CONJONCTURE IN FRANCE

June 2017

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SOLID GROWTH

Solid growth

World trade has intensified further in early 2017, particularly in the emerging economies. In the Eurozone, gross domestic product accelerated once again (+0.6% after +0.5%), increasing a little more strongly than expected in France, Germany, Spain and Italy. The fundamentals of this growth are robust, as shown by the marked improvement in the business climate since the end of 2016. The UK and US economies slowed down in early 2017, meanwhile. This slowdown is likely to be only temporary in the US, where the upturn in corporate expenditure is being confirmed, but is likely to be more lasting in the UK, where consumers are finally adjusting their expenditure to the recent fall in their purchasing power.

There are many signals suggesting that the improvement in the emerging economies should last: Russia and Brazil are returning to growth after two years of severe recession, while the Chinese economy is no longer scaling back its investments and imports, and is even increasing them again significantly. World trade should therefore continue to grow solidly for the rest of the year, with its 2017 rise even being its highest since 2011.

The Eurozone is benefitting from this positive global environment. In addition to this, even though the positive stimuli since mid-2014 are fading out, the past improvement in the financial situation of agents should continue to bear fruits. Oil prices rose slightly, driving an upturn in inflation at the start of the year and limiting household purchasing power gains. Households are softening the impact on their consumption, however, by reducing their precautionary savings as unemployment continues to fall. Meanwhile, the effects of the past fall in the euro and the decline in interest rates are fading out. Investment financing terms remain very accommodating, however, both for companies that have restored their ability to finance them themselves, and for households which are spending strongly once again on new housing, making the most of interest rates that still remain low.

In France, the specific shocks that held back growth in 2016 should no longer do so in 2017. First of all, assuming that weather conditions are normal, the cereal harvests should clearly rebound in 2017, after knocking 0.2 points off growth in 2016. Next, the return of foreign tourists, if confirmed, could halt the marked deterioration in the tourism balance that followed the major terror attacks in the Paris region and Nice since 2015. Finally, after pulling itself out of the rut in 2016, construction activity should accelerate significantly in 2017. Despite temporary negative factors, such as decreases in industrial activity and in heating expenditure, growth barely slipped in Q1 (+0.4% after +0.5%). It should remain at that pace on the whole over the forecasting period (+0.5% in spring and summer, +0.4% at the end of the year), in line with a business climate that was well above its long-term average in May, and actually at its highest since mid-2011 in industry and building. On an annual average basis, growth should therefore stand at +1.6% in 2017, after +1.1% in 2016, posting its strongest rise since 2011. Although less buoyant, domestic demand should remain robust and foreign trade should deteriorate significantly less than last year.

Growth in activity and policies to reduce labour costs should again boost employment which should increase again significantly in 2017 (+220,000). This rise should drive a continuing fall in the unemployment rate, by 0.6 points year on year, to 9.4% of the French labour force at the end of the year.

There are two main uncertainties surrounding this scenario. The first concerns the savings behaviour of European households. In 2017, their consumption should slow significantly less than their purchasing power, as was already observed in Italy and in Spain at the end of 2016 and the beginning of 2017, notably because unemployment is continuing to fall. If this trend should become more pronounced or be reversed, then Eurozone growth will be stronger or weaker. There is also uncertainty surrounding French exports which stumbled in Q1. The scenario is based on a rebound in the spring, but French exports are likely to continue losing market share over the year as a whole. Over the coming quarters, French exports could provide a nice surprise or could disappoint once again. In the latter case, questions will be raised as to the ability of the French economy to benefit from a better environment. ■

General outlook

In Q1 2017, world trade was again very dynamic

The emerging economies pick up again

In Q1 2017, activity accelerated in Russia (+0.4% after +0.3%) and returned to growth in Brazil (+1.0%), after contracting sharply for eight consecutive quarters. In China, activity picked up in industry, with year-on-year growth in industrial production exceeding +7.5% in March for the first time since the end of 2014. All in all, imports of the emerging economies remained very dynamic (+3.8% after +2.4%).

US consumption at a standstill

In Q1 2017, the advanced economies decelerated somewhat (+0.4% after +0.5%), mainly due to the United States (+0.3% after +0.5%) where household consumption slowed sharply. Corporate investment confirmed its recovery, however, and progressed strongly. In Japan, gross domestic product (GDP) continued to rise moderately (+0.3%). In the United Kingdom, activity finally slowed (+0.2% after +0.7%), as households adjusted their expenditure to the past fall in their purchasing power due to the marked upturn in inflation. All in all, world trade remained very dynamic (+2.2% after +1.7%).

Activity accelerated in the Eurozone

In the Eurozone, growth picked up a little at the beginning of 2017 (+0.6% after +0.5%), slightly more than forecast in *Conjoncture in France* in March. It was boosted by the acceleration in investment. Growth was stronger in particular in Germany (+0.6% after +0.4%), where construction activity benefitted from a mild winter, in Spain (+0.8% after +0.7%) and even in Italy (+0.4% after +0.3%).

In France, activity slowed a little in Q1

In France, activity decelerated slightly at the beginning of 2017 (+0.4% after +0.5%), although a little less than forecast in *Conjoncture in France* in March (+0.3%). Manufacturing production stumbled (–0.2% after +0.7%), due mainly to refinery stoppages. On the demand side, household consumption was at a standstill (+0.1% after +0.6%) as energy expenditure slipped, under the effect of the mild weather conditions at the end of the winter after a cool autumn. Corporate investment accelerated sharply, however (+1.9% after +0.9%), driven notably by very dynamic purchases of capital goods before the end of the one-off additional depreciation allowance. Finally, exports fell back significantly (–0.8% after +1.0%), in particular those of aircraft after the record deliveries at the end of 2016, and imports became more dynamic (+1.4% after +0.6%), partly due to exceptional purchasing: the contribution of foreign trade to growth was once again very negative (–0.7 point).

The financial environment remains favourable in Europe

The Fed set for further rate hikes

On the other side of the Atlantic, inflation is now above 2% and the unemployment rate is at its lowest since 2007 (4.3%): the Federal Reserve (Fed) therefore raised its main base rate to 1% in March and is likely to continue tightening its monetary policy through to the end of the year. Conversely, the ECB is continuing its government security purchases, although it has slowed the pace since April to €60 billion a month (against €80 billion previously).

Sovereign yields easing, the Euro slightly up

With the rise in US base rates, the expected upturn in inflation and anticipation of an expansionist fiscal policy in the US after the election of Donald Trump, sovereign yields rose all over the world at the end of 2016. For France, the 10-year sovereign yield temporarily hit 1.2% in March, but fell back to 0.6% in mid-June. Likewise, the euro, which had lost ground against the dollar since the end of 2016, has gained in value since then and stood at $1.12 in early June, the same level as last summer.

OPEC has cut its production but the rise in oil prices has been contained

Just after the announcement at the end of November of the agreement to reduce the production of the OPEC countries and Russia, oil prices rose to about $55 per barrel of Brent. The agreement has been respected on the whole and the cartel's production fell by 1.4 million barrels a day in Q1, causing a marked deficit in the physical market worldwide. However, the particularly high level of stocks and the recovery of unconventional production in the US have contained any price rises. Through to the end of the year, despite the continuing deficit in the physical market with the renewal of the agreement, oil prices should hover around $53 per barrel.

In 2017, world trade picks up

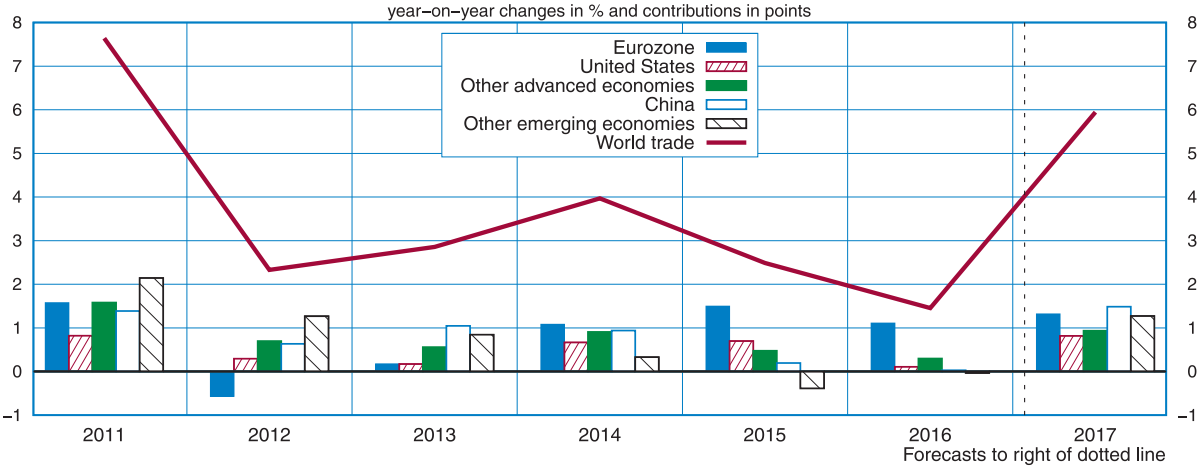
The emerging economies looking brighter

After improving continuously since mid-2015, the business climate in the emerging economies levelled out in spring 2017 at a level that is above the expansion threshold, although still well below the levels of the 2000s. In China, growth should hold up in 2017 at +6.8%. Investment should stop falling and this, combined with a recovery in processing trade, should boost imports. With the stabilisation of commodity prices and the upturn in Chinese demand, the currencies of the commodity-producing countries have stopped falling, thus contributing to a fall in inflation. As losses in purchasing power ease, activity should accelerate in 2017 in Russia, and Brazil should emerge from recession. All in all, the imports of the emerging economies should increase by 8.8% in 2017, after falling for two years (*Graph 1*).

In the United States, post-electoral optimism is barely fading

In the advanced economies, the business climate has progressed significantly since the end of 2016, despite a marked upturn in inflation affecting household purchasing power. This is the case notably in the United States, where the business climate and household confidence have leapt upwards since November's presidential election and remain at a high level despite a recent downturn (*Graph 2*). After being affected temporarily by weak private and government consumption in Q1, US activity should accelerate in Q2 (+0.7%), then remain steady in H2 (+0.5% per quarter). Over the year as a whole, growth should come to +2.1% (after +1.6% in 2016), thanks to the recovery in corporate expenditure. In Japan, activity should only just accelerate in 2017 (+1.1% after +1.0%), notably driven by an upturn in household consumption. In the UK, meanwhile, activity should progress much less quickly (+0.3% per quarter) than the average between 2013 and 2016: households are likely to continue adjusting their spending to the past fall in their purchasing power.

1 - World trade to progress by 5.9% in 2017, a growth rate not seen since 2011



Sources: DG Trésor, INSEE calculations

General outlook

World trade to increase by 5.9% in 2017, a level not seen since 2011

After slowing down sharply in 2015 (+2.5%), world trade increased by only 1.5% in 2016, posting its weakest growth since 2009, due to sluggish US and emerging economy imports. After progressing strongly for two quarters at the end of 2016 and beginning of 2017, the pace of purchases should remain sustained through to the end of the year (+1.2% on average per quarter), as suggested by the leading customs data from the Asian countries and the very high level of foreign orders in business tendency surveys around the world. All in all, world trade should grow by 5.9% in 2017, close to the average annual rise between 1990 and 2007 (+6.3% a year), a growth rate not seen since 2011.

In the Eurozone, the business climate in spring 2017 is at a ten-year high

The business climate has improved in the Eurozone since the end of 2016, notably in industry

In the Eurozone, the business climate in industry in May was at its highest since mid-2011 in the European Commission surveys and in Markit's PMI indicator. The business climate calculated by the Commission, all sectors included, reached its highest in ten years in the spring.

European households have cut their savings ratio slightly in the face of the upturn in inflation

In the Eurozone, due to energy prices, headline inflation has risen significantly since the end of 2016, to +2.0% in February 2017, when it had still been in negative territory in mid-2016. It has already fallen back slightly to +1.4% in May and should remain at this level through to the end of the year. Core inflation is increasing slightly and should reach +1.2% at the end of 2017, against +0.8% at the end of 2016, as wages accelerate a little. Employment should remain solid and the unemployment rate continue to fall, to 8.8% at the end of 2017, 0.9 points lower than one year previously. All in all, due to inflation, the purchasing power of European households was at a standstill at the end of 2016 and beginning of 2017 and it should slow down significantly, on an annual average basis, to +1.2% in 2017, after +1.9%. However, their consumption should decelerate less quickly (+1.6% in 2017 after +2.0%), as Italian and Spanish households lower their propensity to save.

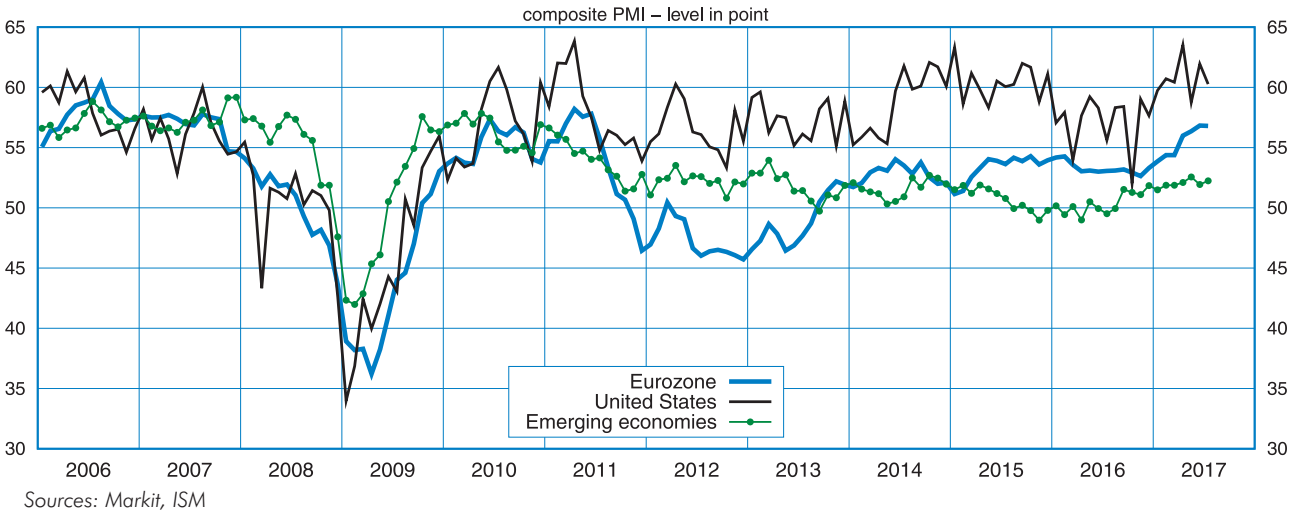
Investment to remain strong

Investment in equipment rebounded in early 2017 and should remain strong over the rest of the year, with production capacity utilisation rates being at their highest since 2008. Investment in construction, meanwhile, was very dynamic in Q1 thanks to the mild winter and is likely to stall in reaction in Q2, notably in Germany. It should pick up momentum in H2 in line with the recent upturn in building permits.

Growth to remain robust in the Eurozone

All in all, growth should remain solid in the Eurozone, at +0.5% per quarter, and then rise in small increments on average over the year: +1.8% in 2017 after +1.6% in 2016: it should remain stronger in Spain (+3.0%) than in Germany (+1.9%), France (+1.6%) and Italy (+1.3%).

2 - The business climate in the Eurozone has been progressing significantly since the end of 2016



Sources: Markit, ISM

After holding back growth in 2016, French foreign trade should weigh down much less in 2017

Buoyed by the worldwide improvement, French exports should rebound by the end of the year

French exports fell back significantly at the start of 2017 (–0.8% after +1.0%), affected notably by the profile of aeronautical deliveries. In Q2, they should rebound strongly (+2.2%), driven in particular by deliveries on major contracts, and then increase further in H2 (+0.9% then +1.3%). Aside from the ups and downs linked to aeronautical and shipbuilding activities, foreign sales should benefit from strong world demand, the restart of nuclear power plants and the return of tourists to France: annual growth in exports should reach +2.8% in 2017, after +1.9% in 2016.

Despite strong imports, foreign trade should weigh down less on activity

In Q2 2017, imports should be at a standstill (0.0% after +1.4%), as a backlash after the exceptional purchases at the start of the year, in particular in pharmaceutical products. In H2, they should increase again in response to domestic demand (+0.5% then +0.7% per quarter). Over the year as a whole, they should again increase strongly, (+3.5% after +4,2%). However, thanks to the acceleration in exports, foreign trade should weigh down much less on growth in 2017 (–0.3 points) than in 2016 (–0.8 points). The balance of trade in manufactured goods is likely to worsen, however, to its lowest since 2011.

The French economy to accelerate at last in 2017

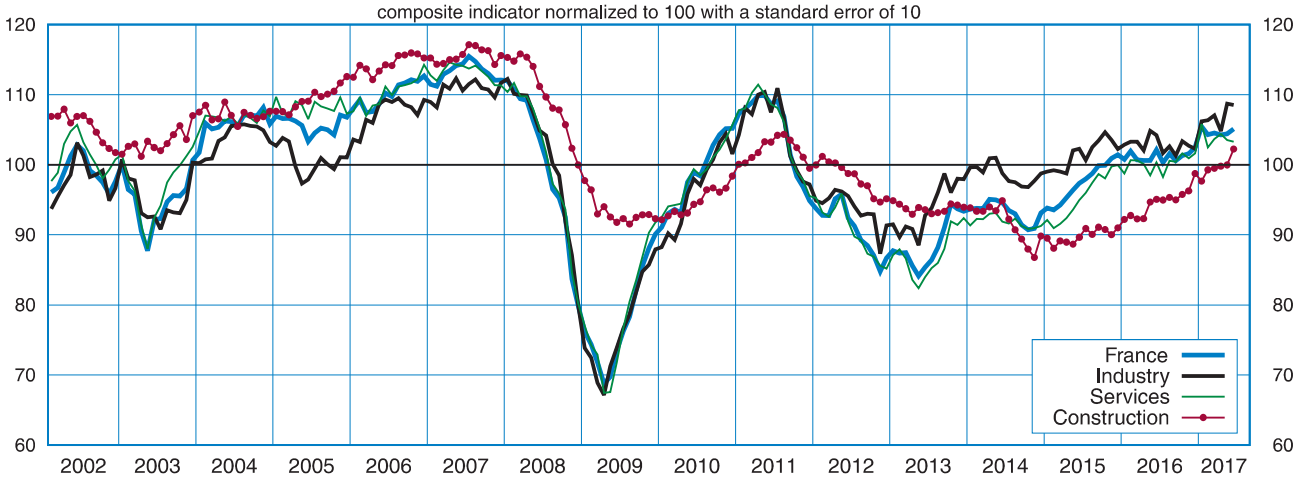
The business climate in France has improved since December, in industry in particular

From October 2015 to November 2016, the business climate in France remained almost stable at a little above its long-term average. It has risen since December and stood at 105 in May 2017, well above its long-term average. The improvement is very clear in industry, where the business climate reached 109 in May, its highest since mid-2011 (*Graph 3*). Business managers are particularly optimistic as to prospects for their activity and foreign demand, and report that their order books are filling up. Manufacturing production should therefore increase in Q2 and continue rising robustly in H2. It should stand at +1.5% on an annual average basis in 2017 (after +0.8% in 2016).

Agricultural production to rebound, contributing to the acceleration in activity in 2017

In 2016, agricultural production collapsed (–5.6% after –1.5% in 2015), knocking 0.2 points off GDP growth: cereal and wine harvests were hit by exceptionally bad weather conditions. In 2017, assuming that weather conditions return to normal, agricultural production in cereals should return to a level close to its average, contributing +0.1 points to activity overall.

3 - In France, the business climate has been improving since December and was at its highest since mid-2011 in industry in May 2017



Source: INSEE

General outlook

Market services should benefit from the return of the tourists

Despite an expected slowdown in household consumption, production of market services should accelerate in 2017 (+2.4% after +1.3% in 2016) thanks to strong industrial production and corporate investment. The transport and the accommodation and food services branches should also benefit from the return of the tourists: overnight stays by foreigners were up 4.7% year on year in Q1 and this rebound should continue through to the end of the year.

Construction to return to steady growth

After falling sharply in 2014 (–1.9%) and in 2015 (–1.5%), activity in construction stopped contracting in 2016 (+0.1%) and should accelerate sharply in 2017 (+1.8%): the construction of housing in particular returned to growth, following the increase in sales of new homes and then in building permits, with the usual time lag.

All in all, French GDP should rise by 1.6% in 2017, a level of growth not seen since 2011

All in all, GDP should progress by 0.5% per quarter in Q2 and Q3, then by 0.4% at the end of the year. Annual growth should stand at +1.6%, its strongest since 2011. French activity should thus return to a growth rate closer to that of the Eurozone, after three years of weaker growth than its neighbours.

Employment progresses steadily, unemployment down

The French economy should generate 203,000 market-sector jobs in 2017, almost the same as in 2016

Market-sector payroll employment progressed significantly once again in Q1 2017 (+76,000 after +60,000 at the end of 2016). Workforce prospects are looking positive in the business tendency surveys and the employment climate stood at 108 in May. Market-sector employment should therefore increase again in Q2 (+45,000). Over H1 as a whole, the Tax Credit for Encouraging Competitiveness and Jobs (CICE), the Responsibility and Solidarity Pact (PRS) and the hiring premium in SMEs have increased the employment intensity of growth by 40,000 new jobs. In H2, that effect should be zero overall, due to the end of the hiring premium, and market-sector employment is likely to slow down (+82,000). All in all, 203,000 market-sector jobs should be created in 2017, almost the same number as in 2016.

Subsidised non-market employment to fall in H2

In 2017, non-market-sector employment should slow down (+17,000 after +49,000 in 2016). Its private component should remain dynamic and the number of civil servants should increase slowly. However, the number of beneficiaries of subsidised jobs is set to fall, especially in H2. All in all, taking account of the fact that agricultural employment and self-employment are almost stable, 222,000 jobs should be created in 2017, after 255,000 in 2016.

Unemployment to fall again by the end of the year

In Q1 2017, the unemployment rate fell significantly (–0.4 points over the quarter and –0.6 points year on year) to 9.6% of the French labour force, its lowest level since early 2012. Over the following quarters, the expected rise in employment should again exceed the change in the labour force and the number of unemployed should continue to fall, although more moderately. The unemployment rate should stand at 9.4% at the end of 2017.

In 2017, purchasing power should slow down due to the upturn in inflation

Inflation has picked up since December due to its energy component

Since the end of 2016, inflation has picked up significantly, reaching +0.8% year on year in May 2017, against 0.0% one year earlier. This upturn was driven mainly by its energy component, with the rises in oil prices and in taxes on petroleum products. Through to the end of 2017, headline inflation should barely rise at all: +1.1% in December. Core inflation is likely to remain low, at +0.8% in December 2017, against +0.4% one year earlier: the past fall in commodity prices should stop weighing down on the prices of manufactured products and the recent rise in commodity prices should not yet begin to work through. In addition to this, the increase in rents, which are index-linked to past inflation, should remain moderate.

Nominal wages to accelerate a little

In 2017, mainly due to the upturn in inflation and the fall in unemployment, nominal wages per capita in the market sector should increase slightly more than in 2016 (+1.6% after +1.3%). In the civil service, wages should accelerate more clearly, boosted by increases in the index point and statutory measures set out in the Finance Law.

Purchasing power to slow down due to the upturn in inflation

In 2017, earned income should accelerate, essentially due to wages. Benefits, which are index-linked to past inflation, should not accelerate, while taxes should increase more than in 2016, as the tax cuts that were passed were smaller than the previous year. All in all, purchasing power gains should slow significantly, at +1.1% after +1.8% in 2016, hit by the upturn in inflation (*Graph 4*).

Household consumption to slow down in 2017 and the savings ratio fall slightly

Household consumption should progress by 1.2%, almost twice as slowly as in 2016

Household consumption was at a standstill in Q1 (+0.1%), essentially due to heating expenditure. It should rebound in a backlash effect in the spring (+0.4%) then progress moderately in H2 (+0.3% per quarter). On an annual average basis, it should be less dynamic: +1.2% against +2.1% in 2016.

