2.10 PROJECTIONS

The projections for the Italian economy presented in this *Economic Bulletin* update those prepared as part of the Eurosystem staff macroeconomic projections, which were based on information available up to 30 November,[1] and take subsequent developments into account. They incorporate the new national accounts data released by Istat on 1 December.

The 2018-20 scenario assumes favourable financial conditions

The technical assumptions underlying the forecasting scenario for the three years 2018-20 incorporate accommodative monetary and financial conditions. According to the expectations inferable from market prices, interest rates will rise gradually in the three years 2018-20: short-term rates, which are currently negative, will increase by around 60 basis points overall, the yields on ten-year government securities by around 110 basis points (see the box 'The assumptions underlying the macroeconomic scenario').

It is also assumed that credit supply conditions will remain relaxed: the difference between the interest rates applied to bank loans in Italy and in the rest of the euro area is expected to remain small over the entire forecasting horizon.

THE ASSUMPTIONS UNDERLYING THE MACROECONOMIC SCENARIO

The forecasting scenario for the Italian economy prepared by Bank of Italy experts as part of the Eurosystem staff macroeconomic projection exercise is published on the Bank's website at the start of June and December in concomitance with the euro-area projections.[1] The macroeconomic projections for Italy presented here update those released on 15 December[2] on the basis of information that has become available in the meantime, including the latest national accounts data published by Istat on 1 December. The technical assumptions have been revised in the light of changes in the exogenous variables to 12 January.

The main assumptions underlying the scenario are as follows (see the table):

a) World trade expands by 5.4 per cent in 2017 and slows to a little more than 4 per cent on average in the three years 2018-20; foreign demand weighted by the outlet markets for Italian exports grows at a similar pace to world trade;

b) The euro/dollar exchange rate remains stable at 1.20 in the three years 2018-20;[3]

c) The price of a barrel of Brent crude oil, equal to $54 on average in 2017, rises to a little more than $66 in 2018 and drops slightly to around $60 in 2020;

[1] See the Bank of Italy's website: '*Macroeconomic projections for Italy*', containing the projections published to date as part of the Eurosystem coordinated exercise.
[2] The assumptions for global economic activity and the outlook for foreign demand are consistent with those underlying the forecasting scenario for the euro area agreed by the Eurosystem central banks and presented by the ECB in '*Eurosystem staff macroeconomic projections for the euro area, December 2017*'.
[3] The technical assumptions on interest rates, exchange rates and oil prices are calculated on the basis of the spot and forward prices observed in the markets in the ten working days to 12 January.

[1] See the Bank of Italy's website: Macroeconomic projections for the Italian economy, 15 December 2017.

d) The three-month interest rates on the interbank market (Euribor), equal to -0.3 per cent in the two years 2017-18, gradually rise to 0.3 per cent on average in 2020;

e) The yield on ten-year BTPs, equal to 2.1 per cent in 2017, rises to 2.4 per cent in 2018, 2.8 per cent in 2019 and 3.2 per cent in 2020, in line with the values of forward rates implied by the term structure of interest rates on government bond yields;

f) The scenario takes account of the measures set out in the budgetary legislation for 2018. For 2019-20 it is assumed that the safeguard clauses relative to VAT and excise duty increases are not activated. In accordance with the guidelines underlying the Eurosystem forecasts, which do not incorporate measures that have yet to be defined in sufficient detail, the macroeconomic scenario excludes alternative measures for recouping revenue.

Assumptions for the main exogenous variables
(percentage changes on previous year unless otherwise specified)

	2017	2018	2019	2020
World trade	5.4	4.6	4.3	3.8
Potential foreign demand	5.1	4.5	4.1	3.7
Dollar/euro (1)	1.13	1.20	1.20	1.20
Nominal effective exchange rate (2)	-0.6	-1.2	0.0	0.0
Crude oil prices (1) (3)	54.4	66.5	62.4	59.8
3-month Euribor (1)	-0.3	-0.3	0.0	0.3
1-year BOTs (1)	-0.3	-0.3	0.0	0.3
10-year BTPs (1)	2.1	2.4	2.8	3.2

Sources: Based on Bank of Italy and Istat data.
(1) Annual averages. – (2) Positive changes indicate a depreciation. – (3) Dollars per barrel of Brent crude oil.

