle: a Methodological Investigation", *Journal of Monetary Economics*, no. 49, page 365-381.

Figure R1 – World trade index (1)
(3-month moving average)



Source: PBO based on Central Planning Bureau data.
(1) The two trend lines have been obtained by regressing the world trade index on a trend plus intercept. The first period is March 2000-June 2008, the second October 2010-March 2017.

Figure R2 – World imports
(annual percentage changes)



Source: PBO based on Oxford Economics data.
(1) The grey bands represent recessions, obtained by applying the Harding-Pagan procedure (2002), as implemented in the R-Bcdating package, to the quarterly time series for world industrial production.

The following seeks to quantify the size of the decline in elasticity and the period in which it took place. Using Oxford Economics quarterly data and the estimation of a simple error correction model, it is possible to identify three-sub-periods in the 1980-2016 period during which the elasticity of trade (measured through world imports) to economic activity (represented by world

GDP) decreased. With *lnIMP* and *lnPIL* representing imports and world economic activity, respectively (using log values), the econometric model is as follows:[8]

$$dlnIMP_t = \alpha + \beta * dlnPIL_t + \gamma * lnIMP_{t-1} + \delta * lnPIL_{t-1} \qquad (1)$$

where *dln* indicates the logarithmic difference of the relevant variables on a previous period basis. The estimation of the model for the entire sample produces a result (Table 1) for the short-term elasticity of trade to GDP of 3.2, while long-term elasticity – the key figure for studying the relationship between trade and output – is just under 2.[9] This estimate then undergoes testing for multiple structural breaks (Bai and Perron)[10] to determine whether there are any persistent changes underlying the average value of elasticity for the entire period. The test does find two changes: in the first quarter of 2001 and in the first quarter of 2009. Repeating the estimations in the three sub-periods delineated on the basis of the structural breaks, you can observe a gradual reduction in long-term elasticity, which goes from 2.4 in the first interval (1980Q1-2000Q4), to 2 in the second (2001Q1-2008Q4) and to 1.5 in the final interval, which contains the recent economic crisis (2009Q1-2016Q4).[11] For the sake of comparison, so-called apparent elasticity (obtained as a simple ratio between the average percentage changes for the period in imports and world GDP) declines from about 2 to 1.5 between the first and second periods and is virtually unchanged at this value in the third period.

Table R1 – Results of the estimations (1)

Sample	1980T1-2016T4	1980T1-2000T4	2001T1-2008T4	2009T1-2016T4	2017T1-2026T4
Dependent variable	DLIMP	DLIMP	DLIMP	DLIMP	DLIMP
C	-0.6182	-1.6242	-5.8184	-2.5444	-1.8943
(se)	(-0.3549)	(0.5528)**	(1.6847)**	(0.8630)**	(0.7027)*
DLPIL	3.2036	2.0519	3.5637	4.8803	-1.2749
(se)	(0.2232)**	(0.2822)**	(0.3459)**	(0.3651)**	(0.5478)*
LIMP(-1)	-0.0344	-0.0646	-0.3346	-0.2606	-0.2383
(se)	(-0.0195)	(0.0280)*	(0.0947)**	(0.0621)**	(0.0797)**
LPIL(-1)	0.0683	0.1581	0.658	0.3913	0.3342
(se)	(-0.0392)	(0.0589)**	(0.1879)**	(0.1056)**	(0.1153)**
Long-term elasticity ($-\delta/\gamma$)	1.9828	2.4476	1.9661	1.5017	1.4026
(se)	(0.6085)**	(1.0169)*	(0.1941)**	(0.2921)**	(0.5724)**
Observations:	147	83	32	32	39
R-squared:	0.592	0.5447	0.7931	0.8718	0.4218
F-statistic:	69.1757	31.5056	35.7723	63.472	8.5114
Prob(F-stat):	0.0000	0.0000	0.0000	0.0000	0.0002

Source: PBO based on Oxford Economics data.
(1) DLIMP it the rate of import growth, DLPIL is the rate of GDP growth, LIMP is the natural log of imports, LPIL is the natural log of GDP PIL, se is the standard error. The asterisks next to the standard errors represent the significance level of the associated coefficients at 5% (*) or 1% (**). The residuals are stationary (ADF test) and not autocorrelated (Breusch-Godfrey LM test) in all four regressions. The estimation of long-term elasticity is obtained through a bootstrap estimation with 1000 repetitions.

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[8] The estimations used the Oxford Economics database. The observations used for the historical period run from the first quarter of 1980 to the fourth quarter of 2016.