The savings ratio should fall slightly in 2017, reaching its lowest since 1990

Since 2015, the consumption of French households has progressed a little more quickly than their purchasing power. In 2017, the expected fall in unemployment should facilitate a slight drop in their precautionary savings and the savings ratio should slip once again to 13.9% after 14.0% in 2016, its lowest since 1990.

Investment to remain dynamic in 2017

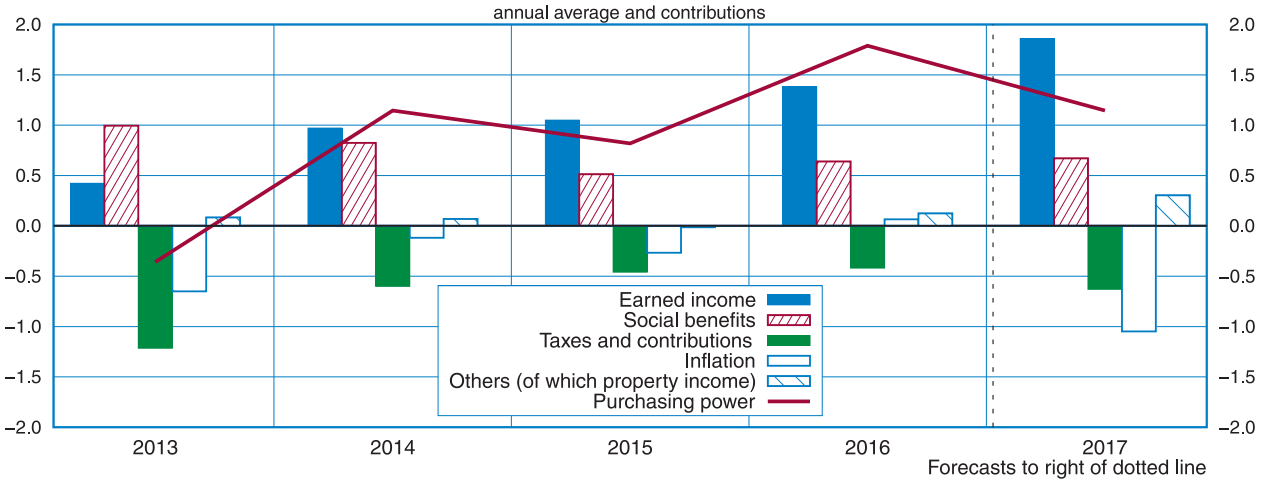
Corporate investment to increase sharply again in 2017

In Q1, corporate investment progressed strongly, boosted by purchases of capital goods and expenditure on services. Conditions are set to remain favourable: prospects for (notably external) demand are looking bright, the margin rate and self-financing capacity are stable at a relatively high level and, despite a slight rise, borrowing costs remain very low. However, the end of the one-off additional depreciation allowance since mid-April should cause a marked jolt in investment expenditure. Total corporate investment should therefore fall in Q2 (–0.2%) then pick up again in H2 (+0.7% on average per quarter), bringing growth over the year to +2.9%. The investment rate should therefore stand at its highest level since 2008.

Household investment to maintain momentum in 2017

Household investment has been accelerating progressively for a year and its growth stood at 1.0% in early 2017. The recent rise in building permits suggests that this trend should continue almost at the same rate: household investment should therefore rise by 3.7% in 2017, a rise on a scale not seen since 2006 (*Graph 5*).

4 - Purchasing power to slow down in 2017 due to the upturn in inflation



Source: INSEE

Uncertainties: exports and consumption behaviour

The improvement in the short-term climate would appear to be firmly established, with the result that the uncertainties surrounding this forecast seem fewer than usual. Nevertheless, two main uncertainties have been identified.

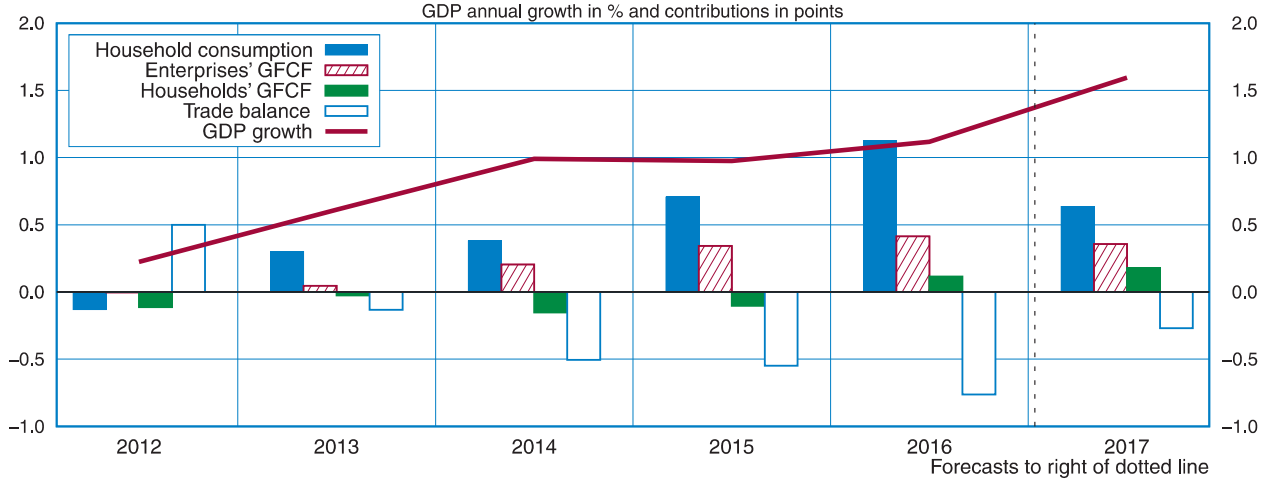
Ability of exports to rebound after the disappointing start to the year

In Q1, manufacturing exports fell despite the acceleration in world trade. The scenario is based on a rebound in Q2, but the acceleration is likely to be modest over the year as a whole, showing further losses of market share. Like last year, exports could be higher than expected at the end of the year or they could disappoint, in the latter case raising questions as to the ability of the French economy to benefit from the improvement in the international environment.

Extent of the fall in the savings ratio in the Eurozone

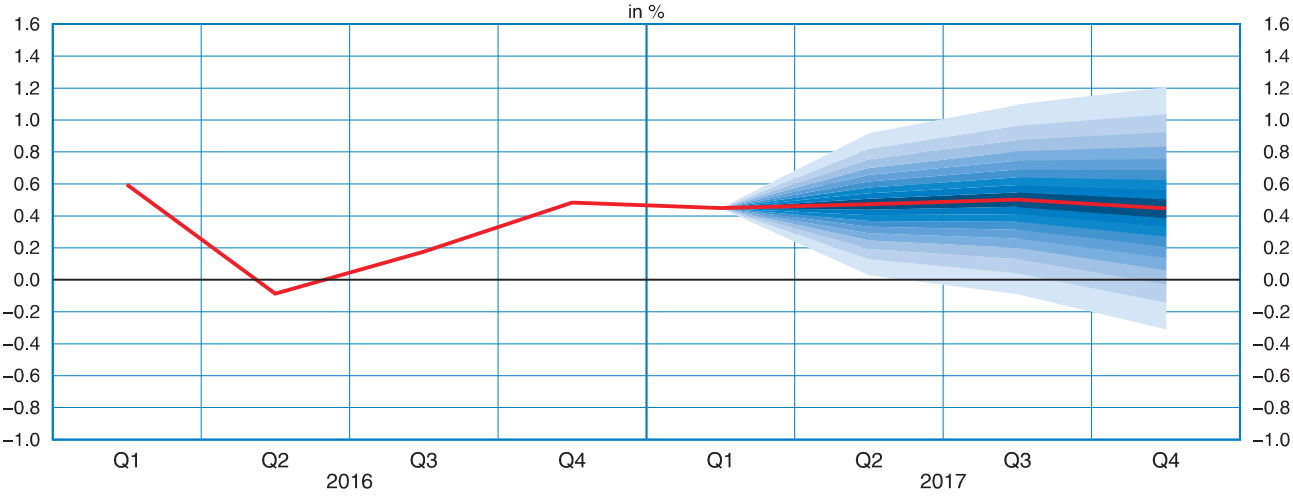
In the Eurozone, consumption should slow down significantly less than purchasing power in 2017 as households reduce their precautionary savings, in Italy and Spain in particular. This movement was already observed at the end of 2016 and beginning of 2017 but could either become stronger over the rest of the year or be reversed, thus affecting activity. ■

5 - In 2017, foreign trade should weigh down less and household investment accelerate



Source: INSEE

6 - Fan chart for *Conjoncture in France*



How to read it: the fan chart plots 90% of the likely scenarios around the baseline forecast (red line). The first and darkest band covers the likeliest scenarios around the baseline, which have a combined probability of 10%. The second band, which is a shade lighter, comprises two sub-bands just above and just below the central band. It contains the next most likely scenarios, raising the total probability of the first two bands to 20%. We can repeat the process, moving from the centre outwards and from the darkest band to the lightest, up to a 90% probability (*see INSEE Conjoncture in France* for June 2008, pages 15 to 18). It can therefore be estimated that the first estimate that will be published in the quarterly accounts for Q2 2017 has a 50% chance of being between +0.3% and +0.7%.

Source: INSEE

Key figures: France and its international environment

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
International environment															
Advanced economy GDP	0.5	0.4	0.4	0.3	0.4	0.4	0.6	0.5	0.4	0.5	0.5	0.4	2.0	1.7	1.9
Eurozone GDP[1]	0.4	0.4	0.3	0.4	0.6	0.3	0.3	0.4	0.6	0.5	0.5	0.5	1.5	1.6	1.8
Barrel of Brent oil (in dollars)	55	63	51	45	35	47	47	51	55	52	53	53	53	45	53
Euro-dollar exchange rate	1.13	1.10	1.11	1.10	1.10	1.13	1.12	1.08	1.06	1.10	1.12	1.12	1.11	1.11	1.10
World demand for French products	1.2	0.1	0.7	0.8	–0.1	1.3	0.5	1.9	1.5	1.3	1.1	1.0	3.5	2.5	5.3
France - supply and uses															
GDP	**0.4**	**0.0**	**0.4**	**0.2**	**0.6**	**–0.1**	**0.2**	**0.5**	**0.4**	**0.5**	**0.5**	**0.4**	**1.0**	**1.1**	**1.6**
Imports	1.8	0.2	1.7	2.6	0.6	–1.1	2.8	0.6	1.4	0.0	0.5	0.7	5.5	4.2	3.5
Household consumption	0.4	0.1	0.6	0.1	1.3	0.3	0.1	0.6	0.1	0.4	0.3	0.3	1.3	2.1	1.2
GG and NPISHs consumption	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.2	1.2	1.2
Total GFCF	0.4	–0.3	0.8	1.4	1.1	–0.1	0.2	0.5	1.2	0.1	0.7	0.7	0.9	2.7	2.3
of which: NFEs	*1.1*	*0.6*	*0.7*	*1.8*	*1.6*	*–0.3*	*–0.2*	*0.9*	*1.9*	*–0.2*	*0.8*	*0.7*	*2.9*	*3.4*	*2.9*
Households	*–0.6*	*–0.4*	*0.1*	*0.7*	*0.8*	*0.7*	*0.9*	*0.9*	*1.0*	*0.9*	*0.9*	*0.8*	*–2.1*	*2.4*	*3.7*
General government	*–0.2*	*–3.3*	*2.2*	*1.2*	*–0.5*	*–0.6*	*0.0*	*–1.5*	*–1.2*	*0.2*	*0.5*	*0.5*	*–3.1*	*–0.2*	*–2.0*
Exports	1.1	1.3	–0.1	0.6	0.3	0.2	0.6	1.0	–0.8	2.2	0.9	1.3	4.0	1.9	2.8
Contributions (in point)															
Domestic demand excluding changes in inventories[2]	0.3	0.1	0.6	0.4	1.0	0.2	0.1	0.5	0.4	0.3	0.4	0.4	1.2	2.0	1.5
Changes in inventories[2]	0.3	–0.4	0.4	0.5	–0.4	–0.7	0.7	–0.2	0.7	–0.5	0.0	–0.1	0.3	–0.1	0.4
Net foreign trade	–0.3	0.3	–0.6	–0.7	–0.1	0.4	–0.7	0.1	–0.7	0.7	0.1	0.2	–0.5	–0.8	–0.3
France - situation of households															
Total employment	2	53	17	59	64	54	72	65	90	52	41	40	131	255	222
Non-farm market sector employment	1	32	25	49	52	36	57	60	76	45	41	41	108	205	203
ILO unemployment rate France[3]	10.3	10.5	10.4	10.2	10.2	10.0	10.0	10.0	9.6	9.6	9.5	9.4	10.2	10.0	9.4
Consumer price index[4]	–0.1	0.3	0.0	0.2	–0.1	0.2	0.4	0.6	1.1	0.8	1.1	1.1	0.0	0.2	1.1
Core inflation[4]	0.2	0.6	0.6	0.9	0.7	0.7	0.7	0.4	0.4	0.5	0.5	0.8	0.5	0.6	0.5
Household purchasing power	0.3	–0.2	0.6	0.6	0.6	0.3	0.6	0.1	0.1	0.5	0.3	0.2	0.8	1.8	1.1

Forecast

1. Eurozone excluding Ireland, as this country's accounts present a break in series in Q1 2015
2. Changes in inventories include acquisitions net of sales of valuable
3. For annual data, unemployment rate is that of the last quarter of the year
4. Year-on-year on the last month of the quarter and annual averages

GDP: gross domestic product
GFCF: gross fixed capital formation
GG: general government
NFEs: non-financial enterprises
NPISHs: non-profit institutions serving households
ILO unemployment: unemployment as defined by the International Labour Organisation

How to read it: the volumes are calculated at the previous year's chain-linked prices, seasonally and working-day adjusted, quarterly and annual averages, as a %.

Source: INSEE

Special Analysis

In 2017, the trade openness ratio of the global economy would appear to be recovering at last

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In 2016, growth in world trade slowed once again (+1.5% in real terms after +2.5%), reaching its lowest rate since the 2008-2009 crisis. Since 2012, world trade has grown on average by 2.7% a year, compared to 5.9% a year between 1986 and 2011. It has therefore increased slightly less quickly than world activity over the last five years (+3.0% on average), whereas it was growing almost twice as fast before the crisis. The trade openness ratio, calculated as the ratio of imports to economic activity, has thus fallen slightly since 2011, after following an upwards trend over the two decades preceding the recent major crisis.

Several reasons can be proposed to explain this dip. It could be an effect of the composition of final demand: the slowdown in items with a high import content, in particular corporate investment, may have had a negative effect on trade. There could also be an effect of the geographical composition of world growth, with the most open zones having experienced the largest slowdown. Finally, the trend towards greater trade openness may have been reversed because world economies are no longer participating to the same extent as before in the process of international production fragmentation. These explanations are not mutually exclusive and go beyond a simple opposition between cyclical and structural factors.

A modelling exercise based on a set of international macroeconomic panel data on 19 countries makes it possible to quantify the effects of these different factors. For all these countries, the dip in the openness ratio since 2011 would thus appear to be due above all to a halt in the process of international production fragmentation, which seems to explain about half of it. A second significant factor, the change in the geographical composition of trade, is thought to explain a little over a third of the dip in the trade openness ratio. The effect of the composition of demand on the openness ratio, on the other hand, is thought to be weaker.

The model suggests that a recovery in the trade openness ratio could occur in 2017. The contribution of the process of international production fragmentation looks as if it will be less unfavourable to the openness ratio, as suggested in particular by the recent upswing in processing trade in Chinese customs data. In addition, world activity is expected to accelerate in 2017, in particular corporate investment, leading to a strong rebound in global trade.

In 2017, the trade openness ratio of the global economy would appear to be recovering at last

Since 2012, world trade has increased more slowly than activity

From 2012 to 2016, the growth in world trade more than halved compared to the years before the 2008-2009 crisis

Since 2012, world trade, defined here as the sum of imports of goods throughout the world, has been slow. In real terms, it has increased by 2.7% on average since 2012, that is to say that the growth rate has been half the average increase between 1986 and 2011 (+5.9%; *Graph 1*). For its part, gross domestic product (GDP) has grown slightly more slowly since 2012 (+3.0% a year) than in the period 1986-2011 (+3.7%): imports, which were increasing almost twice as fast as GDP until then, have also been increasing more slowly than GDP since 2012.

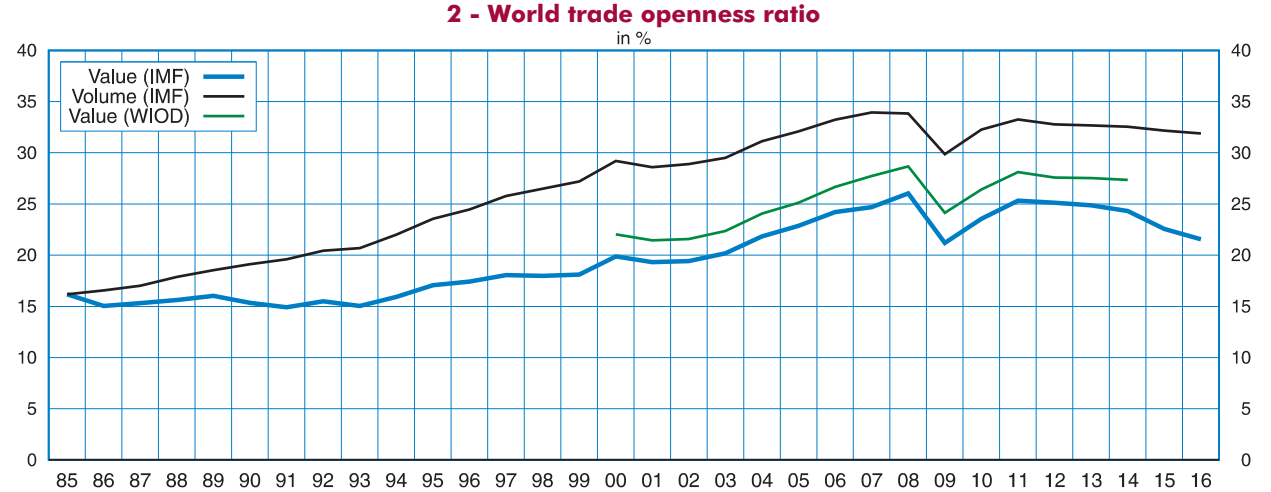
Whereas it rose regularly over the previous two decades, the trade openness ratio of the global economy has fallen slightly since 2011

The trade openness ratio, which is calculated as the ratio of imports to economic activity, is an indicator of the interdependence between economies. Before the 2008-2009 crisis, it was increasing fast and steadily: expressed in real terms, it doubled between 1986 and 2007, going from 17% to 34% over the period (*Graph 2*). During the major recession that occurred in 2008-2009, it fell back sharply, before picking up again in 2010-2011. Since then however, the trade openness ratio has not returned to its pre-crisis trend, and has even fallen slightly again (–2 points to 32% in 2016). A similar trend is found when the openness ratio is calculated based on changes in value terms.

1 - World trade growth

Sources: DG Trésor, INSEE calculations

2 - World trade openness ratio



Note: the global trade openness ratio corresponds to the ratio of global imports to world activity, expressed as a percentage. The trade openness ratio in real terms has been calculated from the changes in volumes of imports and world activity, taking the trade openness ratio in 1985 as the base year.
How to read it: in 2014, the openness ratio in value is 27% according to the source WIOD and 24% according to the source IMF. In volume, it is 33%.

Sources: IMF data for 193 countries, World Input-Output Database (WIOD) for 44 countries, calculations by authors

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The trade openness ratio of emerging Asian countries has seen a particularly marked slowdown

The detailed data in value terms from the WIOD2 project concerning 44 countries representative of the world economy from 2000 to 2014 (*Box 1*) provide information first of all on the geographical origin of this dip. Between 2000 and 2011, the global trade openness ratio calculated in value terms increased by 6 points to 28%, then fell by 1 point to 27% in 2014, representing a slowdown of 0.8 points as an annual average between the two periods.

The slowdown in the openness ratio affected all five major economic zones, with the exception of that consisting of the non-Asian emerging countries (*Table 1*). The most significant slowdown concerned the Asian emerging countries (China, India, Malaysia), whose trade openness ratio in 2014 fell back to its 2000 level (18%) after reaching 23% in 2011.

A geographical composition effect explains just over a third of the overall slowdown

However, the slowdown in each of the different zones alone does not explain the dip at global level: regional economic dynamics have also played a role. Given the substantial disparities in the ratios of openness between them, variations in the relative weights of these zones in the global economy also have an influence on the overall trade openness ratio. For example, for a country with an above-average openness ratio, when its weight in global GDP increases, the proportion of imports in GDP increases at world level.

By following the framework proposed by Berthier (2002),[1] a geographical composition effect can be identified in the slowdown in the global trade openness ratio between the 2000/2011 and 2011/2014 periods (*Table 1*). While most of the slowdown is due to that of the openness ratios of the different zones, just over

1. For a presentation, see appendix 2 of the Special analysis, *Conjoncture in France*, December 2016 "Why have French exporters lost market share?", p. 56-57.

Table 1 - Slowdown in the openness ratio, contribution by zone and geographical composition effect

	All	Eurozone	North America	Other advanced and CEEC	Emerging Asian countries	Other emerging countries
Openness ratio by zone in value (in %)						
(a) in 2000	22	31	14	19	18	36
(b) in 2011	28	37	16	29	23	37
(c) in 2014	27	37	15	31	18	38
Annual average variation 2000-2011 (in points) d = (b–a)/11	0.55	0.57	0.22	0.89	0.41	0.03
Annual average variation 2011-2014 (in points) e = (c–b)/3	–0.25	0.03	–0.29	0.65	–1.49	0.53
Slowdown between the periods 2000-2011 and 2011-2014, in points (e–d)	–0.80	–0.54	–0.51	–0.24	–1.90	0.50
Weight of the zone in the world GDP in value (in %)						
in 2000	100	19	34	27	6	15
in 2011	100	18	25	21	15	22
in 2014	100	16	25	19	18	22
Contribution to the slowdown in the openness ratio (in points)	**–0.80**	**–0.15**	**–0.26**	**–0.11**	**–0.32**	**0.04**
of which slowdown of the zone's openness ratio	–0.50	–0.11	–0.14	–0.08	–0.28	0.11
of which variation of the zone's weight in the world economy (geographical composition effect)	–0.30	–0.04	–0.12	–0.02	–0.04	–0.07

How to read it: the trade openness ratio slowed by 0.80 points between the periods 2000-2011 and 2011-2014, and the Eurozone contributed –0.15 points to this slowdown; this contribution breaks down into an effect linked to the slowdown in the trade openness ratio in the Eurozone on the one hand (–0.11 points) and a geographical composition effect due to the change in the weight of the Eurozone in global GDP on the other (–0.04 points).
Sources: World Input-Output Database (WIOD), calculations by authors

a third can be explained by the change in the geographical structure of the global economy. During the 2000s in particular, the least open zone, North America, was less dynamic than the rest of the world. Conversely, this zone has been growing at a rate close to that of world activity since 2012: the stabilisation of its share in global GDP has mechanically led to a dip in the global trade openness ratio.