Compared with the forecasting scenario published in December, oil prices increase by 6 per cent on average in the three years 2018-20, the euro/dollar exchange rate appreciates by about 2 per cent, the real effective exchange rate by 0.5 percentage points, and the forward interest rates on ten-year BTPs are up by around 20 basis points on average.

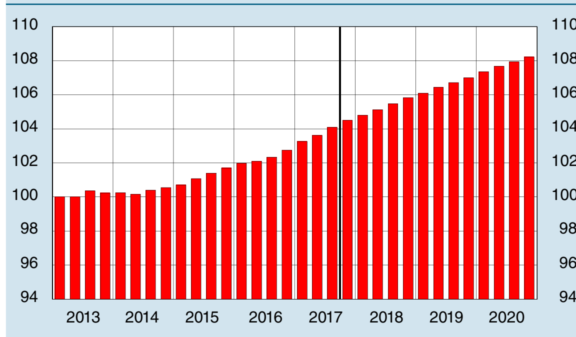
The scenario takes account of the budget measures for 2018; as in the previous exercises it excludes the effects of the increases in indirect taxes in 2019-20 envisaged under the safeguard clauses and does not incorporate possible alternative measures to adjust the public accounts.

In the scenario growth is being driven by domestic demand

Based on these assumptions and on the latest cyclical data, it is estimated that GDP adjusted for calendar effects expanded by 1.5 per cent in 2017 (1.4 per cent excluding this adjustment); it is expected to increase by 1.4 per cent in the current year, and by 1.2 per cent in 2019-20 (Figure 37 and Table 10).[2]

Figure 37

GDP projections: quarterly profile (1)
(levels; Q1 2013 =100)



Sources: Based on Bank of Italy and Istat data.
(1) Data seasonally and calendar adjusted. Actual data up to Q3 2017; projections thereafter.

Economic policies are supporting growth

Economic activity appears to have been mainly driven by domestic demand; the contribution of net foreign demand, which is slightly negative this year, is expected to turn positive again in the two years 2019-20

[2] Without any calendar adjustment, projected GDP growth is 1.5 per this year, 1.2 per cent in 2019 and 1.3 per cent in 2020.

(Figure 38). In 2020 GDP is projected to be about 1.5 per cent lower than it was in 2007, recouping around nine tenths of the drop recorded between 2008 and 2013.

Overall, our projections suggest that output continues to benefit from the support of expansionary economic policies, though to a relatively smaller degree than in the past. On the one hand, this reflects market expectations of a gradual withdrawal of monetary stimulus, on the other, the growing autonomous support to domestic demand originating from the brighter outlook for households' disposable income and firms' smaller margins of spare capacity. According to our estimates, monetary policy measures will help sustain growth of a little under 0.5 percentage points per year in the two years 2018-19; the performance of the public finances is expected to help boost output by around 0.2 percentage points both this year and the next.

Table 10

The macroeconomic scenario
(percentage changes on previous year unless otherwise indicated)

	2017	2018	2019	2020
GDP (1)	1.5	1.4	1.2	1.2
Household consumption	1.5	1.4	1.0	0.9
Government consumption	0.8	0.5	0.2	0.4
Gross fixed investment	3.4	4.3	2.2	1.2
of which: in machinery, equipment and transport equipment	5.2	6.5	2.7	1.4
Total exports	5.2	3.4	3.1	3.0
Total imports	5.6	4.2	2.9	2.3
Change in stocks (2)	-0.1	-0.1	0.0	0.0
Memorandum item: GDP (3)	*1.4*	*1.5*	*1.2*	*1.3*
HICP	1.3	1.1	1.5	1.6
HICP net of food and energy	0.8	0.7	1.5	1.6
Employment (standard units) (4)	1.3	1.3	0.9	0.9
Unemployment rate (5)	11.3	11.0	10.7	10.5
Export competitiveness (6)	1.2	-1.3	0.1	0.1
Current account balance (7)	2.8	2.3	2.4	2.7