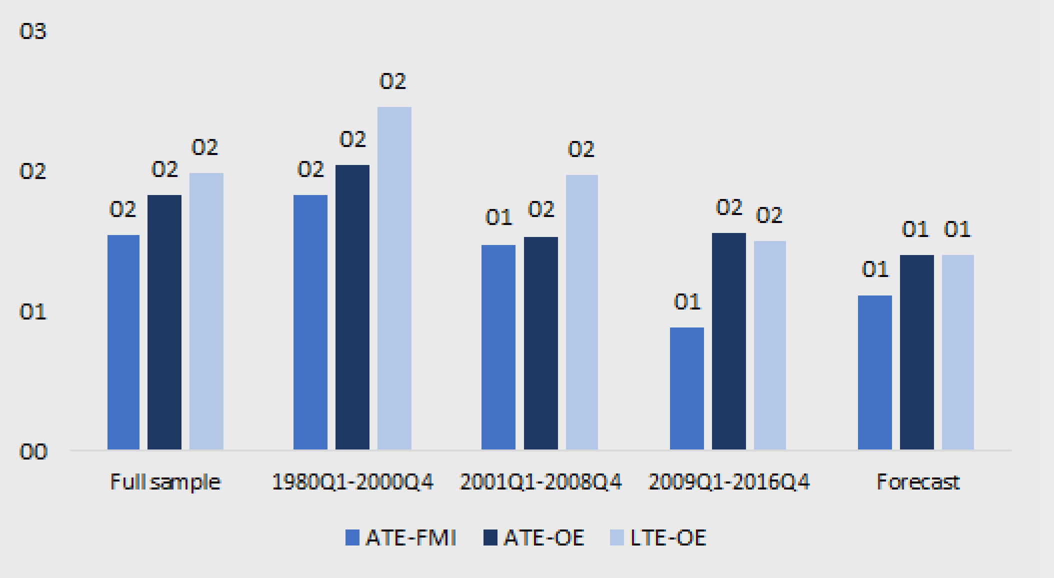
[9] With regard to (1), short-term elasticity is β, while long-term elasticity is $-\delta/\gamma$. The non-linear Wald test of the significance of the long-term coefficients rejects the null hypothesis of non-significance at 1 per cent.

[10] Bai J. and P. Perron (1998) "Estimating and Testing Linear Models with Multiple Structural Changes", Econometrica Vol. 66 N. 1, pages 47-78.

[11] A similar model was estimated using monthly CPB data available from January 1991 to March 2017, where the industrial production index was used instead of GDP. The results are essentially similar. the only two material differences are the position of the first structural break, which with CPB data occurs in September 2003, and long-term elasticity in the final part of the sample, which is just over 1. These differences can largely be attributed to the difference in the period covered and the use of industrial production instead of GDP as the economic activity variable.

The results of the econometric analysis are essentially in line with those obtained in the IMF and OECD studies cited here. They confirm the progressive weakening of the relationship between trade and output that appears to have begun after the strong impulse towards globalisation that marked the final 20 years of the last century. The key question is to determine whether that reduced elasticity will persist in time or will instead increase going forward, perhaps returning to the values seen in 1980-2000. It is clearly difficult to answer the question with the available information. We can, however, assess the expectations of forecasters with regard to this aspect, which are implicit in their projections for world trade and GDP. Using the Oxford Economics forecasts and those of the IMF,[12] we find (last column of Table 1 and last set of bars in Figure R3) that expectations for next 5 or 10 years indicate broad stability with respect to the recent past in the relationship between developments in imports and those in output. Ultimately, the forecasts seem to perceive the decline in elasticity as a structural rather than cyclical phenomenon. This does not mean that world trade will continue at the depressed pace we have seen recently. It will strengthen with the expected acceleration in global economic activity, but the responsiveness of trade to faster growth will not diverge – despite the expected increase in expenditure on investments with a high import content – from the low levels that on average have prevailed in the last decade.

Figure R3 – Elasticity of trade to GDP (1)



Source: PBO based on IMF and Oxford Economics (OE) data.
(1) Apparent elasticity (ATE) is given by the ratio of the average percentage changes in world imports and GDP; long-term elasticity (LTE) is given by the bootstrap estimation of $-\delta/\gamma$ of (Eq.R1); the forecasting period is 2017-2022 for the IMF (annual data) and 2017-2026 for OE (quarterly data).

[12] *World Economic Outlook,* April 2017. The IMF data were only used in the construction of Figure 3.