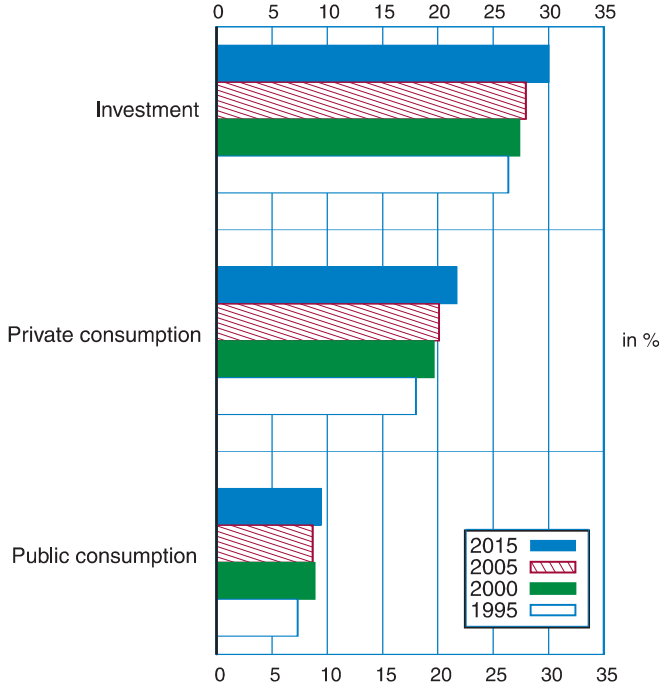
All in all, the two zones contributing the most to the slowdown are North America, particularly the United States, and emerging Asia, each accounting for about a third of the overall slowdown. For emerging Asia, this is due above all to the wide variation in its own trade openness ratio.

Changes in the composition of demand account for about 15% of the slowdown in the trade openness ratio

Import intensity-adjusted aggregate demand traces the slowdown in world trade better than global activity

To grasp the influence of economic activity on imports and world trade, it has become customary to use, instead of GDP, an aggregate variable taking into account the differences in import content of the components of demand (Bussières *et al.*, 2013; INSEE, 2017). The growth in world trade is all the stronger, at a given level of economic growth, when the latter rests on demand components requiring a high proportion of imports. In particular, corporate investment uses a lot of imported goods, especially capital goods, unlike household consumption or general government consumption, which have a strong non-tradable services component (*Graph 3*). The aggregate variable that is used, known as "import intensity-adjusted aggregate demand" (IAD), is calculated as the sum of the final demand for goods and services of the different demand components, weighted according to their relative content of imports of manufactured goods (*Appendix*).

3 - Import content of the main components of world GDP in %



Sources: World Input-Output Database 2 (international tables of input-output), Johnson and Noguera, calculations by authors

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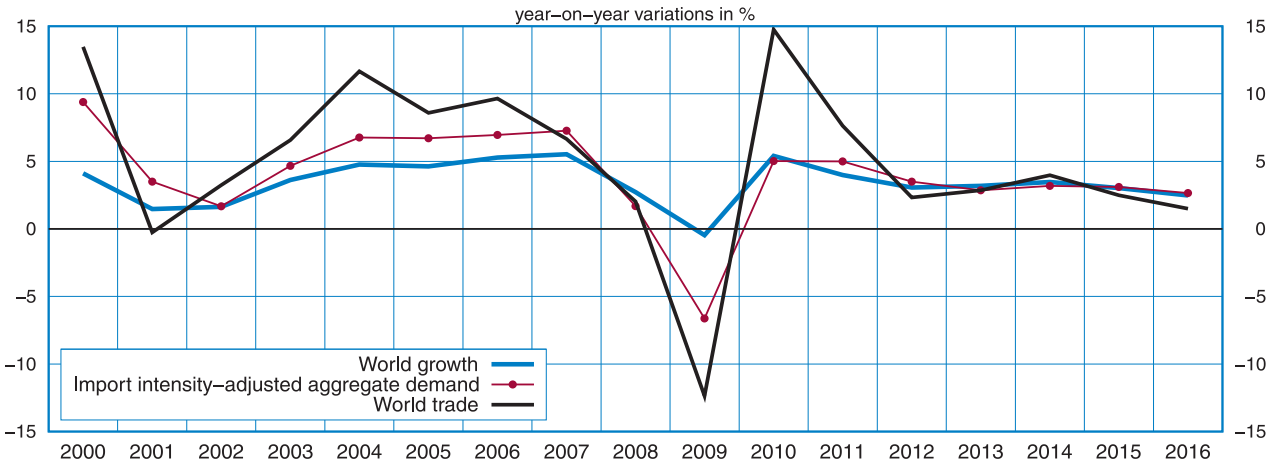
The weak level of investment accounts for about half of the slowdown in IAD

Between 2012 and 2016, IAD grew by about 1.3 points less per year than between 2000 and 2011 (*Graph 4*). This slowdown was more pronounced than that in global GDP (–0.6 points). First of all, it reflects the sharp drop in global investment (*Graph 5*). Indeed, investment has contributed an average of 1.0 point a year to IAD since 2012, compared to 1.6 points between 2000 and 2011, making a contribution of –0.6 points to the slowdown in that demand (even –1.5 points if 2009 is excluded). Private consumption has contributed only slightly more to the slowdown in global demand (0.7 points), although its weight in GDP is substantially greater. On the other hand, public consumption has had virtually no effect on global demand, its contribution having remained basically stable since 2000.

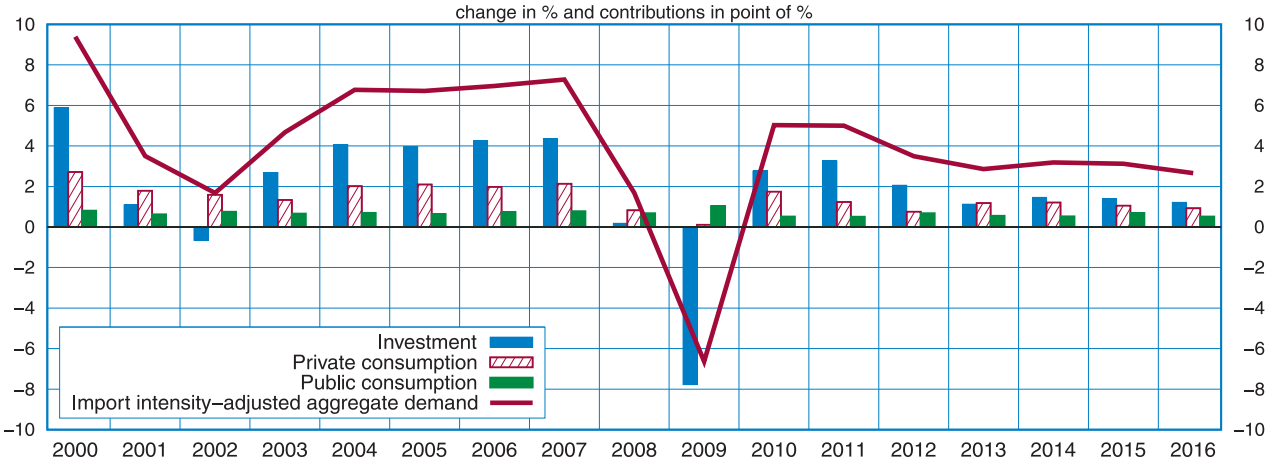
As far as the trade openness ratio is concerned, this demand composition effect accounts for about 15% of the slowdown between the two subperiods.

4 - GDP and world import intensity-adjusted aggregate demand



Sources: DG Trésor, IMF, quarterly national accounts, calculations by authors

5 - Contributions of final demand posts to the import intensity-adjusted aggregate demand



Sources: World Input-Output Database (WIOD), OECD, quarterly national accounts, calculations by authors

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Box 1 - Sources

Usually used for forecasting exercises for *Conjoncture in France*, world trade corresponds here to the sum of imports of goods in volume. The data necessary to construct this indicator are available at different frequencies, based on different concepts, and coming from different sources.

The International Monetary Fund (IMF) (*Graph 2*, p. 20) is the the most comprehensive source on imports, both for its geographical coverage (193 countries tracked) and the number of years (from 1980 to 2016); these data are available in nominal and real terms and annually.

For the breakdown of the trade openness ratio by zone (*Table 1*, p. 21), the data are taken from the inter-country input-output tables of the World Input Output Database (WIOD2), version 2016. This project funded by the European Commission provides annual series of nominal data from 2000 to 2014. The WIOD2 covers 43 countries representative of the global economy (as well as the rest of the world) for 56 sectors of activity.

At zone level, the following scope was used:

Zones	Countries
Eurozone	Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, Spain
North America	Canada, the United States
Other advanced	Australia, Croatia, Denmark, Hungary, Norway, South Korea, Sweden, Switzerland, Taiwan, the United Kingdom
CEEC	Bulgaria, Czech Republic, Poland, Romania
Emerging Asian countries	China, Indonesia, India
Other emerging	Brazil, Mexico, Russia, Turkey, rest of the world

This source was also used to weight the import content of the final demand components (*Graphs 3* to *5*), jointly with Johnson and Noguera's data (2017), which allowed the content to be backcast to 1995.

The bilateral trade figures necessary for the global value chain (GVC) indicators (*Appendix*) can be traced from quarterly nominal customs data, collected in the IMF's Direction of Trade Statistics (DOTS) database and available from 1980 to the end of 2016.

A more restricted scope for volume indicators

The volume data are taken from the national accounts of the different countries. The import data were collected by the Treasury and from national statistics institutes. The other components in GDP come from the OECD or national sources, as not all countries produce quarterly volume figures for the national accounts. The import intensity-adjusted aggregate demand (*Graphs 3* to *5*) and participation in value chains indicators (*Graph 8*) have therefore been calculated for a limited set of 26 countries: Australia, Austria, Belgium, Brazil, Canada, China, Denmark, Finland, France, Germany, India, Italy, Japan, Mexico, the Netherlands, Norway, Poland, Portugal, Russia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. For China, which does not produce detailed quarterly accounts, the data come from the authors' calculation, based mainly on customs data.

Econometric modelling of global imports (*Box 2*) requires a substantial amount of hindsight (since 1995). It covers a slightly more restricted set of 19 countries (the same ones minus Belgium, Brazil, India, South Korea, Switzerland and Turkey). ■

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The integration process in global value chains has been stalled since 2011

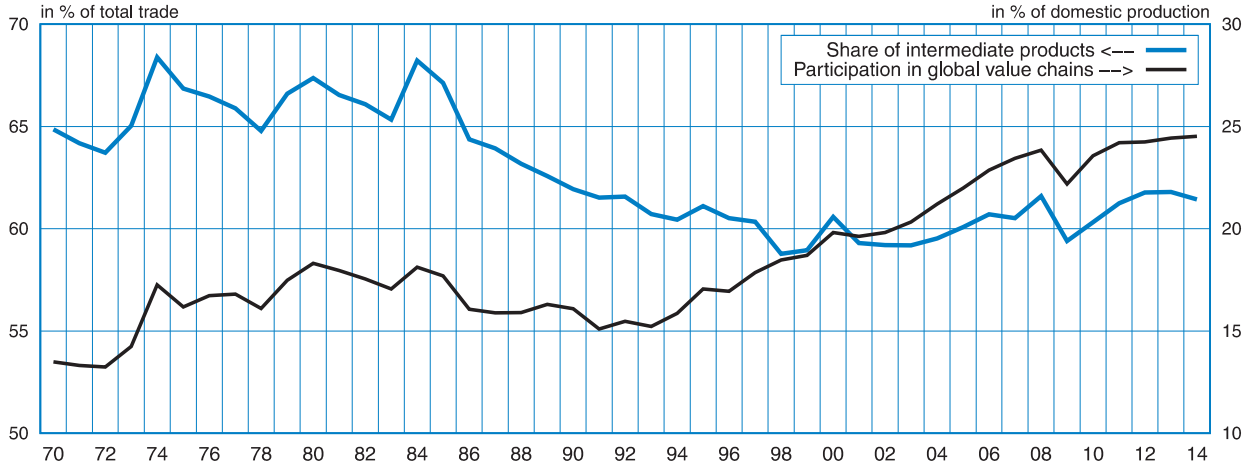
The fragmentation of international production had increased considerably over the fifteen years prior to the 2008-2009 crisis

Beyond the composition of demand, the slowdown in world trade can also be explained by a number of more structural factors. Most notably, the momentum in world trade from the middle of the 1990s until the 2008-2009 financial crisis resulted partly from an increased fragmentation of the international production process between different centres spread across many countries. However, since 2008-2009, this process has stagnated, thereby contributing to a slowdown in the trade openness ratio compared to the earlier period.

To measure this process, an indicator of global value chains (hereafter GVC) indicator has been developed. The intuition behind this indicator is that, instead of producing finished goods at home and then exporting them, countries are using more and more imported goods in their own production processes or, conversely, are manufacturing goods abroad using exported intermediate products. This process is in fact inadequately taken into account by a commonly used indicator, which simply measures the share of intermediate products in total exports and which has virtually stagnated since 2000 (*Graph 6*), essentially because the definition of "intermediate products" in the classification does not cover all the goods that enter into processing trade.[2] Several studies (Hummels, Ishii and Yi, 1999; Johnson and Noguera, 2012; Koopman, Wang and Wei, 2014) have put forward an alternative indicator of international production fragmentation (sometimes also called "participation in global value chains") which is based on the inter-country input-output (ICIO) tables and measures the weight of foreign value added in domestic output. International institutions, in particular the World Trade Organisation (WTO) and the Organisation for Economic Co-operation and Development (OECD), have helped to construct such indicators by bringing together comparable and disaggregated accounting tables on the global production process.

2. For example, in the Chinese customs data, imports of intermediate goods did not represent half of processing trade imports.

6 - Integration in global value chains: indicator of participation in value chains (GVC indicator) and proportion of intermediate products in exports



Sources: quarterly national accounts, IMF and OECD data, international input-output tables from the World Input-Output Database (2016) and from Johnson and Noguera (2017)

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Specifically, the GVC indicator measures the share of foreign value added in the exports of a given country. This indicator will be zero if the country only uses domestic value added to export its goods. It becomes positive if exports incorporate foreign inputs. However, imports can also incorporate inputs that were themselves imported, sometimes even from the initial country. The GVC indicator thus measures the foreign value added, after correction of the value added initially exported and which comes back to its country of origin. This proportion is not directly observable and hypotheses need to be made to compute it. The GVC indicator used here (*Appendix*) attests to an increase in the fragmentation of value chains over the fifteen years preceding the 2008-2009 crisis, a period when the global trade openness ratio was also increasing sharply.

Global trade liberalisation and the fall in transport costs that were driving international production fragmentation process have seized up

The growing participation in global value chains before the crisis can be explained by a dual trade liberalisation movement, in particular with a reduction in customs tariffs and a fall in the cost of transport and communications (*Graph 7*). Johnson and Noguera (2017) have shown that these movements have had a more than proportional effect on trade in intermediate products, enabling them to cross borders several times, or in other words magnifying their impact on world trade.

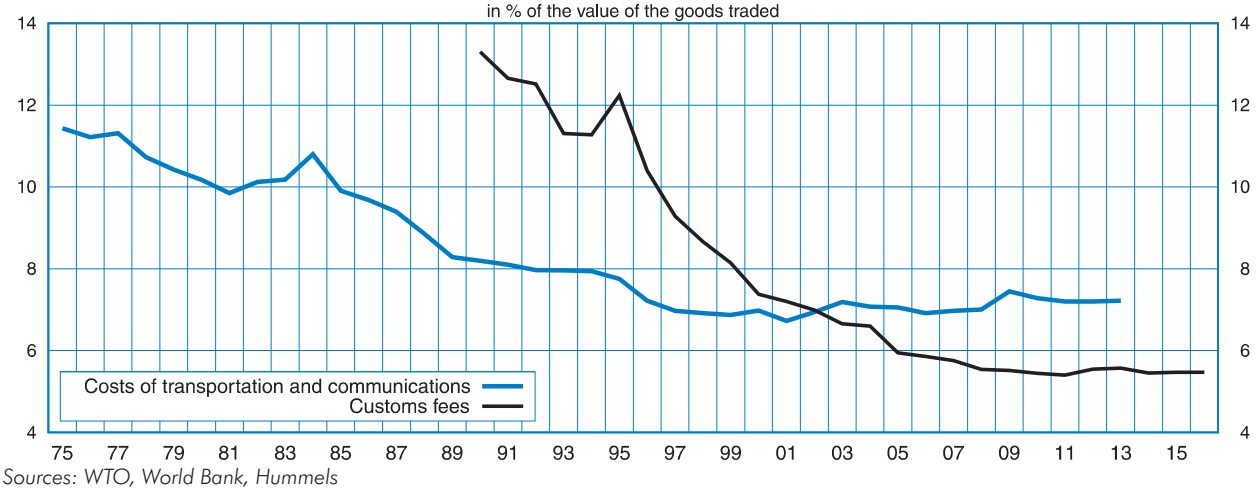
The process of trade liberalisation was driven at the beginning of the 1990s by the success of the Uruguay Round (1986-1994), then by China's entry into the WTO in 2001 and finally by the multiplication of regional and bilateral free trade agreements (François *et al.*, 2016). But this process had already been seriously curtailed even before the 2008-2009 crisis. Most notably, the failure of multilateral trade negotiations in the Doha round (2001 to 2008 for the initial phase of the discussions) prevented further falls in customs tariffs. The recession led to a limited rise in trade protectionism, mainly through measures concerning certain products, such as steel, or by the increase in certain non-tariff barriers.

Since 2012, the intensity of the participation in global value chains has no longer depended as much on the economic cycle

The aggregate participation in value chains indicator fell temporarily with the 2008-2009 crisis, before returning to its earlier level. This profile corresponds to the highly cyclical nature of intermediate products, linked to the "bullwhip effect" when a rise in demand for a product is amplified throughout the supply chain. The 2008-2009 drop was more marked than the weakening of this indicator in earlier periods of global slowdown, in 1991-1993 or in 2001. The 2008-2009 crisis was in fact much more severe. But above all, this indicator stagnated even after the recovery in 2010-2011, unlike what happened the previous times.

7 - Trade barriers

in % of the value of the goods traded



Sources: WTO, World Bank, Hummels

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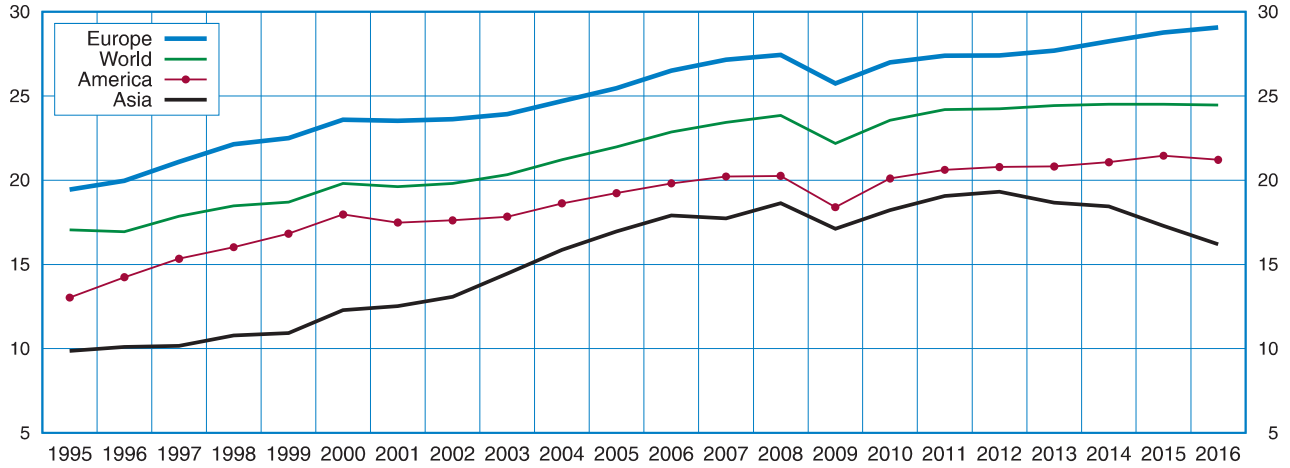
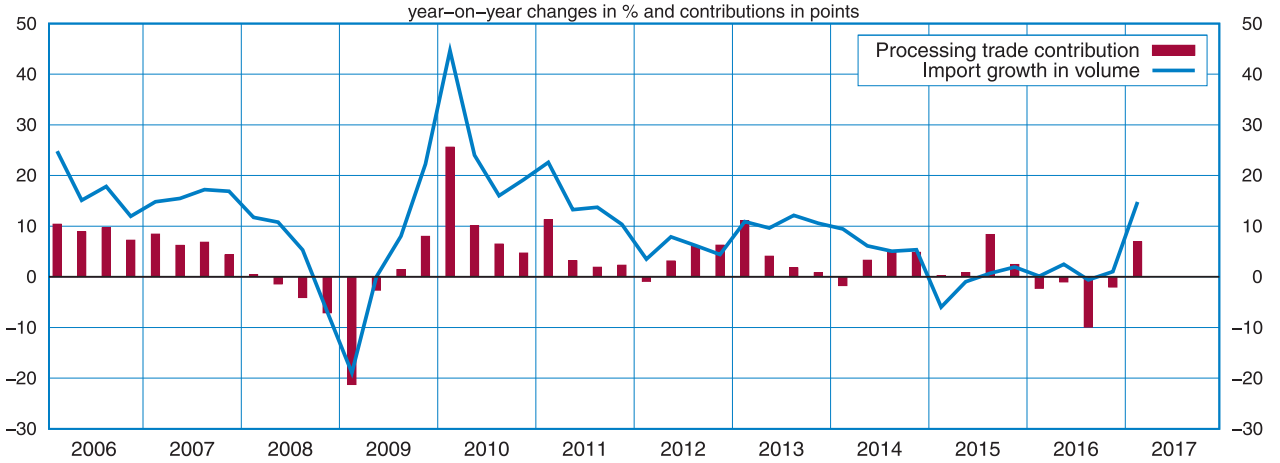
The trend towards participation in global value chains has not been consistent across the regional zones (*Graph 8*). It has continued in Europe since 2011, driven by the increased integration of the countries of Central and Eastern Europe with the other European economies. In North America, the GVC indicator has virtually stagnated. In Asia, the substantial drop in the share of processing trade in international trade led to a lower participation in global value chains from 2013 onwards, as is shown by the contribution of processing trade to the growth of Chinese imports (*Graph 9*). The slowdown in the GVC indicator has therefore been more marked in sectors where Asian goods are predominant, such as electronics.

8 - Participation in value chains by regions (GVC indicators)



Sources: quarterly national accounts, IMF and OECD data, calculations by authors

9 - Growth of imports and contribution of processing trade in China



How to read it: after remaining flat since 2015, in Q1 2017, imports grew by 14.8% year on year, of which 6.9 points driven by processing trade imports.

Sources: Chinese customs administration, INSEE calculations

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Box 2 - Modelling of imports

The modelling of imports is based on the data for a panel of 19 countries (see *Box 1*), between the first quarter of 1995 and the first quarter of 2016. The modelling starts from a common import equation in which the changes in volumes of imports have as determinants the changes in volume of demand and a price effect linked to the difference in the relative price of imports at domestic prices.

Three successive models are tested: the first one uses only GDP growth as the indicator of demand in volume terms, the second following Bussière *et al.*'s model (2013), uses import intensity-adjusted aggregate demand, the last one also introduces the GVC variable, which is supposed to capture the trade openness linked to the fragmentation of global output.

In the first model, the elasticity of trade relative to activity obtained is much greater than unity, which suggests that the high coefficient also captures the upward trend in the trade openness ratio. The explanatory power of this model is 35%.

As in Bussière *et al.* (2013), but over a wider panel, the alternative model using only weighted total demand has a better explanatory power (45%) than the model using only GDP as an indicator of demand.

Finally, in the third model, the GVC indicator stands out significantly and further improves the quality of the adjustment (54%) compared to the first two models. In this model, the long-term elasticity of global demand weighted for imports is spontaneously close to unity.

The model for imports used is therefore:

$$\Delta \ln(M_{i,t}) = \alpha_i \underset{(-9,76)}{-0,25}\Delta \ln(M_{i,t-1}) + \underset{(9,79)}{1,04}\Delta \ln(DGP_{i,t}) + \underset{(4,63)}{0,28}\Delta \ln(DGP_{i,t-1}) + \underset{(12,92)}{0,06}\Delta GVC_{i,t} + \varepsilon_{i,t}$$

Period of estimation: 1995Q3 – 2016Q3
R^2: 54%

$M_{i,t}$: imports of country i in quarter t;
$M_{i,t-1}$: imports of country i in quarter t–1;
$DGP_{i,t}$: import intensity-adjusted aggregate demand of country i in quarter t;
$DGP_{i,t-1}$: import intensity-adjusted aggregate demand of country i in quarter t–1;
$GVC_{i,t}$: GVC indicator of participation in value chains, moving average of order 5.