Sources: Based on Bank of Italy and Istat data.
(1) For GDP and its components: chain-linked volumes; changes estimated on the basis of quarterly data adjusted for seasonal and calendar effects. – (2) Includes valuables. Contributions to GDP growth in percentage points. – (3) Not calendar adjusted. – (4) Standard labour units. – (5) Annual averages; per cent. – (6) Calculated by comparing the price of foreign manufactures with the deflator of Italian merchandise exports (excluding energy and agricultural products); a positive value indicates a gain in competitiveness. – (7) Per cent of GDP.

Consumption is expected to be sustained by rising employment ...

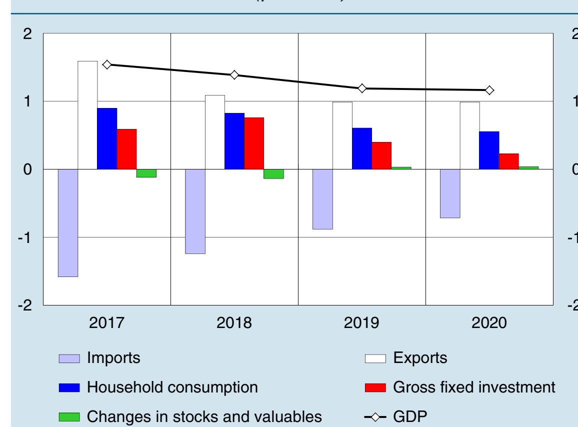
Household consumption has grown by a little less than output and real disposable income and is expected to continue to benefit from the improvement in the labour market and low interest rates. The rise in employment should increase at a relatively fast pace (by approximately 1.0 per cent on average per year), mainly reflecting the favourable performance of economic activity. The increase in the participation rate, attributable to the improved economic situation and to the gradual rise in the retirement age, means that unemployment will decline only gradually, to 10.5 per cent in 2020 (from 11.3 per cent in 2017).

... and investment by the demand outlook

In this scenario, strengthening demand prospects and enduringly accommodative financial conditions are the main contributory factors in capital formation. Investment in machinery, equipment and advanced technologies, which is estimated to have risen by more than 6 per cent this year, continues to benefit from the extension of tax incentives contained in the budget law; the bringing forward of expenditure that these measures have induced is expected to translate into a slowdown in investment in the subsequent two years. The recovery in the construction sector is also expected to continue, though at a slower pace, thanks to

Figure 38

GDP growth and contributions of the main demand components and imports (1)
(per cent)



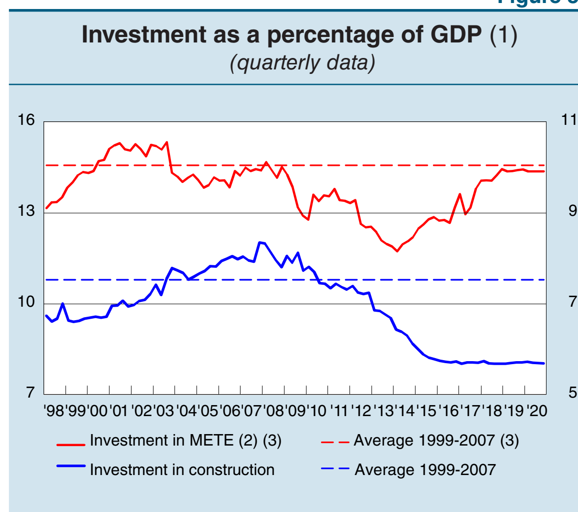
Sources: Based on Bank of Italy and Istat data.
(1) Data seasonally and calendar adjusted.

the consolidation of the real estate market and to public investment policies.

Over the forecasting horizon, investment in machinery, equipment and transport equipment should fully recoup the drop of almost 25 percentage points recorded between 2008 and 2013. The ratio of investment in capital goods to GDP is expected to regain the levels recorded prior to the double-dip recession; for the construction sector, instead, this ratio is still expected to be 4 percentage points below pre-crisis levels in 2020 (Figure 39), reflecting the slower pace of the recovery in the real estate market.

Figure 39

Investment as a percentage of GDP (1)
(quarterly data)



Sources: Based on Bank of Italy and Istat data.
(1) Data seasonally and calendar adjusted. – (2) Capital investment (in machinery, equipment, transport equipment (METE)). – (3) Right-hand scale.

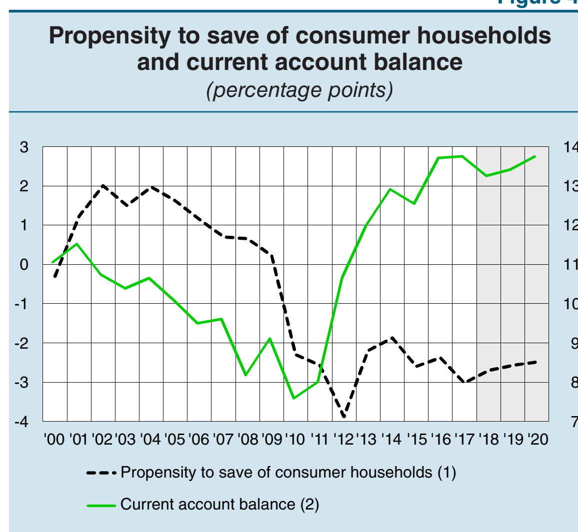
The surplus on the foreign accounts remains ample

In each of the three years 2018-20 exports are forecast to expand by more than 3 per cent on average, reflecting both the assumptions regarding the favourable performance of international trade and the effects of the appreciation of the euro in recent quarters. The growth of imports, which was especially strong in 2017 before gradually slowing, is expected to mirror developments in productive investment and exports, the two components of demand with the highest imported goods content.

The surplus on the current account of the balance of payments remains wide: on average in the three forecasting years, it is estimated at around 2.5 per cent, virtually the same as in the period 2015-17 (Figure 40).

Figure 40

Propensity to save of consumer households and current account balance
(percentage points)



Sources: Based on Bank of Italy and Istat data.
(1) Right-hand scale. – (2) Per cent of GDP.

Inflation is expected to rise gradually ...

Inflation is expected to dip temporarily this year, before gradually climbing back up again (Figure 41). The drop expected in 2018 (to 1.1 per cent on average for the year) is mostly attributable to the automatic waning of the effect of the increase in the prices of energy and food products registered in early 2017. The recovery in 2019-20, when inflation is expected to reach 1.5 per cent or slightly more in each of the two years, will presumably mostly reflect higher core inflation. As measured by the GDP deflator, it is estimated that prices will rise more rapidly, by 1.6 per cent in both 2018 and 2019, and by 1.9 per cent in 2020 (on average by around 1 percentage point more than in the period 2015-17).

... in part thanks to stronger wage growth

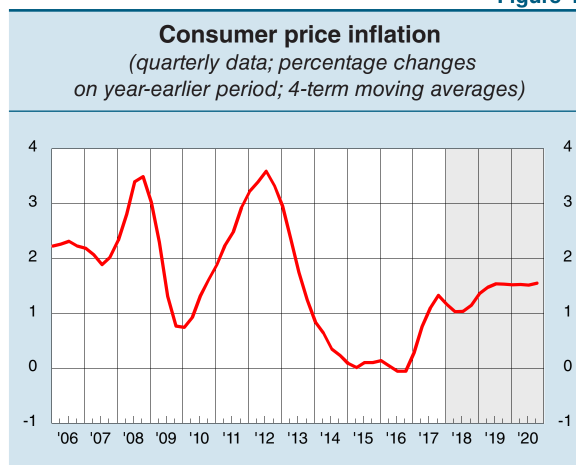
A gradual increase in wages, including public sector wages, should contribute to the recovery in inflation, as should the gradual phasing out of the tax breaks for open-ended hires made starting in 2015; these developments should have an immediate effect on the GDP deflator and a more gradual one on consumer