The model takes account of the two indicator variables for the United Kingdom in 2006, which reflect the fits and starts in this country's imports.

As is often the case in macroeconomic import equations, the price variable appears to be poorly significant or completely insignificant. This may be due to the fact that, by construction, the GVC indicator captures the variations in domestic market share which can be partly explained by price-competitiveness effects.

As the model is based on panel data, a fixed effects model has been used. The latter is validated empirically against a random error model (using a Hausman test), which reveals the presence of individual effects specific to each country.

The R^2 in the equation amounts to 54%, which reflects a relative difficulty in capturing the quarterly ups and downs of each of these countries. However, the model does show very well the annual changes in global imports (apparent R^2 in annual data of 95%). ■

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The halt in the process of value chain integration is the main reason for the slowdown in the trade openness ratio of the global economy

A panel data model to quantify the contribution of the factors to the slowdown by country

In order to quantify the contribution of the different factors to the slowdown in world trade, imports are modelled for a panel of countries representing approximately 70% of global trade. The model that adjusts best to the data is the one that uses as economic determinants of imports, an indicator of import intensity-adjusted aggregate demand and an indicator of participation in value chains.

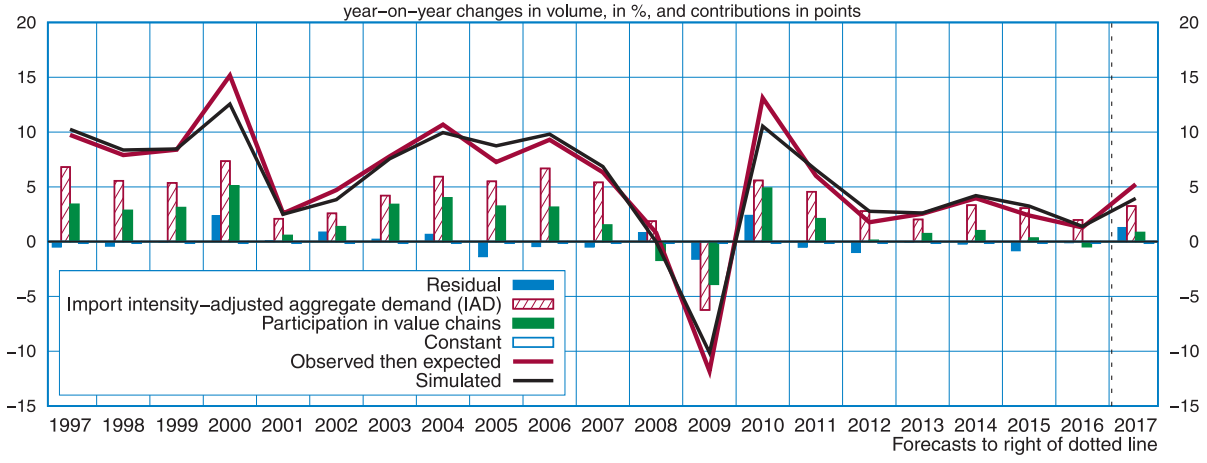
In the model used, the long-term elasticity of IAD for global imports is close to unity and the additional contribution of participation in value chains is significant. This model allows the slowdown in global imports to be tracked quite closely (*Graph 10*).

The slowdown in the trade openness ratio is largely due to stagnation of international production fragmentation

The econometric contributions of the two determinants can be compared from one subperiod (2000-2011) to the next (since 2012): this serves to compute their respective contributions to the slowdown in global imports since 2012, and therefore that of the trade openness ratio excluding the geographical composition effect.[3] The geographical composition effect accounts for just over a third of the slowdown in the trade openness ratio observed since 2012. The halt in the integration of global value chains accounts for a larger share, a little under half (45%). The change in the composition of demand has a considerably lower influence as it accounts for only about 15%. The contribution of global demand to the slowdown in the trade openness ratio therefore seems to be moderate in view of its strong contribution to the slowdown in world trade.

3. The contribution of the composition of demand is obtained by deducting the growth in GDP from the econometric contribution of import intensity-adjusted aggregate demand (IAD). In the model, the changes in the trade openness ratio (and the contributions to these changes) are considered excluding geographical composition effects, insofar as they have been calculated with a weighting fixed over time.

10 - World imports, observed and simulated variations with the model used



Scope: 19 countries of the modelling (*Box 2*)
Source: quarterly national accounts, IMF and OECD data, calculations by authors

In 2017, the trade openness ratio of the global economy would appear to be recovering at last

However, the results are more mixed at country level (*Table 2*). In China, the slowdown in the trade openness index, which has been large, can be explained mainly by the reversal in its participation in value chains, but the composition of demand has also played a more marked role than on average (approximately 20% of the slowdown). In Russia and Australia, the composition of demand accounts for a third of the slowdown in the trade openness ratio. In the countries in the Eurozone, the trade openness ratio slowed less, in particular because their involvement in global value chains continued to grow, contrary to the global trend. This is the case of the Netherlands, France, Spain and especially Portugal, and it has been accompanied for Spain and Portugal by a sharp gain in their export performances over recent years.

In 2017, the trade openness ratio of the global economy is expected to increase for the first time since 2011

For 2017, the model suggests a clear acceleration in world trade in 2017 (+5.9% as an annual average), under the effect of a marked upturn in investment, especially in China and the United States. Furthermore, participation in value chains is expected to cease weighing down on world trade, as is suggested by the recent recovery in foreign processing trade in the Chinese customs data (*Graph 9*).

In 2017, world trade is therefore expected to accelerate more sharply than world activity (+3.5%). Even if it remains lower than its average between 2000 and 2011, this increase is expected to lead to a marked increase in the trade openness ratio (+0.7 points), for the first time since 2011. ■

Table 2 - Share of demand factors and of value chains in the slowdown of openness ratios between 2000-2011 and 2012-2016

in points

Countries	Slowdown (–) or acceleration (+) of openness ratio (annual average, in points)	Weighted total demand (composition effect)	Participation in value chains	Unexplained
All the countries of the modelling	**–0.6**	**–0.1**	**–0.4**	**–0.1**
United States	–0.1	0.1	0.0	–0.1
United Kingdom	0.0	0.1	0.0	–0.1
Austria	–0.1	0.2	–0.2	–0.1
Denmark	–1.0	0.0	–0.9	0.0
France	0.3	0.1	0.3	–0.1
Germany	–0.1	0.0	–0.1	0.0
Italy	–0.2	–0.1	–0.1	0.0
the Netherlands	0.6	0.2	0.6	–0.2
Sweden	0.0	0.2	0.0	–0.1
Canada	–0.4	–0.3	–0.4	0.2
Japan	0.1	0.1	0.1	0.0
Finland	–0.2	0.1	–0.1	–0.1
Portugal	1.2	0.2	1.1	–0.1
Spain	0.4	0.2	0.3	–0.1
Australia	–1.1	–0.3	–0.8	–0.2
Mexico	0.1	0.1	0.1	–0.1
Russia	–2.3	–0.7	–1.4	–0.7
China	–1.8	–0.4	–1.4	–0.1
Poland	0.5	–0.1	0.3	0.3

How to read it: the trade openness ratio (excluding the geographical composition effect) fell by an annual average of 0.6 points between the subperiods 2000-2011 and 2012-2016, for all the 19 countries included in the model. –0.1 point of this dip is accounted for by weighted total demand, –0.4 points by participation in value chains and the remaining 0.1 point remains unexplained.
Source: calculations by authors

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Appendix - The participation in value chains indicator (GVC) and import intensity-adjusted aggregate demand (IAD)

This report uses two main indicators, the participation in value chains (GVC, for global value chains) on the one hand and import intensity-adjusted aggregate demand (IAD) on the other. Both are taken from the same source, the inter-country input-output (ICIO) tables disseminated by the World Input-Output Database (WIOD2) and Johnson and Noguera (2017). The first indicator mainly uses the part of the ICIO tables concerning intermediate consumptions, whilst the second mainly relies on the composition of final demand.

This appendix illustrates how these indicators are constructed based on a simplified model of the world economy, with two economies, indexed "1" and "2", and for each of them a single sector producing a single product ("1" and "2"). This product may be used for final demand or as an intermediate consumption. The notations used here are close to those of Koopman, Wang and Wei (2014), who propose a unified theory of the GVC indicator.

To understand what the GVC and IAD indicators add, it can be useful to compare the results in the simplified case where there is no trade in intermediate products (international trade therefore concerns only finished goods): in this case, the GVC indicator is zero and the IAD corresponds to domestic demand.

In 2017, the trade openness ratio of the global economy would appear to be recovering at last

Input-output table (IOT) and inter-country input-output (ICIO) table

As the treatment of the items of domestic demand is symmetrical, the simplified model below presents only private consumption, but the presentation would be the same for investment or public consumption. By separating the domestic or foreign origin of the intermediate consumptions and final consumptions, the IOT for country 1 can be written as follows:

IOT of country 1	Output	Final demand	
		Consumption	Exports
Domestic products	$a_{11}x_1$	y_{11}	e_{12}
Imported products	$a_{21}x_1$	y_{21}	/
Value added	v_1x_1		
Output	x_1		

We have the following accounting relationships:

(1) Output x_1 is the sum of all intermediate consumptions and value added: $x_1 = a_{11}x_1 + a_{21}x_1 + v_1x_1$ with a_{ij} the technical coefficients associated with the production of product x_1.

(2) Country 1's imports from country 2, m_{12}, are the sum of the imports used as inputs for production, and the imports used directly for final consumption, namely $m_{12} = a_{21}x_1 + y_{21}$.

(3) Symmetrically, by reading the IOT for country 2, country 1's exports are the sum of the exports used for the production process and the exports consumed directly, namely $e_{12} = a_{12}x_2 + y_{12} = m_{21}$. In the customs data as in the national accounts, imported inputs are assumed not to be directly re-exported.

(4) The total consumption of country 1 is the sum of the consumption served by domestic products and that served by imported products, namely $y_1 = y_{11} + y_{21}$

(5) Finally, country 1's GDP is equal on the one hand to the value added and, on the other, to the final demand less imports, namely: $v_1x_1 = (y_{11} + y_{21}) + e_{12} - m_{12}$

By combining equations (1) and (5) with the definition of demand components (2) to (4), the resources and uses balance is obtained for product 1, the total output of product x_1 broken down into its use as intermediate consumptions or as final consumptions with, each time, a breakdown according to domestic or foreign origin, namely:

(6) $x_1 = a_{11}x_1 + a_{12}x_2 + y_{11} + y_{12}$.

The two IOTs of country 1 and country 2 can be combined in an inter-country input-output (ICIO) table. In its simplest form, the value added or international trade can be deduced from the other lines in the table and are not shown. The first line in the table represents the resources and uses balance for product 1, the second that of product 2.

ICIO	Intermediate consumption		Final demand	
	Product 1	Product 2	Country 1	Country 2
Product 1	$a_{11}x_1$	$a_{12}x_2$	y_{11}	y_{12}
Product 2	$a_{21}x_1$	$a_{22}x_2$	y_{21}	y_{22}
Output	x_1	x_2		

Import intensity-adjusted aggregate demand (IAD)

The construction of the import intensity-adjusted aggregate demand (IAD) aims to take into account the import content of the different factors in demand. It is sufficient to reason at the level of a given country's IOT.

The output of product 1 necessary to meet the total final demand for product 1 given by equation (5) can be rewritten in the following form:

(7) $x_1 = a_{11}x_1 + y_{11} + (a_{12}x_2 + y_{12}) = a_{11}x_1 + y_{11} + e_{12}$

from which it can be deduced

(8) $x_1 = \frac{y_{11} + e_{12}}{1 - a_{11}}$

where (8) corresponds to the transformation using the Leontief inverse matrix in the case of a scalar (as there is only one product in the model).

The country's total imports have two components, imports of final products or "direct imports" and imports of intermediate products or "indirect imports" given by the IOT and necessary to produce product 1, namely:

(9) $m_{12}^{\text{Direct}} = y_{21}$

(10) $m_{12}^{\text{Indirect}} = \left(\frac{a_{21}}{1 - a_{11}} \right) (y_{11} + e_{12})$

For each demand component, the import content is the sum of the total imports over the sum of the final uses. For consumption, the import content of consumption is thus:

(11) $w_c = \left(\frac{a_{21}}{1 - a_{11}} y_{11} + y_{21} \right) / (y_{11} + y_{21})$

Assuming that there is no immediate re-exporting of the products imported, the imports associated with the exports are only indirect. The import content of the exports is therefore:

(12) $w_e = \left(\frac{a_{21}}{1 - a_{11}} e_{12} + 0 \right) / (e_{12} + 0) = \frac{a_{21}}{1 - a_{11}}$

Import intensity-adjusted aggregate demand is calculated as the aggregated sum of the demand components using the weight of the normalised import content:

(13) $\ln(\text{DGP}) = \frac{w_c}{w_c + w_e} \ln(y_{11} + y_{12}) + \frac{w_e}{w_c + w_e} \ln(e_{12})$

In the simplified case where there is no trade in intermediate products (case $a_{21} = 0$), the import content of exports is naturally zero, whilst the import content of consumption corresponds simply to the direct import content, namely the weight of the imported products in total consumption, $y_{21} / (y_{11} + y_{21})$. In this case, IAD is simply equal to domestic demand.

The final demand items used in the calculation of IAD are private consumption, public consumption, total investment by enterprises and general government, as well as exports. With the available indicators (*Box 1*), quarterly import intensity-adjusted aggregate demand is calculated from 1995 onwards, across a total of 26 countries. "Global" import intensity-adjusted aggregate demand corresponds to the average of the countries' IADs, adjusted for their weight in world imports in 2011.

The participation in global value chains indicator

The participation in global value chains (GVC) indicator measures the share of foreign value added in a country's exports. Indeed, the concept of trade in value added consists not of taking into account the gross trade flows that cross borders, but of measuring the added value per country along an international production chain. For example, for value added exports, it is necessary to deduct from gross exports the share of foreign inputs that enter into their production process.

Let us assume that X is the column vector (x_1, x_2) of global output in product 1 and product 2, and Y the column vector (y_1, y_2) of global consumption per product. The ICIO table can be rewritten in matrix form as:

(14) $X = AX + Y$

where A is the global matrix of technical coefficients. By rearranging this equation in this form:

(15) $X = (Id - A)^{-1} Y = BY$

the Léontief B inverse matrix appears. This indicates the output necessary to serve a given final demand, taking account of the intermediate goods entering into the production process.

In 2017, the trade openness ratio of the global economy would appear to be recovering at last

Final consumption can be separated into four components indicating the domestic or foreign origin of the final product, namely $y_{11}+y_{12}$ and $y_{21}+y_{22}$. By writing final consumptions in matrix form, four new production variables xij are defined which are the result of the following matrix product:

(16) $$\begin{pmatrix} x_{11} & x_{12} \\ x_{21} & x_{22} \end{pmatrix} = \begin{pmatrix} b_{11} & b_{12} \\ b_{21} & b_{22} \end{pmatrix} \begin{pmatrix} y_{11} & y_{12} \\ y_{21} & y_{22} \end{pmatrix}$$

The term x_{12}, corresponds to the output of country 1 necessary to serve the total final demand of country 2 in product 1. It represents the sum of the production necessary to serve exports y_{12} including the inputs necessary to the production process of product 1, but also the products 1 that are inputs in the production process of country 2, namely: $x_{12}=b_{11}y_{12}+b_{12}y_{22}$. The total output of product 1 is $x_1=x_{11}+x_{12}$.

The value added exports vax_{12} correspond to the value added associated with this domestic production destined to serve the foreign country, namely:

(17) $vax_{12} = v_1 x_{12}$

The share of trade in value added is simply the ratio of value added exports to gross exports, namely:

(18) $vax_{12}\,(\%) = v_1 x_{12} / e_{12}$

The GVC indicator used is the complement to one of the share of the trade in value added, namely:

(19) $GVC = 1 - vax_{12}\,(\%)$

Once again, in the simplified case where the two countries trade only in finished goods, the cross technical coefficients (a_{12} and a_{21}) are zero, and the matrix of technical coefficients A is a diagonal matrix, as is the Léontief B matrix, with the coefficients $b_{ii}=1/(1-a_{ii})=1/v_i$. In this case, the gross exports, e_{12}, are equal to exports of value added, $v_1x_{12}=e_{12}$ and the share of the trade in value added is 100%. The GVC indicator is therefore zero.

GVC indicators calculated from inter-country input-output (ICIO) tables have several limitations: these data are only available after a delay of several years, only cover short periods or a small number of countries and require a large mass of sector-based data. For example, the OECD's product ICIO tables only cover 1995 to 2011, with date five years apart for the first years. The database put together by Johnson and Noguera (2017) goes back to about 1970, but is only published until 2009. Finally, the WIOD2 (World Input Output Database) database stops in 2014, but covers a smaller sample of countries that those of the OECD. Depending on the countries, there are sometimes substantial differences in the GVC indicators calculated based on each of these three sources.

To overcome the difficulties specific to these sources, this report uses a simpler GVC indicator proposed by Marc and Patier (2016). It is based only on bilateral trade matrices and import ratios as a share of GDP. This indicator is very parsimonious as it requires neither a sector-based breakdown of the IOTs nor the separation of imports into intermediate products and final products, in other words it requires 5,000 times less data than a 50-sector ICIO table (the approximate size of the OECD's table for example). In spite of its extreme parsimony, the indicator used is very close to those calculated based on the three other sources (*Graph*). In particular it is very close to the results of Johnson and Noguera (2017) and the WIOD (2016), and also captures a trend close to the OECD's GVC indicator. Another advantage is that it can be produced on a quarterly basis and until the end of 2016, which represents a gain of two years on the most recent alternative indicators.

Marc and Patier's basic idea was to start from an approximate estimation of value added in exports, equal to the share of value added in GDP, and then to correct it by taking into account first of all the imported value added, then the value added exported and then returned to the country of origin. Specifically, the formula used is:

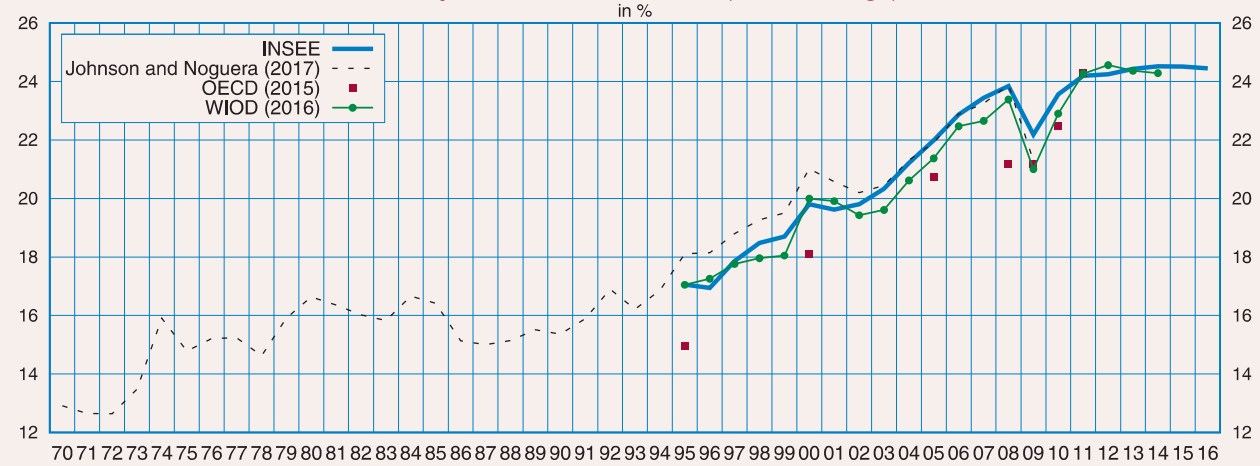
(20) $$vax(\%) = \frac{1}{1+m_i - m_i\left(\sum a_{ij}a_{ji}\frac{m_j}{1+m_j}\right)}$$

where m_i is the share of imports in the the GDP of country i and a_{ij} is the share of the imports of i destined for country j.

In 2017, the trade openness ratio of the global economy would appear to be recovering at last

Participation to the value chains (world average)

in %



Sources: Johnson and Noguera, OECD, WIOD, calculations by authors

In the case of the two-country model presented here, $a_{12} = a_{21} = 100\%$ and the indicator used becomes simply:

(21) $$vax(\%) = \frac{1}{1 + \frac{m_1}{1 + m_2}}$$

This is based intuitively on taking the value added, adjusted by the imported value added, itself adjusted by the the exports that return to the country of origin. ■

Why has growth in Italy lost ground to France since 2000?

Charles-Julien Giraud
Benjamin Quévat

Département de la conjoncture

Until 2000, the French and Italian economies grew at a very similar pace, both in growth phases and in times of crisis. Since then, the activity differential between the two countries has increased every year, in favour of France. This gap is widening, although France and Italy are still two very similar countries: they share a border and are comparable in size and population. They use the same currency, have a very similar supply and demand structure, they are integrated into the same common market and share the same social model.

The average annual growth differential since 2000 is 1.0 GDP point, and ground has been lost in virtually all branches of activity. Part of this differential stems from the short-term divergence related to the sovereign debt crisis, the impact of which was considerably more powerful and sustained in Italy. Excluding this effect, the difference in potential growth between France and Italy is still 0.8 points per annum.

Several factors combine to account for this gap. The Italian demographic dynamic, with faster population aging and lower fertility, contributes 0.2 points on average across the period.

Some of the gap may also be the result of different ways of taking measurements. Sometimes the methods used by the French and Italian national accountants diverge. This is especially the case in the volume-price split for certain consumption or investment items, whether for capital goods or for services (rents, telephony, software and databases). All in all, about 0.2 GDP points seem to be attributable to these methodological differences.

When adjusted for these measurement differences and for the demographic effect, the growth potential differential should shrink to 0.4 GDP points on average per year, which is nevertheless significant. The complete absence of productivity gains in Italy is very surprising. Indeed, in some branches such as services to businesses, Italian productivity has been in sustained and steady decline since 2000. The arguments put forward in the literature (rate of research and development expenditure, qualification levels of the labour force, institutional organisation, shareholding structure, regional inequalities) do not seem able to account for the scale of the country's decline, either in time – since 2000 – or space, against all its European neighbours, particularly France.

Why has growth in Italy lost ground to France since 2000?

Italy and France, two countries with similar economic structures but diverging trajectories since 2000

Two economies with very similar trajectories until 2000...

Italy is very similar to France: historically, the two countries have developed along parallel lines, they are neighbours and founding members of the European Union then the Eurozone, their populations are similar in size, and they share a Latin culture. From the post-war period to the creation of the Eurozone, the two countries followed very similar economic trajectories: an intense catch-up phase with virtually no cyclical episodes from 1950 to1973 (+5.2% average annual growth in France against +5.3% in Italy), followed by a period of growth at half this level between 1974 and 2000 (annual average of +2.4% for both countries) alternating phases of slowdown, or even recession (1974, 1979-1981, 1993) with phases of expansion which were the same for both countries.

...whose growth rates have diverged substantially since then...

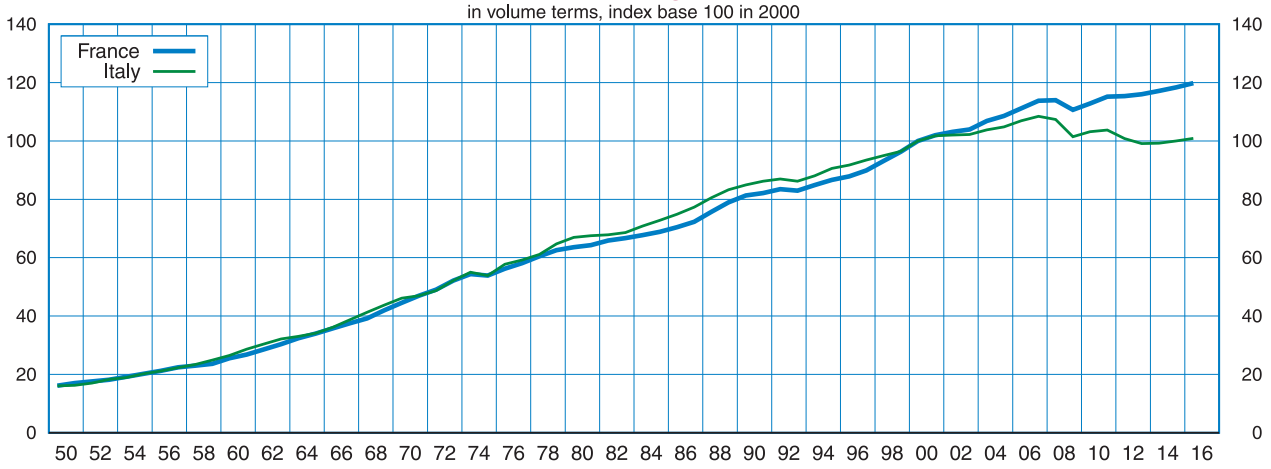
Since 2000, however, despite business cycles remaining the same for the two countries (Guillet and Lalande, 2017), annual gross domestic product (GDP) growth has weakened significantly in Italy, falling to +0.3% on average between 2000 and 2016, whereas in France it slipped back much less (+1.3% on average annually, *Graph 1*). Thus the average annual growth differential since 2000 has been +1.0 point in favour of the French economy, whereas growth rates had previously been very similar.

...despite a similar productive structure

The structure of the productive system, i.e. the composition of value added per branch of activity, is fairly similar from one country to the other (*Table 1*).

1 - Growth has diverged since 2000

in volume terms, index base 100 in 2000



Sources: INSEE, ISTAT, CEPII retropolation, national accounts

Table 1 - Comparison of structure of value added by branch in 2000 and 2016

in %

	2000		2016	
	France	Italy	France	Italy
Agriculture, forestry and fishing	2	3	1	2
Industry	18	22	14	19
Construction	5	5	5	5
Trade, transport, accomodation and food service activities	18	22	18	21
Information-communication	5	4	5	3
Financial activities	4	5	4	5
Real estate activities	11	10	13	14
Services to businesses	12	9	13	9
Non-market services	21	16	23	17
Other services to households	3	4	3	4

Sources: INSEE, ISTAT, national accounts

However, the weight of industry is greater in Italy (19% in 2016) than in France (14%). Conversely, the weight of the public sector is greater in France (23% against 18%).

The structure of demand is also similar

The two countries also have a similar demand structure (*Table 2*). The weight of government consumption is slightly higher in France (24% against 20% in Italy in 2016), with a fairly similar composition.

The weight of private consumption is greater in Italy, although the 7-point gap was reduced to 5 points between 2000 and 2016. The distribution of spending within private consumption is fairly similar in the two countries, although in Italy the proportion spent on housing is smaller.

However, the sovereign debt crisis has affected Italian investment particularly severely since 2011, widening the gap between the weight of investment in activity in France and in Italy from 2 points (in 2000) to 6 points (in 2016).

The decline in Italian growth is common to virtually all branches of activity

The sectoral composition of supply, which is very similar in both countries, had a minimal effect on the growth differential between the two countries between 2000 and 2016. The average annual growth differential in gross domestic product (GDP) of 1.0 point stemmed from almost all branches of the economy (*Table 3*).

The causes of the decline in Italian growth are therefore to be found in macroeconomic factors affecting all branches.

Table 2 - Comparison of structure of demand in 2000 and 2016

in % of GDP

	2000		2016	
	France	Italy	France	Italy
General government consumption	23	19	24	20
Private consumption	53	60	55	60
Gross fixed capital formation	22	20	23	17
Foreign trade	2	1	–2	3
Total	**100**	**100**	**100**	**100**

Sources: INSEE, ISTAT, national accounts

Table 3 - Growth in value added between 2000 and 2016 on a annual basis and contributions to the differential between France and Italy

in %

	France	Italy	Contribution to the differential
Agriculture, forestry and fishing	–0.4	–0.3	0.0
Industry	0.9	–0.3	0.2
Construction	–0.1	–1.0	0.0
Trade, transport, accomodation and food service activities	1.3	0.3	0.2
Information-communication	4.0	2.4	0.1
Financial activities	2.4	1.6	0.0
Real estate activities	1.5	0.6	0.1
Services to businesses	1.4	0.4	0.1
Non-market services	1.0	0.2	0.2
Other services to households	1.6	0.4	0.0
Total	**1.3**	**0.3**	**1.0**

Sources: INSEE, ISTAT, national accounts

Why has growth in Italy lost ground to France since 2000?

The sharp deterioration in the economic situation in Italy during the sovereign debt crisis accounts for around 0.2 points of growth differential per year on average since 2000

On the demand side, the Italian decline concerned mainly private consumption from 2000 to 2010...

Between 2000 and 2010, the annual growth differential between France and Italy reached +0.8 points on average. Private consumption alone accounted for +0.7 points (*Table 4*) as it was less dynamic in Italy (+0.7% annually) than in France (+2.0%). It suffered from the very moderate gains in Italian household purchasing power over the period (+0.4% on average per year), especially when compared with French households (+2.1%).

This difference in purchasing power was mainly the result of a smaller rise in per capita wages and more sustained inflation in Italy. Employment dynamics (*Graph 2*) and other income contributed relatively less (*Table 5*).

Since 2011, household purchasing power has slowed in both countries, and has even fallen back in Italy (*Graph 3a*). Faced with this decline in their purchasing power, Italian households have reduced their savings ratio substantially (by around 4 points), much more than in France where this ratio has remained relatively stable (*Graph 3b*). All in all, the contribution of private consumption to the growth differential has been similar to that before 2010 and since 2011.

...and has worsened since 2011 due to lower investment and government consumption

For the period 2011-2016, Italy suffered severely and directly from the sovereign debt crisis: its activity dropped by 0.4% per year on average, whereas France managed to withstand the crisis, with average annual growth of +1.0%. The growth differential therefore widened to +1.4 points. Investment became the main contributor, accounting for +1.0 point. The crisis had a marked effect on investment in Italy, which declined by an average of 2.7% annually over the

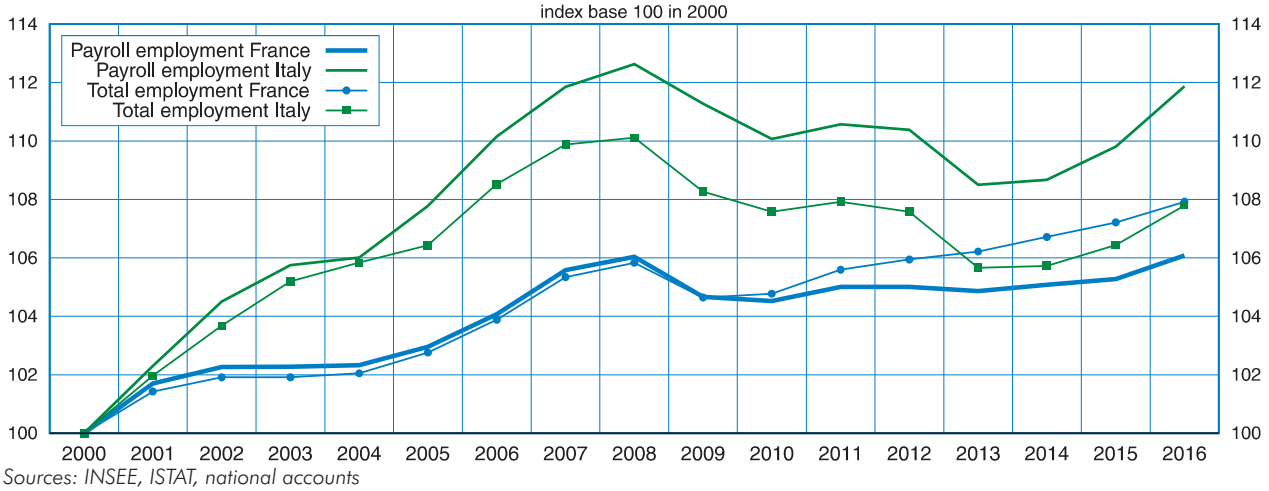
Table 4 - Comparison of growth of GDP and contributions of the main items of demand

in %

	2000-2010			2011-2016			2000-2016		
	France	Italy	Differential	France	Italy	Differential	France	Italy	Differential
Gross domestic product	**1.5**	**0.6**	**0.8**	**1.0**	**–0.4**	**1.4**	**1.3**	**0.3**	**1.0**
General government consumption	0.4	0.2	0.2	0.3	–0.1	0.5	0.4	0.1	0.3
Private consumption	1.1	0.4	0.7	0.5	–0.3	0.8	0.9	0.1	0.7
Investment and inventories	0.3	0.1	0.2	0.5	–0.6	1.0	0.4	–0.1	0.5
Construction	*0.2*	*0.1*	*0.1*	*–0.1*	*–0.4*	*0.4*	*0.1*	*–0.1*	*0.2*
Others	*0.1*	*0.1*	*0.0*	*0.5*	*–0.2*	*0.7*	*0.3*	*0.0*	*0.3*
Foreign trade	–0.3	–0.2	–0.1	–0.2	0.7	–0.9	–0.3	0.2	–0.4

Sources: INSEE, ISTAT, national accounts

2 - Comparison of variation in employment



Sources: INSEE, ISTAT, national accounts

period. In particular, investment in capital goods shrank by 1.5% annually on average between 2011 and 2016 despite a recovery at the end of the period, whereas in France it grew by 1.6% over the same period.

Thus by the end of 2016, investment in France was back to its 2008-2009 pre-crisis level, while in Italy it was still 20% below its pre-crisis level (*Graphs 4a* and *4b*). In addition, investment in construction plummeted in Italy, by an annual average of 4.6% since 2011, far more than in France (–0.4%). The sharp downturn in investment was due mainly to financing terms which in Italy had deteriorated significantly (*Box 1* and Fortin *et al.*, 2015).

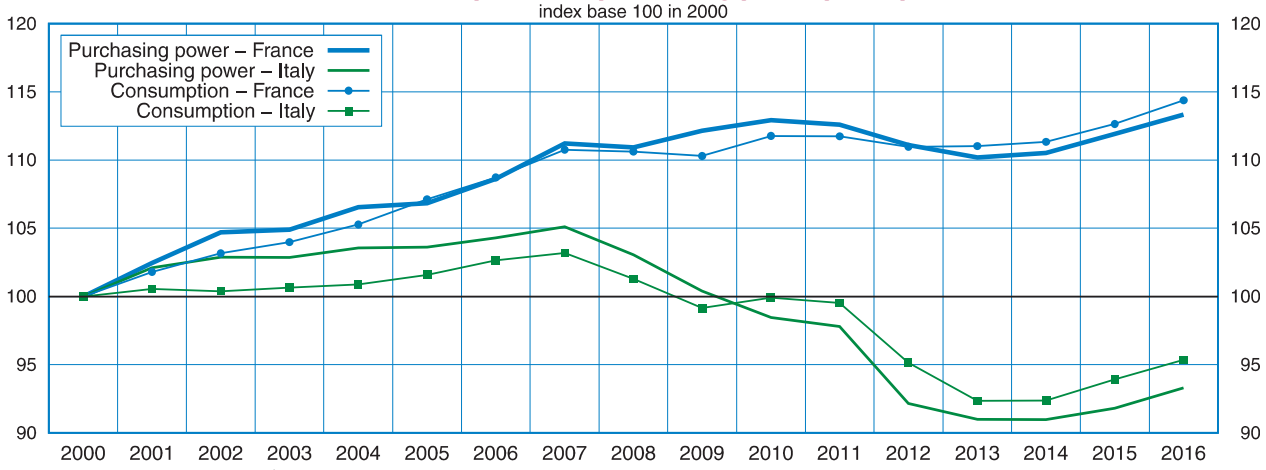
Table 5 - Comparison of growth of purchasing power and contributions of the main items

in %

	2000-2010			2011-2016			2000-2016		
	France	Italy	Differential	France	Italy	Differential	France	Italy	Differential
Purchasing power	**2.1**	**0.4**	**1.7**	**0.3**	**–1.1**	**1.4**	**1.5**	**–0.1**	**1.6**
Gross disposable income	**3.6**	**2.7**	**0.9**	**1.0**	**0.3**	**0.8**	**2.8**	**1.9**	**0.9**
of which total employment	0.5	0.5	–0.1	0.3	0.0	0.3	0.4	0.4	0.1
of which earned income per capita	1.9	1.4	0.5	0.7	0.4	0.3	1.5	1.0	0.5
of which other incomes	0.8	0.5	0.3	0.2	–0.1	0.3	0.5	0.3	0.3
of which social benefits	1.3	1.1	0.2	0.8	0.6	0.2	1.1	0.9	0.2
of which social contributions and taxes	–0.8	–0.8	0.0	–1.0	–0.4	–0.6	–0.9	–0.6	–0.2
Inflation	**–1.6**	**–2.3**	**0.7**	**–0.8**	**–1.4**	**0.6**	**–1.3**	**–2.0**	**0.7**

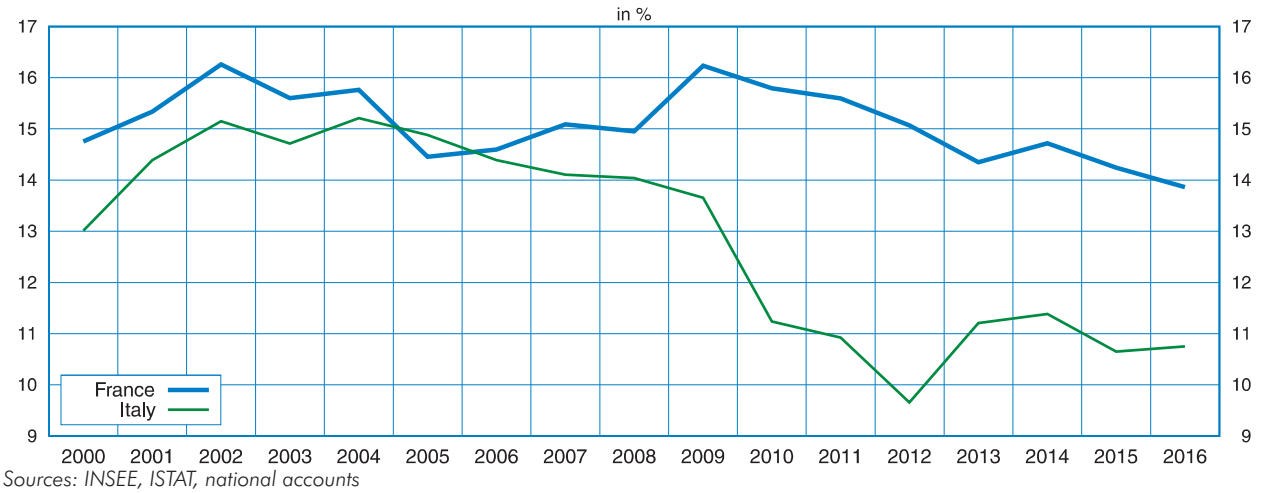
Sources: INSEE, ISTAT, national accounts

3a - Consumption and purchasing power per capita



Sources: INSEE, ISTAT, national accounts

3b - Savings ratio of households



Sources: INSEE, ISTAT, national accounts

Why has growth in Italy lost ground to France since 2000?

Government consumption also contracted in Italy (–0.7% as an annual average since 2011, against +1.2% between 2000 and 2010). In contrast, in France it continued to grow at a regular pace (+1.3% after +1.6%). Government consumption thus accounted for +0.5 points of growth differential from 2011, much more than between 2000 and 2010 (+0.2 points).

An improved balance of trade in Italy since 2011 due to weak domestic demand

From 2000 to 2010, the contribution of foreign trade to GDP growth was negative in both countries, and were of quite similar magnitude. Their export performances dipped in a similar fashion over this period, before stabilising after 2011. However, the trade balance improved in Italy between 2011 and 2016, unlike that of France. Imports increased very moderately: +0.3% on average per year, against +3.7% in France (*Graph 5*). Foreign trade has therefore reduced the growth differential by 0.9 points on average per year in favour of Italy since 2011.

This is more a reflection of the sluggishness of economic activity in Italy over this period, most notably due to the decline in private investment, and the good export performance of the Italian economy: foreign sales progressed in a similar fashion to France.

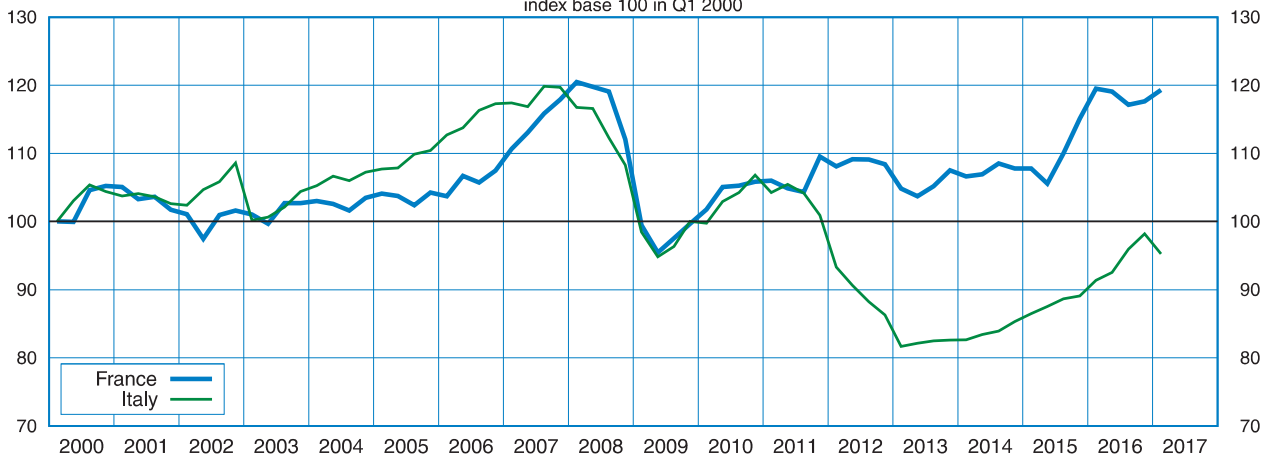
The output gap therefore deteriorated much more markedly in Italy

Part of the GDP growth differential between 2000 and 2016 is therefore linked to cyclical factors. To determine what these factors are, it can be noted that the growth differential was "only" +0.8 points per year over the period 2000-2010, but increased to +1.0 point per year when the entire 2000-2016 period is considered, as the sovereign debt crisis had a much greater impact in Italy. This difference of 0.2 points can be considered as a first measurement of the cyclical differential between the two countries.

4 - Gross fixed capital formation

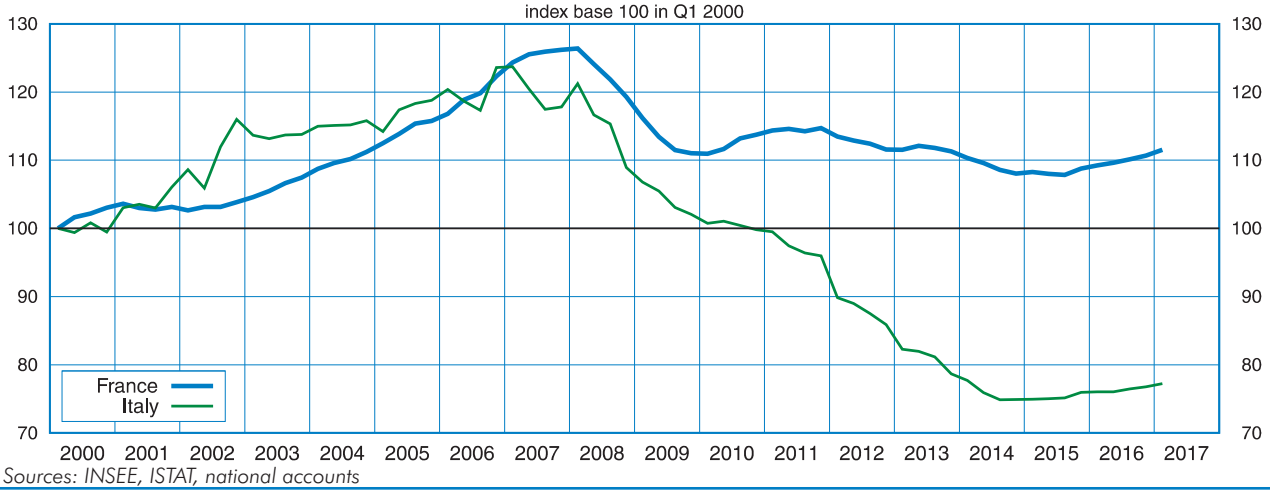
a - Equipment

index base 100 in Q1 2000



b - Construction

index base 100 in Q1 2000



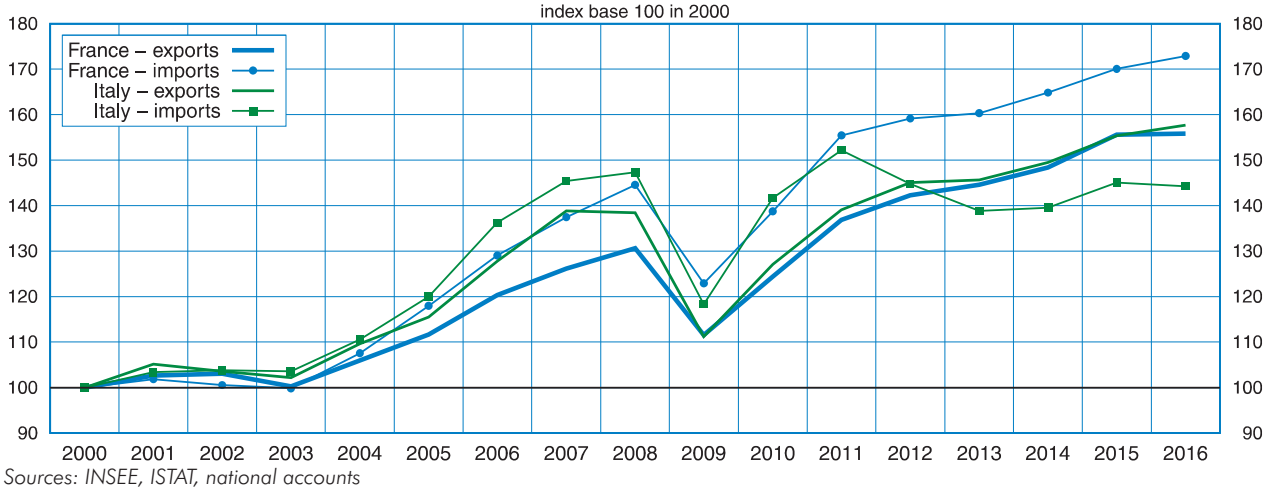
Sources: INSEE, ISTAT, national accounts

This effect can also be assessed through the output gap, which reflects the position of each economy in its cycle. The output gap is the difference between the level of actual activity in the country and its potential level, i.e. the level it would reach if production factors were used without creating inflationary tensions. This potential, which cannot be observed directly, is estimated using econometric models. According to OECD estimates, in the early 2000s France and Italy were in a favourable phase, in excess of their potential.

The output gap was positive and comparable for the two countries (*Graph 6*). Both were affected by the 2008 crisis, but after this Italy suffered much more from the sovereign debt crisis between 2011 and 2013. Thus the output gap widened far more in Italy than in France. Despite an upswing in activity from 2014, the output gap remained more negative in Italy than in France in 2016. Thus the output gap differential estimated by the OECD was 2 points in 2016. Compared with the situation in 2000, this contributed to an average annual growth differential of 0.1 points between the two countries.