prices. It is estimated that private-sector earnings will expand by just under 1.5 per cent this year, then accelerate on average to around 2 per cent in the two years 2019-20: the new contracts are expected to gradually incorporate progressively higher inflation expectations and the improvement in cyclical conditions. The effect on unit labour costs should be mitigated by the cyclical turnaround in productivity. Profit margins in the private sector are expected to expand by a little under 1 percentage point over the three-year forecasting horizon, driven by strengthening demand; at the end of that period, they will have recovered around half of the drop recorded between 2008 and 2012.

Figure 41

Consumer price inflation

(quarterly data; percentage changes on year-earlier period; 4-term moving averages)



Sources: Based on Bank of Italy and Istat data.

The growth projections are revised upwards with respect to July

GDP growth projections are slightly higher than those contained in last July's *Economic Bulletin*. The upward revision was mainly influenced by the more favourable assumptions regarding foreign demand and interest rate developments, only partly offset by the appreciation of the exchange rate and higher crude oil prices; the largely pro-growth stance of the 2018 budget was also a contributory factor. Inflation estimates have been revised downwards by around one tenth of a percentage point for 2019, above all owing to the appreciation of the euro observed to date and price developments in services, which proved weaker in the second half of 2017 compared with the July forecasts. With respect to the estimates published in mid-December[3] as part of the Eurosystem coordinated exercise, growth is marginally lower, in line with slightly less favourable assumptions on interest rates, exchange rates and oil prices; consumer price inflation is projected to be around 0.2 percentage points higher in 2018.

The overall outlook is slightly more favourable than that of the other forecasters

The growth projections formulated here are broadly in line with those of the OECD published at the end of November and with the projections of the analysts polled by Consensus Economics in January; they are slightly more positive than those of the European Commission and much more favourable than those published by the International Monetary Fund (IMF) in October (Table 11). The inflation projections presented in this *Economic Bulletin* are around 0.1 percentage points below those of the main institutional forecasters for the current year, in line with the persistently weak core inflation observed in recent months; however, they are broadly consistent with the projections of these forecasters for 2019.

Table 11

Other organizations' forecasts for Italy

(percentage changes on previous period)

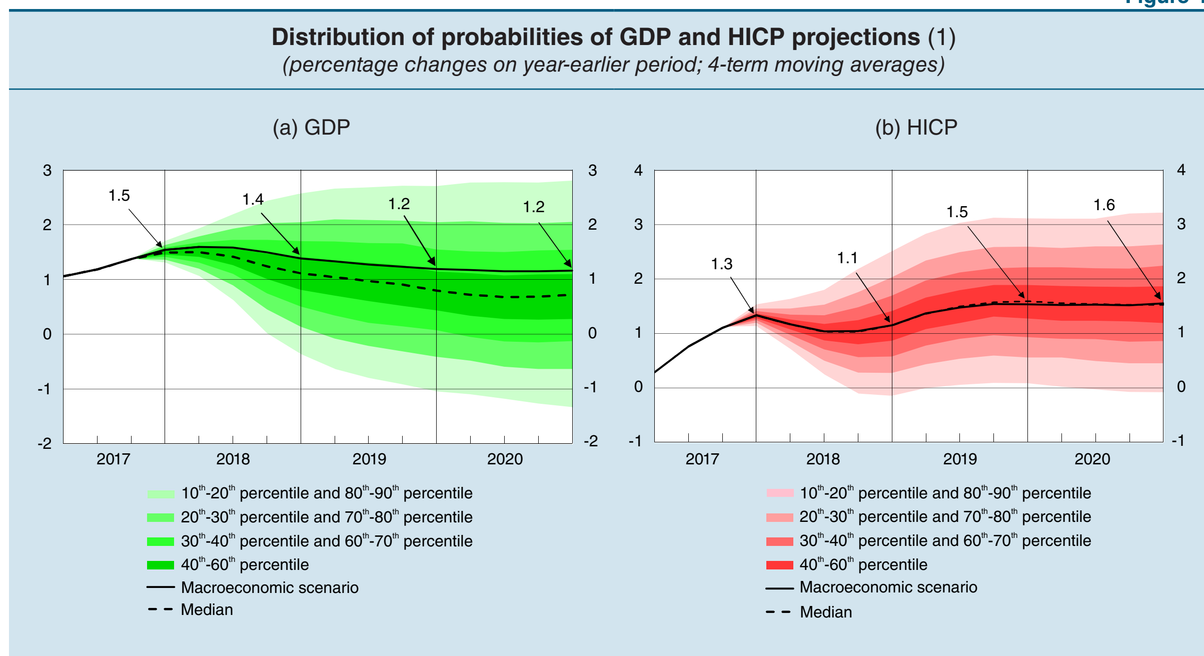
	GDP (1)			Inflation (2)		
	2018	2019	2020	2018	2019	2020
IMF (October)	1.1	0.9	1.0	1.2	1.4	1.4
OECD (November)	1.5	1.3	–	1.2	1.4	–
European Commission (November)	1.3	1.0	–	1.2	1.5	–
Consensus Economics (January)	1.4	1.1	–	1.1	1.4	–