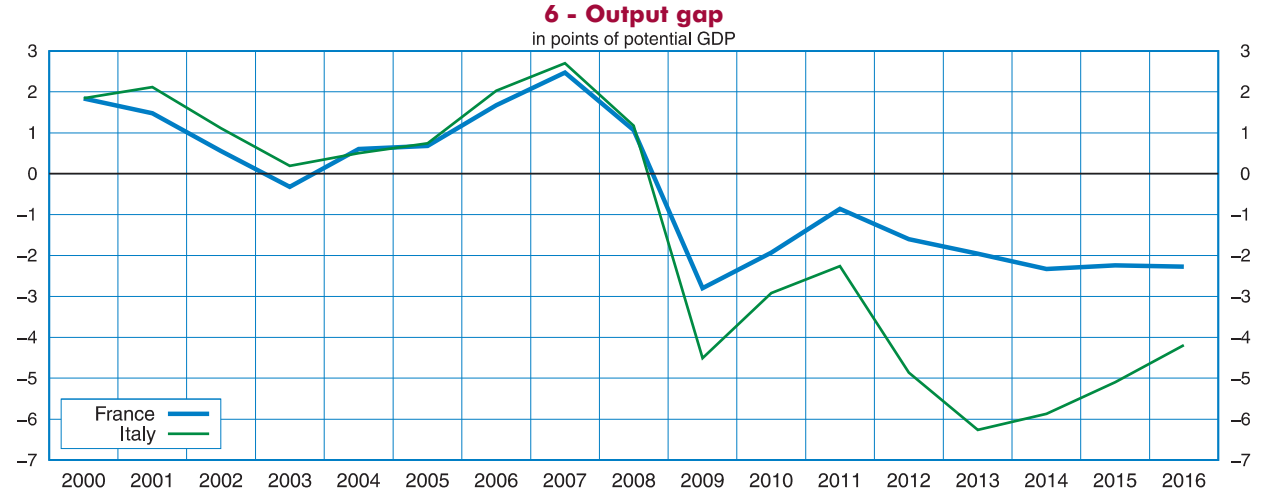
The two measurements of this cyclical differential therefore suggest that the difference in the impact of the sovereign debt crisis contributed to an average annual growth differential of around +0.2 points between France and Italy for the period 2000-2016, concentrated in the years 2011-2013. When adjusted for cyclical effects, the difference in growth between France and Italy remains at +0.8 points per year.

5 - Imports and exports in value terms



Sources: INSEE, ISTAT, national accounts

6 - Output gap



How to read it: relative difference as a % between actual level of activity and potential level of activity (the level it would reach if production factors were used without creating inflationary tensions).
Source: OECD

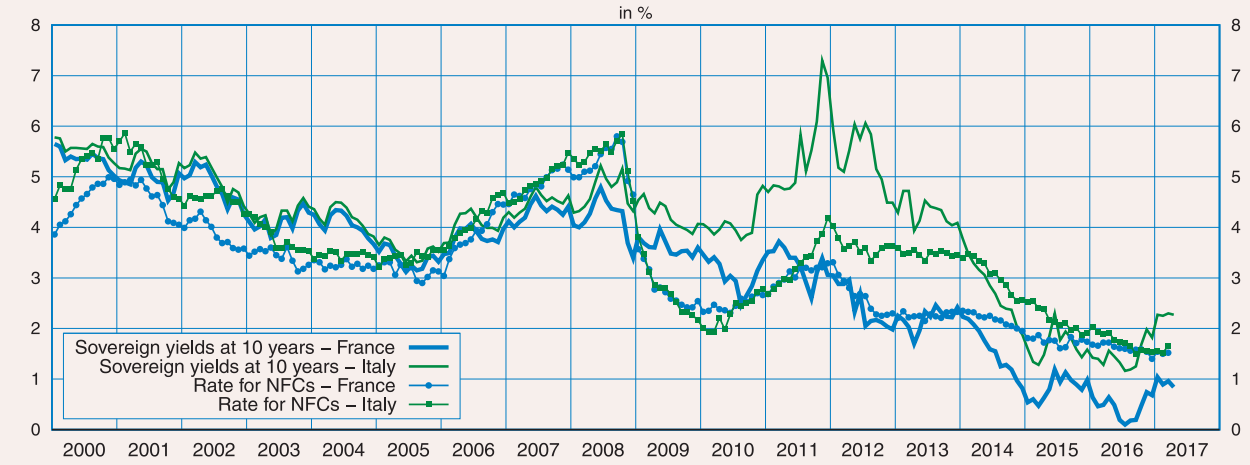
Box 1 – The sovereign debt crisis in Italy: a financial shock compounded by very substantial fiscal consolidation measures

The crisis experienced by the countries of the southern Eurozone clearly differentiated between the Italian and French economies. In November 2011, sovereign yields recovered sharply in Italy (*Graph 1*), while French securities, on the other hand, saw a slight decline as a result of the effect of a "flight-to-quality".

The sudden rise in Italian sovereign credit rates had several consequences. First, private rates increased substantially and the Italian banks, which held a great many domestic sovereign bonds, severely restricted their conditions for loan offers. Corporate loans, which had increased in parallel in France and Italy from 2004 to 2011, declined in Italy, resulting in a decline in corporate investment (*Graph 2*).

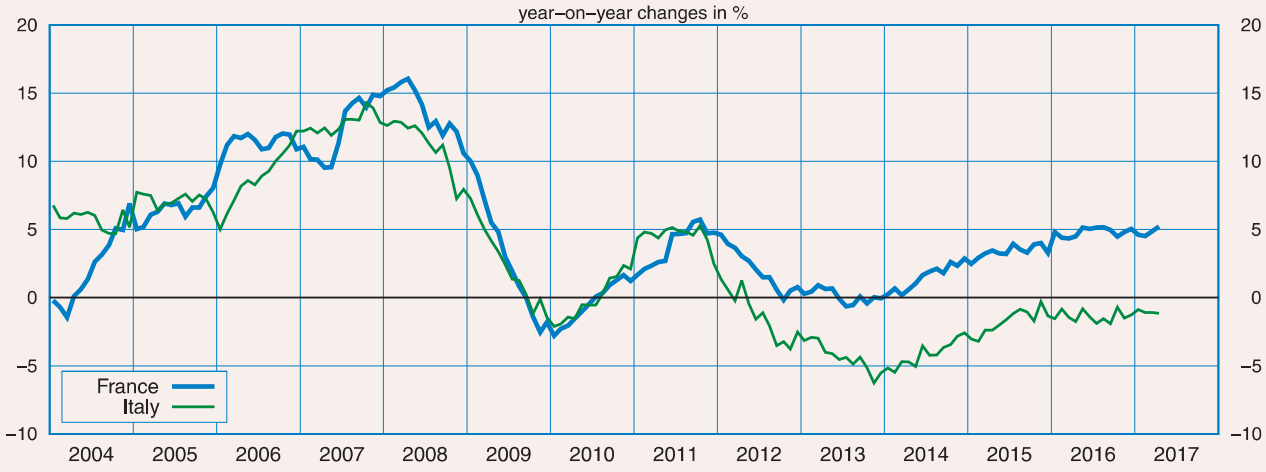
In addition, the sharp increase in government financing costs resulted in the Italian government implementing severe fiscal consolidation measures (*Graph 3*). In 2012 and 2013, the Italian structural balance improved by 3.2 points, against 1.8 points in France. This more restrictive fiscal policy mainly accounts for the growth differential in government consumption and investment over the period. ■

1 - Sovereign yields



Source: European Central Bank

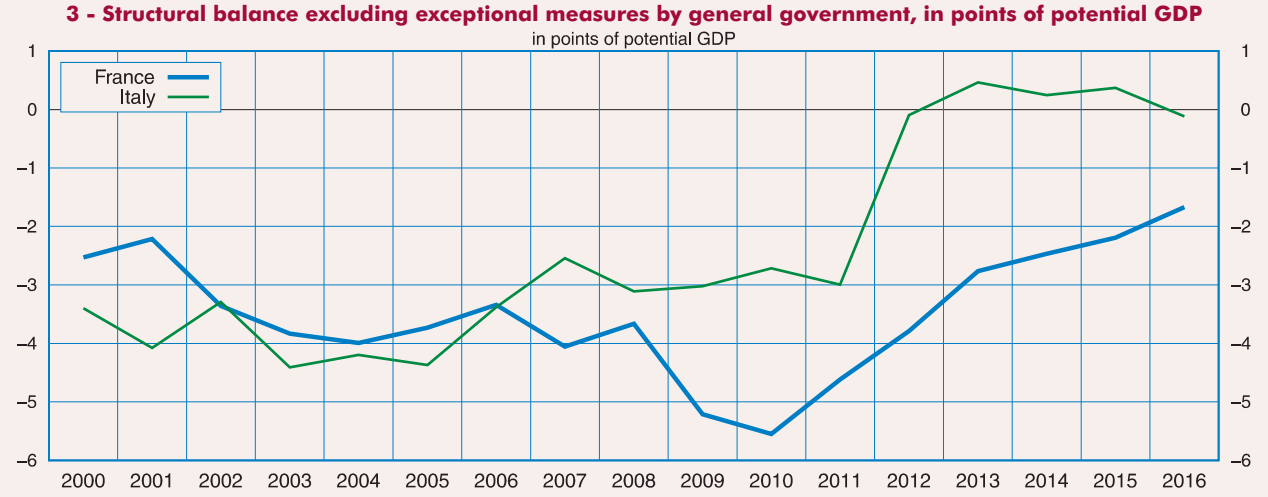
2 - Loans to non-financial corporations



Source: European Central Bank

Why has growth in Italy lost ground to France since 2000?

3 - Structural balance excluding exceptional measures by general government, in points of potential GDP



Source: OECD, forecast for year 2016

The demographic factor accounts for 0.2 points of average annual growth differential since 2000

The total populations of France and Italy are similar, but their population dynamics are not. The French population has increased by 0.6% per year since 2000. The Italian population has increased less rapidly, by 0.4% per year (*Table 6*). All in all, the less dynamic demographics in Italy account for 0.2 points of the average annual growth differential observed since 2000. In other words, when adjusted for population variations and excluding the cyclical factor, the diagnosis differs only slightly: economic growth in France is still higher than that in Italy from 2000, at around 0.6 GDP points every year. In addition, the demographic factor does not shed light on the break since 2000, as between 1975 and 2000, the average annual difference in demographic growth was already greater: +0.5% in France against +0.1% in Italy.

Table 6 - Demographic effects and growth of GDP between 2000 and 2016

variations in %, differentials in points

		Cumulative growth	Annual average growth
GDP variation	France	24.4	1.29
	Italy	4.6	0.26
	Differential (1)	*19.8*	*1.03*
Variation in GDP per capita	France	12.8	0.71
	Italy	–1.8	–0.11
	Differential (2)	*14.6*	*0.82*
Contribution of demography	*(1)–(2)*	*5.2*	*0.21*

Sources: INSEE, ISTAT

Why has growth in Italy lost ground to France since 2000?

Methodological differences may explain about 0.2 growth points per year

Measuring activity in volume terms means taking quality effects into account

In order to estimate real growth in a country's activity, when considering variations in amounts in euros, factors related to price rises must be neutralised. This means measuring variations in the price of identical products, i.e. at constant quality. In practice, this is rather difficult to carry out as product characteristics change frequently: new products are created or improved while others disappear. In particular, in the case of technological products such as televisions, computers, household appliances, telephones, motor cars, etc., innovations are often introduced with the result that these products shift upmarket. With this type of product it is not easy to distinguish, for example, whether a change in household expenditure in current euros on televisions is purely a price variation or a change in the characteristics of the product, in other words, a "quality effect". Various treatment methods can be used, each with its own advantages and disadvantages, although none is clearly preferable to the others (Caillaud *et al.*, 1998, present these methods for France).

Estimating quality effects may be done differently from one country to another

At European level, the principles behind the harmonisation of consumer price indices set out guidelines for these readings. However, the methods used to take quality effects into account may vary from one country to another. This sometimes results in a difference in the way volumes of activity are calculated, but this is not systematic. On the one hand, a difference in measuring the consumer price index does not necessarily mean a difference in measuring volumes of activity: for example, national accountants may favour volume indicators directly. On the other hand, the volume-price split of mainly imported products has only an indirect influence on that of economic activity.

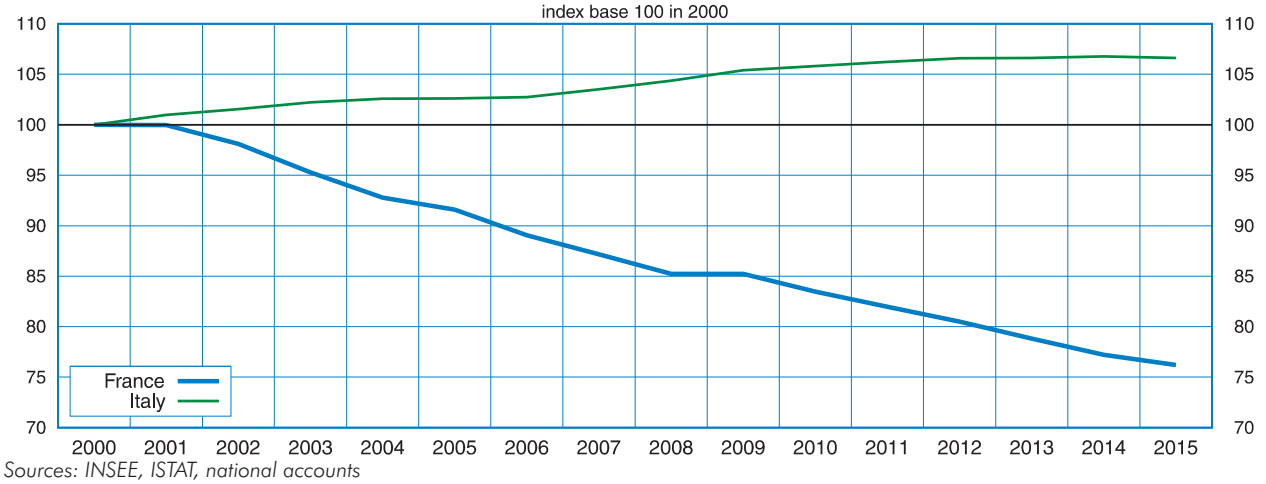
The growth differential in value terms between France and Italy is smaller

For France and Italy, the average annual growth differential in GDP in volume terms is +1.0 point from 2000, whereas it is only +0.6 points for value data. In other words, the contribution of the deflator to the growth differential is around +0.4 points annually, as the increase in prices in Italy is estimated to be greater.

Estimation of quality effects seems to be clearly different for some consumption items

The French and Italian methods for measuring prices, and hence the adjustment for quality effects, are manifestly different for certain items of household expenditure. This is particularly true for household appliances: the price index for these products has increased annually by 0.4% on average since 2000 for Italy, but decreased by 1.8% in France (*Graph 7*), although these are products that for the most part are traded at world level and price changes should be fairly similar since they are expressed in the same currency.

7 - Deflator of household consumption of household appliances



Sources: INSEE, ISTAT, national accounts

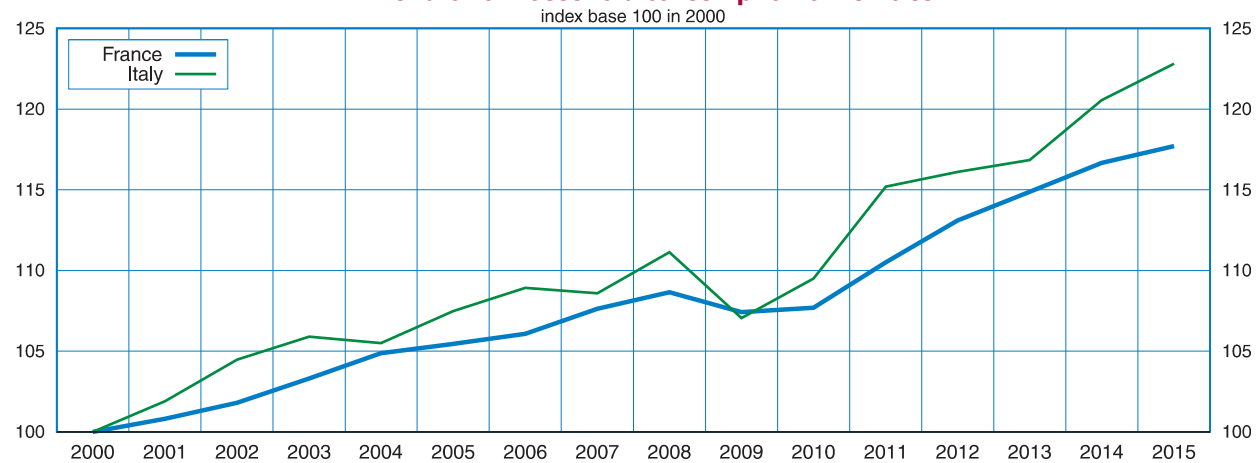
For this item, the adjustment for quality effect therefore appears more favourable for changes in volumes in the case of France than in that of Italy. Similar differences in treatment can be found for other goods, such as tools, cultural appliances and accessories or for certain services. For rents in particular (real or imputed), the method used also appears to differ between the two countries. In the French national accounts, the consumer price index is used as the indicator, and the deflator of consumption is scarcely different. In the Italian national accounts, however, the price index used is determined from the "Household Budget Survey"; this index increases considerably faster than the consumer price index (*Graph 8*), resulting in a change in volumes that is less dynamic than if the consumer price index had been used.

Telecommunication services are another example where treatment diverges. In the French accounts, volumes consumed are assessed directly from the number of minutes, SMS or MMS messages exchanged. Using this method, technological progress is taken into account in terms of information exchange. In the Italian accounts, volumes are deduced from change in value based on operators' receipts and price changes and telephone packages measured in the consumer price index (ISTAT, 2012). The result is a difference in the measurement of volume growth, which would be less dynamic if the French national accounts were drawn up using a similar method to the Italian accounts. However, for other products that change quality frequently, such as motor cars, changes in deflators and hence the quality effect adjustments are similar in the two countries (*Graph 9*).

8 - Deflator of household consumption on rent and consumer price index

Sources: INSEE, ISTAT, national accounts

9 - Deflator of household consumption of vehicles



Sources: INSEE, ISTAT, national accounts

Why has growth in Italy lost ground to France since 2000?

The treatment of quality effects also has repercussions on investment measurements

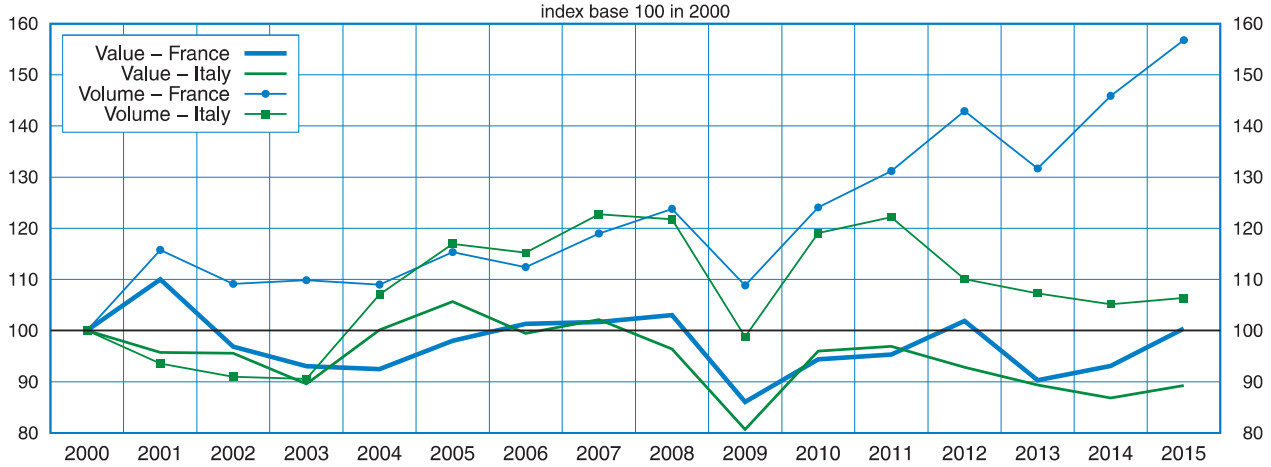
The use of different methods to measure quality effects seems to be repeated in some investment items too. This is particularly the case for technological equipment investment: between 2000 and 2016, growth in this item in value terms was similar in the two countries, but growth in volume terms was significantly more dynamic in France than in Italy, especially from 2011 (*Graph 10*). Such a disparity in the volume-price split for this type of investment is one of the reasons for growth differentials between different OECD countries (Ahmad *et al.*, 2017); price changes in France since 2000 fall between those of Italy and those of the USA and the United Kingdom, where they have dropped much more sharply.

Similarly, the volume-price split for investment in software and databases seems more favourable for growth measured in France than in Italy (*Graph 11*).

Analysis of productivity trends since 2000 also points to differences in measurements from one economy to another

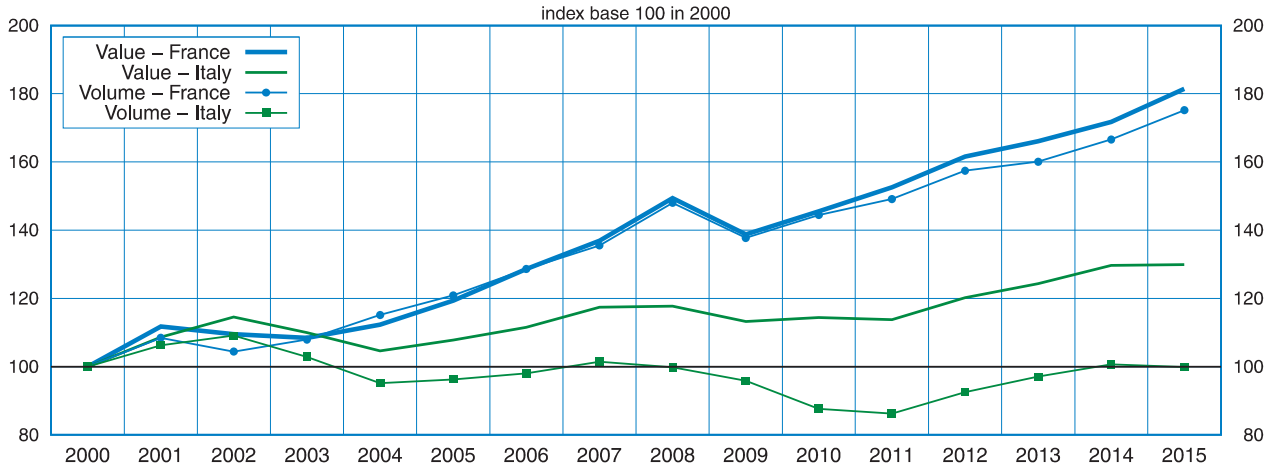
For the economy as a whole, the decline in growth since 2000 in Italy compared with France, while employment increased in a much more homogeneous way in the two countries (*Graph 12*), resulted in a sharp decline in productivity. This was concentrated in just a few branches (*Table 7*). Productivity gains were higher in France than in Italy by an average of 1.0 point per year. The main contributions were from industry (+0.3 points), trade, transport and accommodation and food services (+0.2 points), services to businesses (+0.2 point), and finally information-communication (+0.1 points). However, in construction, productivity fell significantly and in a similar fashion in both countries.