Sources: IMF, *World Economic Outlook*, October 2017; OECD, OECD Economic Outlook, *November 2017; European Commission*, European Economic Forecast – Autumn 2017, November 2017; Consensus Economics, *Consensus Forecasts*, January 2018.
(1) The growth rate forecasts of the OECD are adjusted for calendar effects; those of the European Commission and IMF are not. – (2) HICP.

[3] See the Bank of Italy's website: Macroeconomic projections for the Italian economy, 15 December 2017.

Figure 42

Distribution of probabilities of GDP and HICP projections (1)
(percentage changes on year-earlier period; 4-term moving averages)



(1) The probability distribution is graphed, for percentile groups, by *fan charts*, based on stochastic simulations made via random extractions from the shock distribution of the Bank of Italy's quarterly econometric model. The distribution takes account of asymmetric shocks to the equations that reflect the main risk factors according to the procedure described in C. Miani and S. Siviero, 'A non-parametric model-based approach to uncertainty and risk analysis of macroeconomic forecasts', Banca d'Italia, Temi di Discussione (Working Papers), 758, 2010. The figure shows year-on-year percentage changes of 4-term moving averages. The value corresponding to the fourth quarter of each year coincides with the average annual percentage change.

Overall, it is estimated that the risks, which can be summed up in the probability distributions (Figure 42), are mainly on the downside for growth and balanced for inflation.

The risks to growth stem from the global situation and financial markets

The forecasting scenario described assumes the continuation of the current phase of strong business confidence and low volatility on share markets. The main risks to growth stem from global conditions and financial markets. The global economic recovery could be affected by any intensification of geopolitical tensions and by the uncertainty surrounding the future course of international economic policies, with adverse repercussions on the expansion of world trade. Furthermore, a deterioration in the international outlook or unexpected changes in the economic policies adopted in the main economic areas could lead to increases in financial market volatility and risk premiums, affecting financial conditions and consumption and investment decisions.

Among domestic risks, those connected with the weakness of the banking system and with the uncertainty over the strength of the recovery under way have abated compared with past quarters. This scenario, however, relies on the continuation of economic policies capable of fostering long-term economic growth, by supporting investment and consumption choices, while also lending credibility to public debt reduction objectives, by fully exploiting the upturn in the global economy.

Downward risks to inflation are still associated with the effects of a possible weakening of output and the possibility that the first signs of renewed wage growth observed to date fail to take hold (see Section 2.5); upward pressures could instead derive from fresh increases in the prices of energy commodities.