10 - Investment in information and communication technology, in value and in volume terms



Sources: INSEE, ISTAT, national accounts

11 - Investment in software and databases, in value and in volume terms

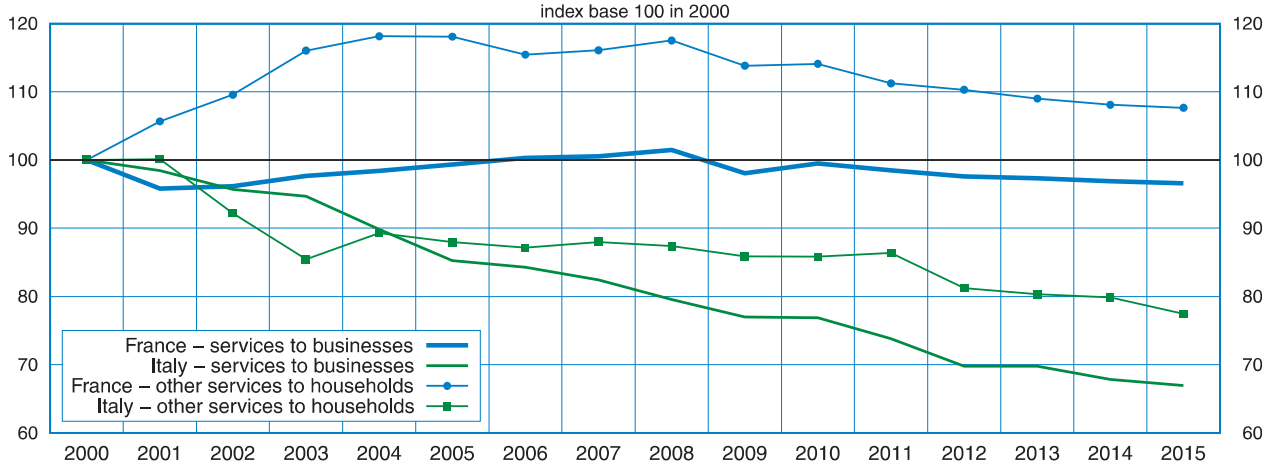


Sources: INSEE, ISTAT, national accounts

In the different branches, the productivity gaps are partly the result of differences identified in the consumption or investment deflators. Thus the measurement differences in the quality effects of electronic products are partly to be found on the supply side on the trade margins, where the volume-price split follows that of consumption. Lastly, half of the differences observed in information-communication are the result of the difference in concept in the prices of telephone services.

For other branches, the decline in productivity in Italy is of interest even though it is not easy to highlight a difference in measurement. This is especially the case in services to businesses where the productivity gap peaks: while productivity was stable overall in France between 2000 and 2016, at the same time in Italy it decreased continuously and sharply (–2.4% annually), according to published data. Although it declined to a lesser extent in "other services to households", productivity in Italy dropped by 1.5% annually after 2000 whereas it increased moderately in France (+0.7% per year). Exactly the same result is obtained when analysis is based on hourly productivity.

12 - Comparative analysis of productivity for selected branches



Sources: INSEE, ISTAT, national accounts

Table 7 - Annual change in productivity by branch between 2000 and 2016 and contributions to the differential

in %

	France	Italy	Contributions to the differential
Agriculture, forestry and fishing	1.0	0.7	0.0
Industry	2.3	0.7	0.3
Construction	–1.3	–1.2	0.0
Trade, transport, accomodation and food service activities	0.5	–0.5	0.2
Information-communication	2.8	1.4	0.1
Financial activities	1.6	1.3	0.0
Services to businesses	–0.5	–2.4	0.2
Non-market services	0.4	–0.1	0.1
Other services to households	0.7	–1.5	0.1
Total (except real estate activities)	**0.7**	**–0.3**	**1.0**

Note: here, productivity is measured as the ratio of value added by volume to employment in individual persons.

Sources: INSEE, ISTAT, national accounts

Why has growth in Italy lost ground to France since 2000?

All in all, methodological differences account for 0.2 points of growth differential since 2000

All in all, the methodological differences identified when measuring activity contribute to the growth differential between France and Italy. This is especially true for products with a high technological content, where innovations have often been introduced and where consumption is growing. When combining the consumption and investment items for which a major difference in deflator seems to clearly indicate a difference in the method used to measure the quality effect, and take their import content into account, the methodological differences in measuring activity would appear to account for about 0.2 points of Italy's lower annual growth since 2000 (*Table 8*).

The ground lost could also be linked to structural factors that are difficult to quantify

The demographic, cyclical and methodological factors that have been identified account for about half of the growth differential that has appeared since 2000 between France and Italy: 0.6 points per year out of a total of 1.0 point per year on average. In the economic literature (Mrabet (2016), Mody and Riley (2014), Calligaris *et al.* (2016)), other factors have been suggested to account for the Italian decline: the poor level of research and development (*Graph 13*), the general weakness of the productive investment rate, lower qualification levels of the labour force, labour market rigidities which are likely to limit the integration of young people in particular and hence the effective use of human capital, weak competition in certain goods and services markets which is likely to limit innovation, the family-based structure of Italian capitalism, regional inequalities specific to the country, the increasing misallocation of capital, and also weakening institutions and increasing corruption.

Table 8 - Growth differentials attributable to differences in method

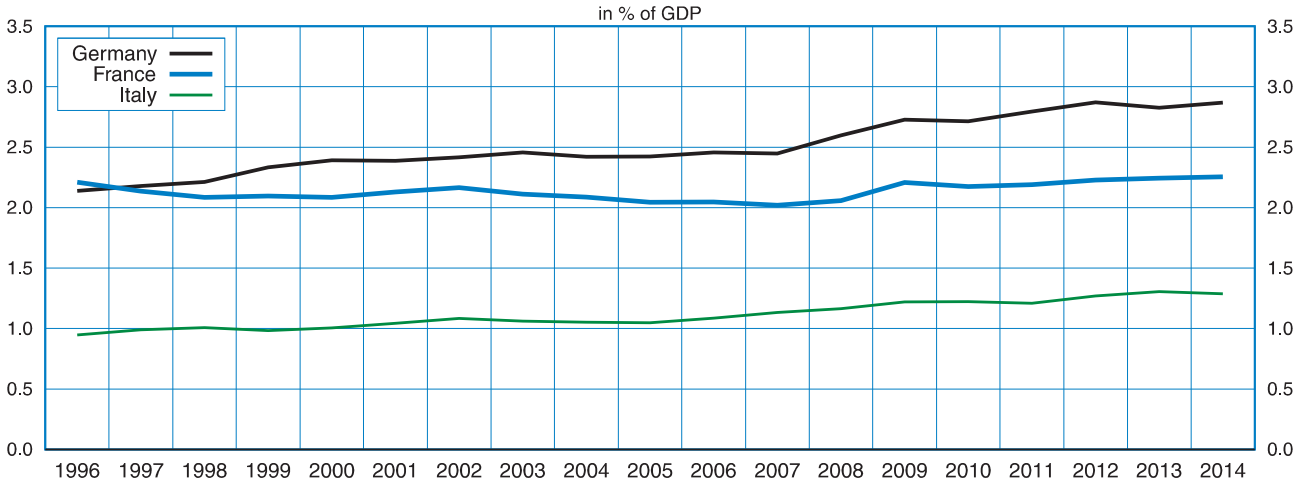
in GDP points

	2000-2010	2011-2015	2000-2015
Consumption of goods	0.04	0.01	0.03
Consumption of services	0.16	0.09	0.14
Investment	0.08	0.03	0.05
Total	**0.28**	**0.13**	**0.22**

How to read it: differences in methods used to measure quality effects in the consumption of services contributed 0.14 points to the annual growth differential between France and Italy, between 2000 and 2015.

Sources: INSEE, ISTAT, national accounts, calculations by authors

13 - Ratio of research and development (R&D) to GDP



Source: World Bank

However, most of these factors, which are structural in nature, are very difficult to quantify. Nor can they demonstrate the scale of the decline in both time – before and after 2000 – and space, and in comparison to France in particular. For example, the research and development rate is certainly lower than in the rest of Europe, but this was already the case in the 1990s, with no apparent growth differential, and since 2000 it has even increased more in Italy than in France. In addition, the rate of higher education graduates has increased considerably more in Italy than in the rest of Europe (Gros, 2011). Also, the productive investment rate in Italy was very similar to that of French enterprises until 2010 and only fell back with the sovereign debt crisis. Finally, there is no particular reason to suggest that regional disparities are the cause of the decline (*Box 2*). Regarding labour market rigidities, Hassan and Ottaviano (2013) use OECD employment protection data to show that Italy's market was more flexible than those of France and Germany from 2000 from 2007.

However, regarding the misallocation of capital, Calligaris *et al.* demonstrate a very sharp rise in Italy over 20 years: in each industry, the variance of per capita productivity per firm increased greatly. The authors calculated that this factor potentially made a major contribution of around 20% to 60% of productivity loss, depending on the branch. Regarding the quality of institutions, Gros (2011) highlights the very serious deterioration in Italy's ranking since 2000 in different classifications concerning respect for the law, the effectiveness of government, and corruption, although without quantifying the consequences.

Nevertheless, although these different structural factors may persist, the growth differential fell significantly in 2015 and 2016 and is likely to be moderate once again in 2017 compared to the preceding fifteen years (+1.3% expected in Italy against +1.6% in France in this *Conjoncture in France*): as the Italian output gap is even more pronounced, Italy will see a faster improvement in its economic situation. ■

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Why has growth in Italy lost ground to France since 2000?

Box 2 – Regional disparities do not seem to be a factor in the ground lost by Italy

In Italy, per capita GDP shows some major regional disparities. For example, per capita GDP in the southern part of the country (€18,100 in value per annum) is much less than that in Lombardy (€35,700 per annum). However, the least prosperous regions in Italy contribute no less to their country's growth than the least dynamic regions in France contribute to the French economy. In other words, in terms of contribution to growth, there are strong regional disparities in Italy, but they are no greater than the disparities between Île-de-France and the least populated regions of France. Italy, however, does not have the advantage of a world-ranking metropolis such as Paris, which is a powerful driving force for the French economy: more than a third of French growth between 2000 and 2015 derived from Île-de-France. ■

Regional contributions to national growth

French developments

Review of the previous forecast

In Q1 2017, gross domestic product (GDP) grew a little more than forecast in Conjoncture in France *in March 2017 (+0.4% against +0.3%). The contribution of domestic demand excluding inventory to growth in GDP was in line with the forecasts (+0.4 points): household consumption slowed after a marked upturn at the end of 2016, almost as forecast (+0.1% against +0.2%), corporate investment was surprisingly strong (+1.9% against +0.9%), while that of households was almost in line with the forecast (+1.0% against +0.9%). Government investment, however, contracted unexpectedly (–1.2% against a forecast of stability). The negative contribution of foreign trade to growth was greater than expected (–0.7 points against –0.4 points). On the other hand, the contribution of changes in inventories was more favourable (+0.7 points) than expected (+0.3 points). The growth forecast for Q2 remains unchanged from that in March's issue of* Conjoncture in France *(+0.5%).*

In Q1, market-sector employment was more dynamic than anticipated: +76,000 against a forecast of +41,000. At the same time, the unemployment rate fell to 9.6% of the French labour force, against a forecast of 9.8%. In May 2017, headline inflation stood at +0.8% according to the provisional estimate, and the forecast for June is lowered from +1.1% to +0.8%.

In Q1, activity progressed a little more than forecast

In Q1 2017, gross domestic product decelerated slightly, but less than expected in *Conjoncture in France* in March 2017 (+0.4% after +0.5% at the end of 2016; *Table 1*). Manufacturing output fell almost as expected (–0.2% against –0.3%; *Table 2*) and the value added of the branch increased by 0.2%, as forecast.

Energy production also decreased markedly (–1.3%) whereas it had been expected to be close to stable (–0.1%): household heating expenditure fell back in February and March due to mild weather conditions after a rather cold autumn. Finally, production in construction was slightly less dynamic than forecast (+0.3% against +0.4%), but market-sector services progressed more than expected (+0.9% against +0.4%).

The negative contribution of foreign trade to growth was greater than forecast

Exports were weaker than expected (–0.8% against +0.2% forecast), affected essentially by manufactured goods (–2.0% against –0.1%). Conversely, sales of agricultural products (+3.3%) and those of energy, water and waste, which rebounded strongly (+20.1%), increased when they had been expected to be stable. Exports of services progressed as forecast (+1.0%).

Table 1
Gross domestic product and its main components in the expenditure approach
Percentage changes from previous period in %

	Conjoncture in France March 2017		*Conjoncture in France* June 2017	
	Q1 2017	Q2 2017	Q1 2017	Q2 2017
Gross domestic product	0.3	0.5	0.4	0.5
Imports	1.3	0.2	1.4	0.0
Household consumption expenditure	0.2	0.4	0.1	0.4
General government consumption expenditure*	0.3	0.3	0.3	0.3
Gross fixed capital formation	0.8	0.6	1.2	0.1
of which: Non financial enterprises	*0.9*	*0.5*	*1.9*	*–0.2*
Households	*0.9*	*1.0*	*1.0*	*0.9*
General government	*0.0*	*0.6*	*–1.2*	*0.2*
Exports	0.2	1.4	–0.8	2.2
Contributions (in percentage points)				
Domestic demand excluding changes in inventories**	0.4	0.4	0.4	0.3
Changes in inventories**	0.3	–0.3	0.7	–0.5
Net foreign trade	–0.4	0.4	–0.7	0.7

Forecast

* General government and non-profit institutions serving households
** Changes in inventories include acquisitions net of sales of valuable
Source: INSEE

Imports increased a little more quickly than forecast (+1.4% against +1.3%). Purchases of manufactured goods were even more dynamic than expected (+3.0% against +1.9%). Energy purchases, on the other hand, fell significantly (–8.8% against a forecast of –3.0%). Imports of agricultural products fell back (–0.4%) whereas they had been expected to be stable.

Due to the fall in exports, the contribution of foreign trade to GDP growth was significantly more negative than forecast (–0.7 points against an expected –0.4 points). Conversely, that of changes in inventories was more favourable than expected (+0.7 points against +0.3 points).

The growth forecast for Q2 2017 is unchanged

The growth forecast for Q2 2017 is unchanged from that in *Conjoncture in France* in March (+0.5%).

In Q2, manufacturing production should rebound a little less than forecast in *Conjoncture in France* in March (+0.8% against +1.0%), as should the added value of the branch (+0.6% against +0.7%).

The forecast for total household consumption (+0.4%) remains unchanged. The forecast for investment by non-financial enterprises is lowered (–0.2% against +0.5%) due to the more pronounced calendar effects of the end of the one-off additional depreciation allowance measure. The rebound in government investment has been slightly attenuated (+0.2% against +0.6%).

Foreign trade should sustain activity more than expected in March's issue of *Conjoncture in France* (+0.7 points against +0.4 points). The import forecasts have been slightly lowered (0.0% against +0.2%) and those for exports slightly raised (+2.2% against +1.4%): against a backdrop of a general recovery in world trade, French sales, in particular in aeronautics and shipbuilding, should rise again after a very poor Q1, especially as several major contracts are likely to be delivered. Conversely, the contribution of changes in inventories should be negative (–0.5 points), and a little more so than forecast in *Conjoncture in France* in March (–0.3 points).

Market-sector employment was more dynamic than expected

In Q1 2017, market-sector employment increased by +76,000, which was more than expected (+41,000; *Table 2*). At the same time, the unemployment rate fell to 9.6%, against a forecast of 9,8%, mainly due to the unexpected fall in the labour force participation rate.

In Q2 2017, the employment forecast (+45,000) is almost unchanged, while that for the unemployment rate is lowered (9.6% against 9.8%).

Headline inflation is a little lower than in the March forecast

In May 2017, headline inflation stood at +0.8%, according to the provisional estimate, less than was forecast in March. For June, headline inflation is revised downwards to +0.8% (against +1.1%). The core inflation forecast, meanwhile, is lowered slightly (+0.5% in June against an initial forecast of +0.7%), due to the fall observed in telephony service prices at the start of the year. ■

Table 2

Activity by sector and labour market

Percentage changes from previous period in %

	Conjoncture in France March 2017		*Conjoncture in France* June 2017	
	Q1 2017	Q2 2017	Q1 2017	Q2 2017
Output by sector				
Agriculture	2.6	1.9	2.4	1.7
Manufacturing	–0.3	1.0	–0.2	0.8
Energy, water and waste	–0.1	0.7	–1.3	0.7
Construction	0.4	0.8	0.3	0.7
Trade	0.2	0.6	0.6	0.5
Market services excluding trade	0.4	0.6	0.9	0.5
Non market services	0.3	0.3	0.3	0.2
Total	**0.3**	**0.7**	**0.5**	**0.6**
Employment, unemployment, prices				
Non-agricultural market sector employment	41	41	76	45
ILO* unemployment rate - Metropolitan France	9.8	9.8	9.6	9.6
Consumer price index[1]	1.3	1.1	1.1	0.8
Core inflation[1]	0.5	0.7	0.4	0.5

Forecast

* ILO unemployment: unemployment as defined by the International Labour Organisation
1. Year-on-year on the last month of the quarter
Source: INSEE

Output

In Q1 2017, gross domestic product slowed slightly (+0.4% after +0.5% in Q4 2016), as did total output of goods and services (+0.5% after +0.7%). The dip stems from a decline in output in the manufacturing sectors (–0.2% after +0.7%) and in energy-water-waste (–1.3% after +2.5%).
Since December 2016, the business climate in France has been fluctuating at four to five points above its long-term average (100). It stood at 105 in May. It has improved considerably in industry, reaching a level in May not seen since June 2011. In construction, it exceeded its long-term average for the first time since mid-2012 and is higher in services and trade.
Total output of goods and services is expected to gather pace slightly in Q2 2017 (+0.6%) and should remain buoyant in H2 (+0.6% then +0.5% in Q3 and Q4), taking its average rise over the year to +1.9% after +0.9% in 2016.

Output of goods and services is expected to continue increasing steadily until the end of 2017

After rising by 0.7% in Q4 2016, output of goods and services slowed slightly in Q1 2017 (+0.5%; *Table 1*), due to a decline in manufacturing output and that of energy-water-waste. However, activity picked up in agriculture and market services; it also increased as solidly as in the previous quarter in trade.

Reaching 105 in May, the business climate confirms a clear brightening of the picture since December 2016 (*Graph 1*). The improvement is even more substantial in industry: the business climate reached 109 in May, its highest level since mid-2011.

Drawing on this outlook, output of goods and services is expected to gather pace a little in Q2 2017 (+0.6%) and should remain buoyant in H2 (+0.6% then +0.5% in Q3 and Q4), mainly following the profile of manufacturing industry and construction. Indeed, manufacturing output is expected to bounce back in Q2 due to the reopening of refineries, and it should gather pace in construction; activity should then increase steadily in both sectors in H2. Activity in market services and in trade is expected to slow a little in Q2, before increasing robustly in H2.

Manufacturing output is expected to recover in spring 2017 and then remain buoyant for the rest of the year

Manufacturing output contracted in Q1 2017 (–0.2% after +0.7%), mainly due to a marked decline in manufacturing of coke and refined petroleum products (–11.0% after +4.7%) and in agri-food (–0.8% after –0.8%). On the other hand, output picked up in "other industries" (+0.6% after –0.2%), remained vigorous in transport equipment (+1.0% after +3.3%) and stabilised in capital goods (after +1.1%).

Table 1

Output by branch at the previous year's chain-linked prices

Q/Q-1 variations (as a %), SA-WDA data

	Quarterly changes												Annual changes		
	2015				2016				2017						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2015	2016	2017
Agriculture (2%)	–0.7	–1.0	–1.4	–2.0	–2.5	–1.3	–0.1	1.4	2.4	1.7	1.0	0.2	–1.5	–5.6	4.9
Manufacturing industry (20%)	1.1	–0.1	0.4	0.6	0.2	–0.9	0.7	0.7	–0.2	0.8	0.7	0.5	1.9	0.8	1.5
Energy, water, waste (4%)	3.6	–2.2	1.2	–0.6	1.3	0.7	–2.2	2.5	–1.3	0.7	0.0	0.2	0.6	0.8	0.1
Construction (8%)	–0.1	–0.3	–0.5	0.2	0.1	–0.3	0.3	0.6	0.3	0.7	0.6	0.6	–1.5	0.1	1.8
Trade (10%)	1.0	0.5	0.8	0.2	1.0	–0.4	0.0	0.6	0.6	0.5	0.6	0.6	3.0	1.5	1.8
Market services excluding trade (41%)	0.5	0.3	0.4	0.3	0.6	–0.3	0.4	0.6	0.9	0.5	0.6	0.6	1.7	1.3	2.4
Non-market services (15%)	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.9	1.0	1.0
Total (100%)	**0.6**	**0.0**	**0.3**	**0.3**	**0.4**	**–0.3**	**0.3**	**0.7**	**0.5**	**0.6**	**0.6**	**0.5**	**1.4**	**0.9**	**1.9**

Forecast

Weights constructed from the annual production value in 2015.

Source: INSEE

French developments

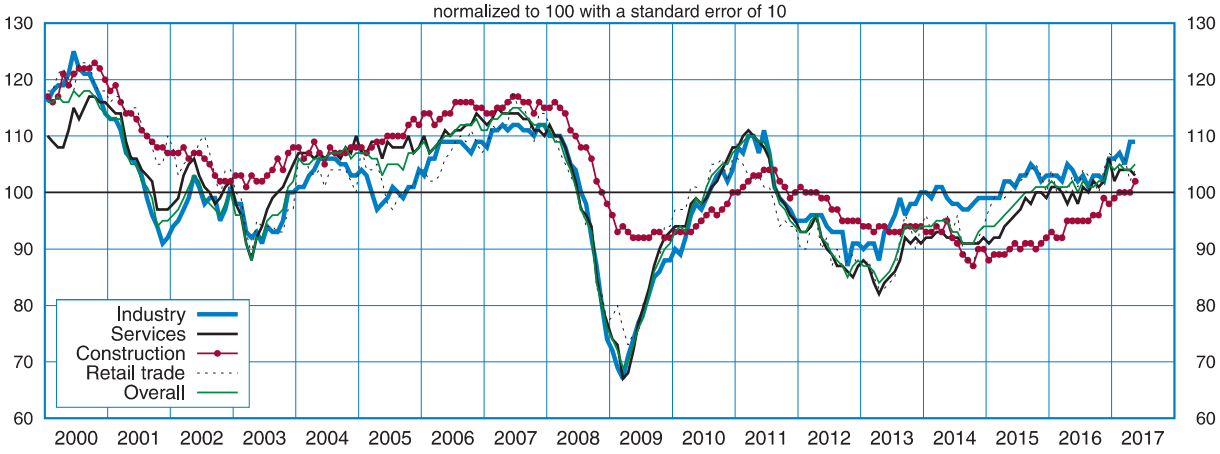
In Q2 2017, manufacturing output is expected to bounce back (+0.8%). Indeed, the quarterly carry-over effect in the industrial production index (IPI) was positive in April (+0.3%), the business climate was stable in May at its highest level since June 2011 and the balances of opinion of business managers in industry on expected activity and order books remain substantially above their average level. In detail, activity is expected to bounce back in agri-food (+0.5% after –0.8%), with the climate gaining 3 points in two months (*Graph 2*), and in coke and refined petroleum products (+4.7% after –11.0%), due to the re-opening of a refinery that was undergoing maintenance in Q1. Output is expected to rise again in capital goods (+1.4% after 0.0%), in line with the new improvement in the business climate, which in May rose to its highest level for nine years. Activity is expected to remain vigorous in "other industries" (+0.5% after +0.6%), with the business climate remaining considerably higher than the norm. On the other hand, activity is expected to remain virtually unchanged in transport equipment (+0.1% after +1.0%), the automotive sector being particularly affected by temporary supply difficulties. Value added, which is relatively unaffected by coke and refined petroleum products, should gather pace more moderately than output: +0.6% after +0.2% (*Table 2*).

In H2 2017, manufacturing output should remain solid (+0.7% in Q3 and then +0.5% in Q4). On average over the year it is expected to gather pace sharply in 2017 (+1.5% after +0.8% in 2016).

Agricultural output should bounce back in 2017 after two years of decline

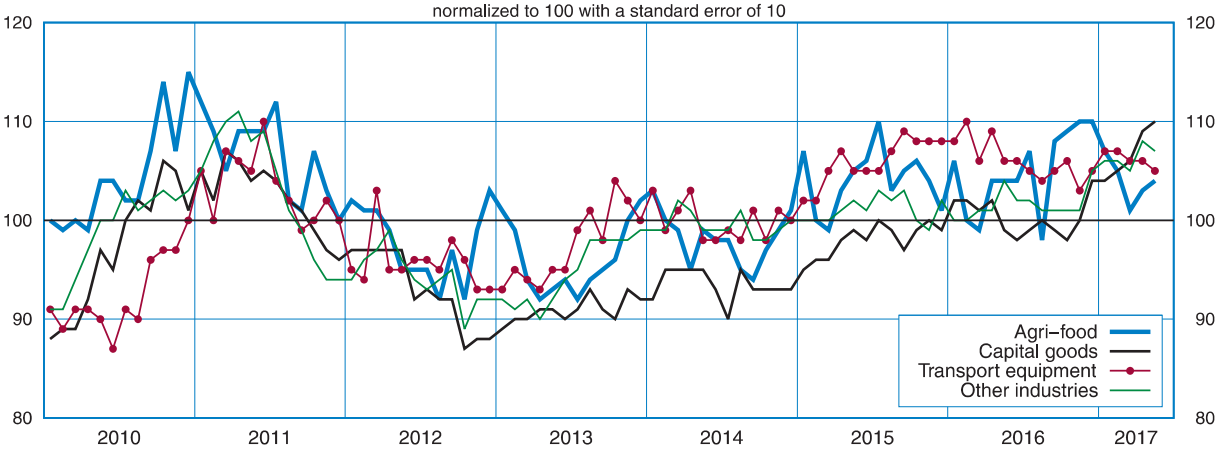
Agricultural output increased sharply in Q1 2017 (+2.4% after +1.4%). Assuming weather conditions are normal, it should continue to rise steadily through the end of 2017, so that, on average over the year, agricultural output should recover (+4.9%) after two years of pronounced decline (including –5.6% in 2016). The rebound in agricultural activity is expected to contribute +0.1 points to annual growth in gross domestic product.

1 - Business climate in France: all sectors in industry, services and construction



Source: INSEE

2 – Sub-sector business climates in industry



Source: INSEE

Energy output is expected to bounce back in Q2

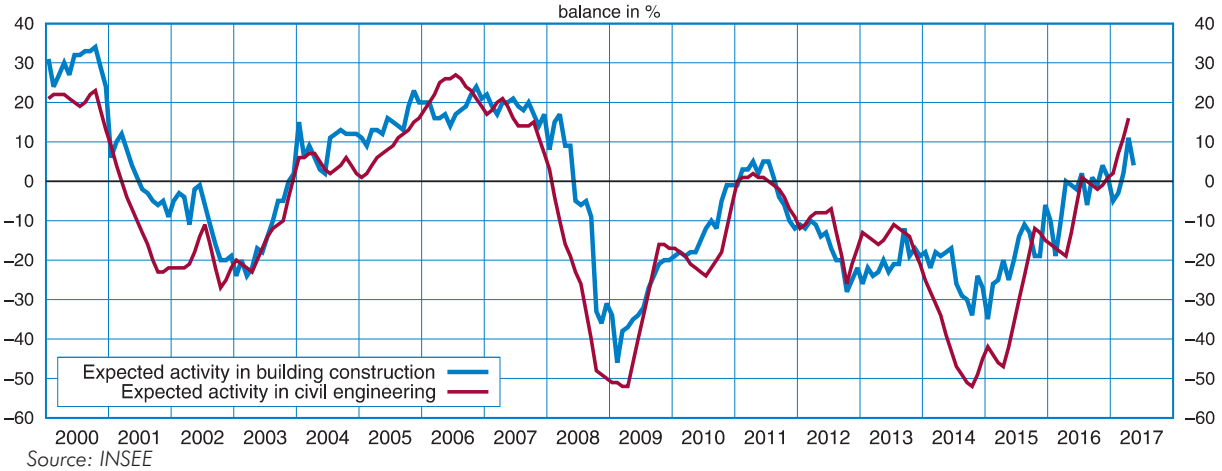
After falling in Q1 2017 (–1.3% after +2.5%) under the effect of temperatures above the seasonal norms in February and March after a cool autumn, energy output is expected to bounce back in Q2 (+0.7%) and then show weak growth in H2 (0.0% then +0.2% in Q3 and Q4). On average over the year, it is expected to increase by 0.1% (after +0.8%).

In construction, activity is expected to gather pace in the spring and then stay steady

In Q1 2017, output in construction slowed (+0.3% after +0.6%). Activity in the building sector increased whilst it fell again in civil engineering, hampered by unfavourable weather conditions.

In Q1 2017, the number of building permits for single dwellings picked up and has remained on an upwards trend since the beginning of 2015. On the other hand, the number of building permits for collective housing fell for the second consecutive quarter. In the business tendency survey carried out with business leaders in the building sector, the balance of opinion on expected activity was above its long-term average (*Graph 3*). Furthermore, opinions on order books in the building industry and the prospects for activity in small construction firms are improving. In civil engineering, the balances of opinion of business leaders concerning their activity substantially exceed their long-term average. Consequently, a rebound is expected in spring 2017. Total construction output is expected to gather pace in Q2 2017 (+0.7%) and then increase sharply once again in H2 (+0.6% per quarter). Over the whole of 2017, it is expected to pick up quite considerably (+1.8% after +0.1% in 2016).

3 - Expected activity in construction



Source: INSEE

Table 2

Value added by branch

Q/Q-1 variations (as a %), SA-WDA data

	Quarterly changes												Annual changes		
	2015				2016				2017						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2015	2016	2017
Agriculture (2%)	0.0	–1.0	–2.0	–3.2	–4.1	–2.7	–1.0	0.9	2.4	3.5	1.9	0.4	0.5	–9.8	5.7
Manufacturing industry (11%)	0.1	0.2	0.4	0.6	0.5	–0.1	0.4	0.3	0.2	0.6	0.6	0.5	0.9	1.4	1.4
Energy, water, waste (3%)	4.5	–1.8	1.8	–0.6	1.8	0.5	–2.7	1.8	–2.0	0.7	0.0	0.2	2.4	1.3	–1.3
Construction (5%)	–0.3	–0.6	–0.3	0.3	0.0	0.0	0.0	0.3	0.2	0.5	0.5	0.4	–2.0	0.0	1.2
Trade (10%)	0.7	0.3	0.7	0.1	0.9	–0.4	–0.1	0.4	0.4	0.4	0.5	0.4	2.2	1.1	1.2
Market services excluding trade (46%)	0.2	–0.1	0.4	0.4	0.8	–0.2	0.4	0.5	0.7	0.5	0.5	0.5	0.9	1.4	1.9
Non-market services (23%)	–0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.9	0.9
Total (100%)	**0.3**	**0.0**	**0.3**	**0.3**	**0.5**	**–0.1**	**0.2**	**0.4**	**0.4**	**0.5**	**0.5**	**0.4**	**0.8**	**1.0**	**1.5**

Forecast

Weights constructed from the annual production value in 2015.

Source: INSEE

Trade activity should continue to grow steadily in 2017

In Q1 2017, trade activity grew at the same sustained rate as in Q4 2016 (+0.6%). Indeed, for manufactured goods household consumption remained buoyant (+0.3% after +0.6%), and corporate investment accelerated (+2.7% after +1.1%).

In Q2, activity is expected to slow a little (+0.5%): consumption of goods is expected to remain positive, exports of manufactured goods should bounce back (+2.8% after –2.0%) but trade margins should suffer from the expected contraction of investment. In wholesale trade as well as in retail trade, the business climate improved in May. In both sectors, it stands at 104, above its average level, and the balances relating to general and personal prospects remain higher than their long-term average.

As a result, trade activity is expected to increase vigorously in H2 (+0.6% in each quarter). On average over the year, it should increase by 1.8% in 2017, after +1.5% in 2016.

Market services excluding trade: activity is expected to rise at a sustained pace in 2017

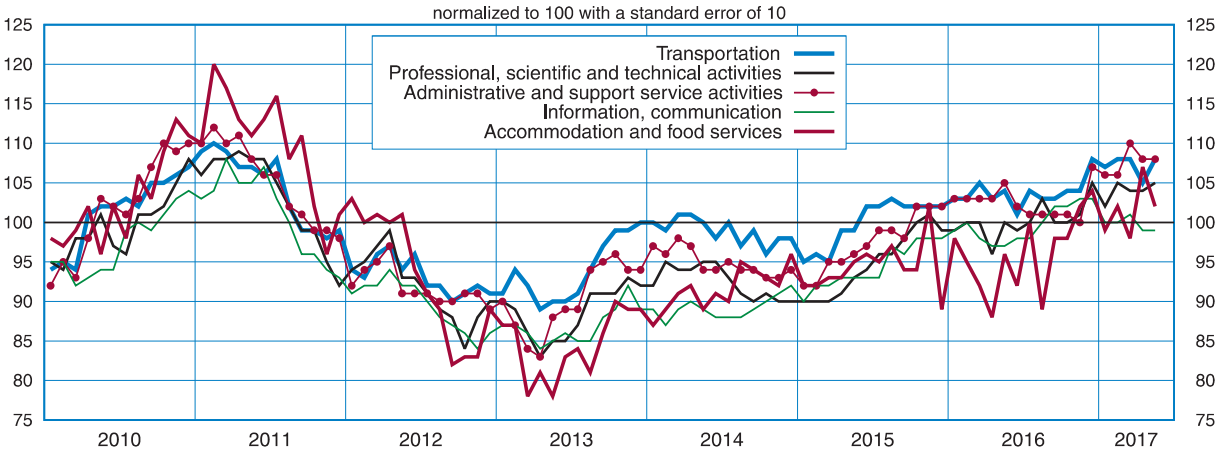
In Q1 2017, activity in market services excluding trade saw a sustained increase (+0.9% after +0.6%). Activity gathered pace sharply in accommodation and food services (+1.0% after 0.0%) and information and communication (+1.7% after +0.7%), and bounced back in "other service activities" (+0.5% after –0.2%). It continued to grow markedly in services to businesses (+1.2% after +1.0%) and in transport services (+0.6% after +0.8%).

In May 2017, the business climate in the service sector was virtually unchanged at 103, above its long-term average. It confirmed the brighter picture since the end of 2016 – in December it had reached a level not seen since mid-2011. The composite indicator is particularly high in transport (108; *Graph 4*) and in administrative and support services (108). In accommodation and food services, the business climate dipped in May, after a marked improvement in April, but it remains above its long-term level, confirming that tourists are returning to France. In Q2 2017, activity in market services excluding trade is expected to slow down (+0.5%) and then continue growing at a similar rate in H2 2017 (+0.6% per quarter). Over 2017 as a whole, output of market services excluding trade is expected to accelerate markedly (+2.4% after +1.3%).

Mainly non-market services: growth in activity is expected to remain moderate

In Q1 2017, activity in mainly non-market services grew at the same rate as in Q4 2016 (+0.3%). It is expected to continue increasing at this moderate pace until the end of the year. Overall over the year, output is expected to grow by 1.0% in 2017 in these sectors, as in 2016.■

4 – Sub-sector business climates in services



Source: INSEE

Two new indicators of activity in services and trade to refine short-term monitoring in these two sectors

Since March 2017, the range of short-term economic indicators provided by INSEE has seen the addition of two new indices, the Index of Services Production (*indice de production dans les services* - IPS) and the Index of Sales Volume in Wholesale and Retail Trade (*indice de volume des ventes dans l'ensemble du commerce* - IVVC). Both have proved to correlate well with their sector's business climate derived from the business tendency surveys. They also correlate well with the corresponding aggregates in the quarterly national accounts, the IPS with the production of market services and the IVVC with that of commercial services. In certain cases, the IPS can be used to complete the short-term diagnostic in real time.

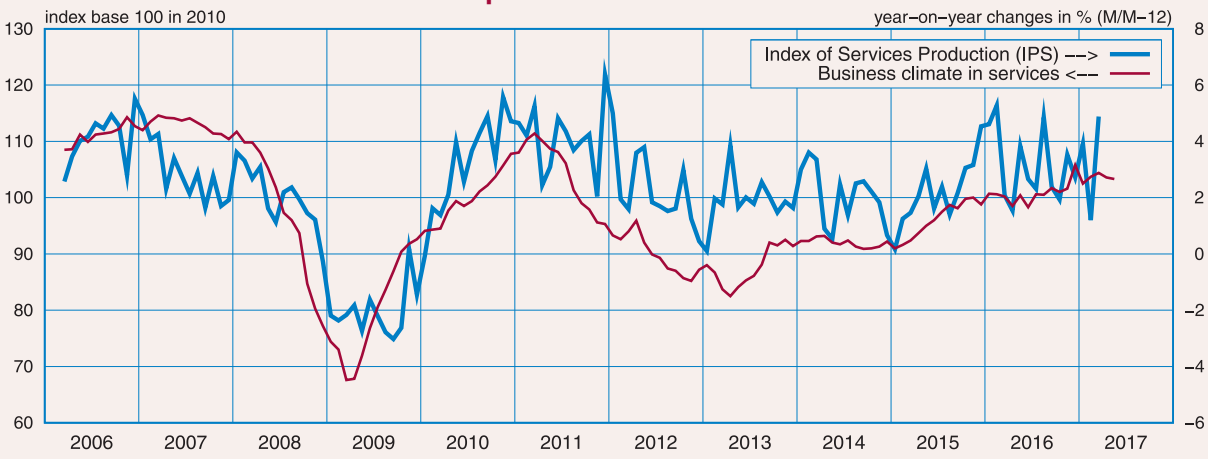
Since March 2017, INSEE has developed a new Index of Services Production (IPS) which has been added to the panel of tools used to monitor economic activity in France. Like the industrial production index (IPI), this index is calculated monthly. It is published approximately 60 days after the end of the month in question, like the indices of turnover in value it is based on (see Method). With regard to the latter, it aims to measure the change in the volume of activity excluding price effects, facilitating interpretation for the purposes of short-term analysis.

The IPS is obtained by aggregating the output indices of the market service sectors it covers (most of them, with the exception of activities that are not liable for VAT such as financial services or market health services). Similarly, an Index of Sales Volume in Wholesale and Retail Trade (IVVC) now provides the volume of activity in the trade sectors every month. With the industrial production index and the construction output index, the outlook in most market sectors is now monitored by a quantitative monthly indicator.

These two new quantitative indicators correlate well with the sectoral business climates estimated from the business tendency surveys

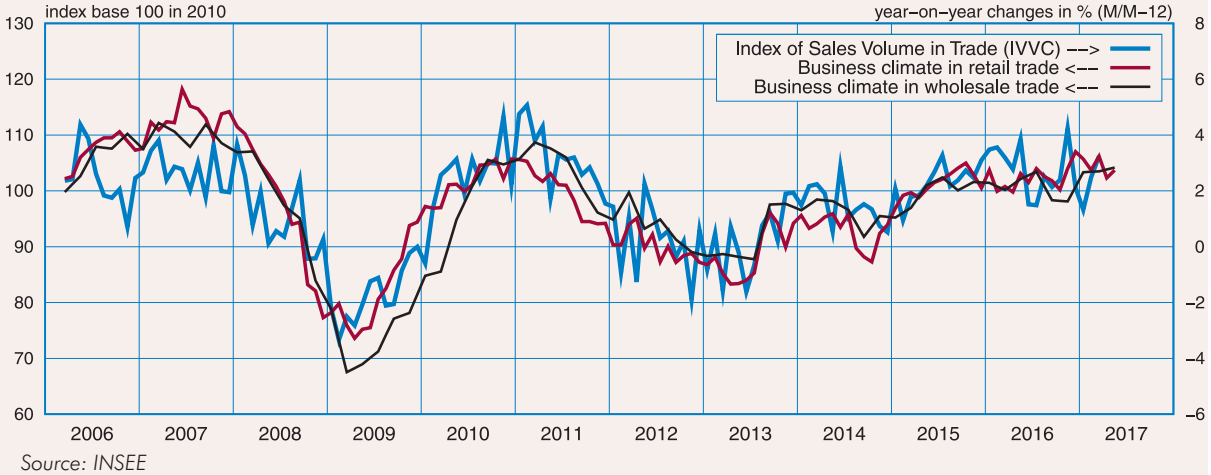
Even though the monthly variability of the IPS is greater than that of the business climate estimated from the business tendency survey in services (Gorin et al., 2015), their medium to long term trends appear to be very closely correlated; the correlation coefficient since 2006 between the business climate and the year-on-year IPS figures is 68% (*Graph 1*).

1 – Business climate and production index in volume in trade services



Source: INSEE

2 – Business climate and sales volume in wholesale and retail trade



Source: INSEE

The same applies to the IVVC (*Graph 2*): the correlation coefficient since 2006 between the year-on-year figures for this indicator and the business climate is 69% in retail trade (including the sale, maintenance and repair of motor vehicles); it is 75% for wholesale trade alone.

The IPS and the IVVC also correlate well with the corresponding aggregates in the quarterly national accounts

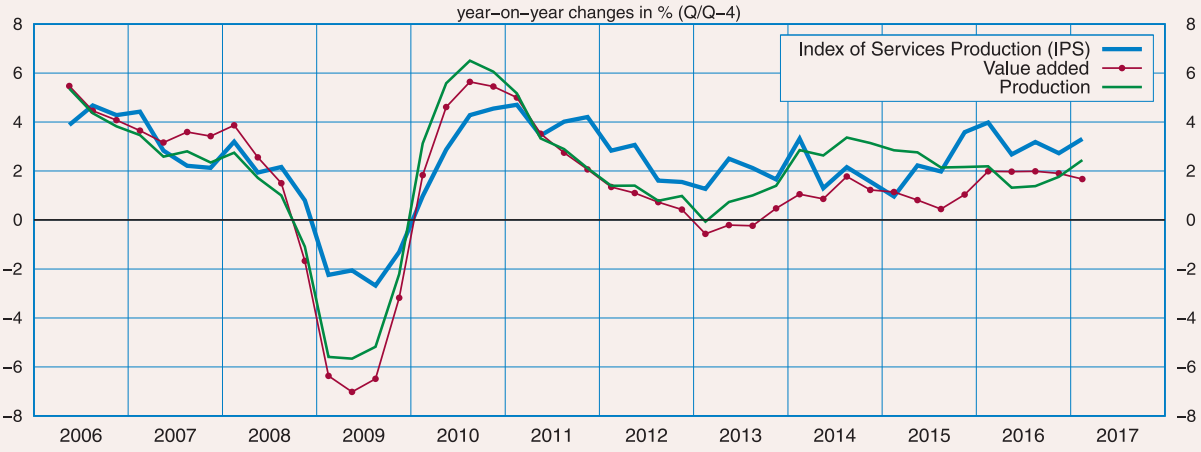
In the quarterly national accounts, the production of trade and services is not estimated directly: it is derived from the resources-uses balance, at a relatively detailed level in the classification of products (accommodation, food services, telecommunications, etc.). For many products, the turnover indices are used to calculate certain uses (consumption, investment, etc.); for example, the food services turnover index is the indicator used to work out quarterly consumption of the product in question. Other indicators are sometimes preferred: for example, the data from the ARCEP (electronic communications and postal regulation authority) or the balance of payments data for exports of services.

In spite of these differences in sources, the services production taken from the quarterly accounts and the index of services production have proven to be well correlated, in a scope rendered as comparable as possible (on the national accounts side: excluding financial services and real estate services, a branch which is very closely related to household activity).

In this scope, the short-term fluctuations in the IPS and the services production in the national accounts tally well (*Graph 3*). The correlation between the quarterly variations in the two aggregates is 70%.

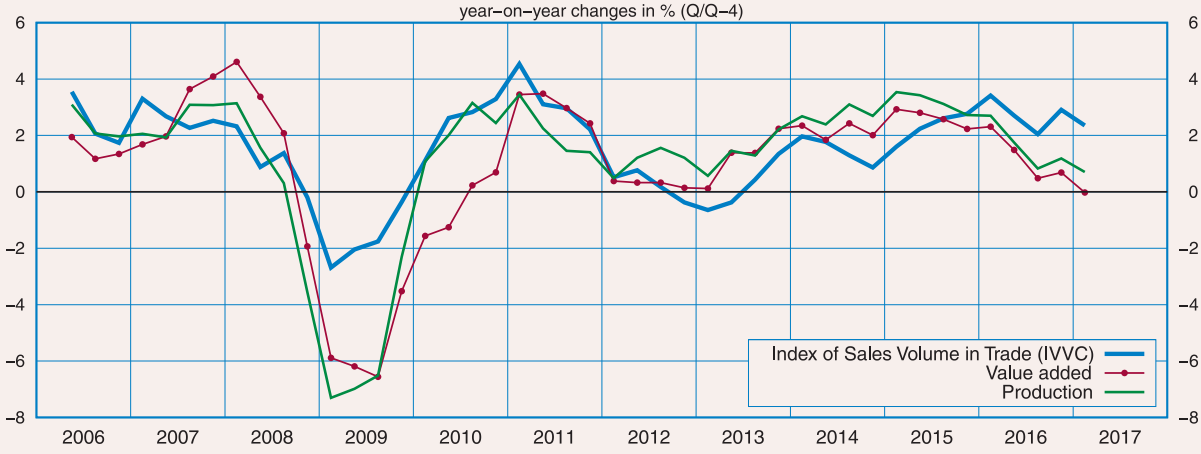
The dynamic of the IPS has proven to be closer to that of output than to that of value added. As the IPS is weighted by value added, this observation may seem paradoxical, but there are two reasons for it. First of all, the elementary changes are in fact changes in turnover, for which the closest national accounts concept is output. Secondly, these changes, even when weighted by value added in a base year, cannot detect the deformation of production capacity evidenced by the structural data and the national accounts: indeed, production patterns change over time and the ratio of output to value added is not constant, even at the most detailed level of activity.

3 – Output index and activity in the national accounts in services



Source: INSEE

4 – Sales volume index and activity in the national accounts in trade



Source: INSEE

In the commercial services scope, the fluctuations between the IWC and output from the trade branch in the accounts also coincide (Graph.4). The correlation between quarterly variations in these two variables is 69%. As with services, this correlation cannot be taken for granted: the fluctuations in trade output in the quarterly accounts are mainly due to those in the uses of tradable goods (consumption, investment and exports of manufactured goods, in particular), for which the sources differ from the IWC.

For the forecaster, the IPS can serve as a useful new indicator to appraise growth in real time

The good match between the quarterly variations in the accounts and those of the IPS make this new indicator a source of potentially useful information on the real-rime outlook.

Most notably, when a quarter Q ends and only a small amount of quantitative information about it is available (1 or 2 months of IPI, which is published 40 days after the end of the month in question), what does the information from the first month of the quarter in question (available after 60 days, i.e. at the end of quarter Q) tell us?

Some initial econometric modelling tests, attempting to directly explain the quarterly variations in GDP or in the output of the market services sectors, have given the following few findings (*Table*):

- on its own, the series of "one-month" quarterly carry-over effects of the IPS provides some clearly significant information (model 1);
- this information remains significant if business climate indicators derived from the business tendency surveys are added into the model (model 2);
- however, the one-month quarterly carry-over effect of the IPS no longer provides sufficient complementary information on the change in GDP once the one or two-month IPI carry-over effect information is added in (models 3 and 4);
- the IPS carry-over effect remains significant in these models (3 and 4) as long as it is restricted to market services activity only. ■

Contribution of the IPS to calibration models of GDP or market services activity

	One-month IPS carry-over effect elasticity of...			
	...GDP growth (standard deviation : 0.50 %)		...growth in trade services output (standard deviation : 0.86 %)	
	Coefficient (probability)	In-sample RMSE	Coefficient (probability)	In-sample RMSE
Model 1 : IPS variable only	0.16 (0.03)	0.42	0.41 (0.00)	0.62
Model 2 : model 1 + business climate in France	0.13 (0.04)	0.31	0.29 (0.01)	0.51
Model 3 : model 2 + one-month IPI carry-over effect	0.05 (0.37)	0.25	0.19 (0.05)	0.46
Model 4 : model 2 + two-month IPI carry-over effect	0.05 (0.28)	0.25	0.19 (0.03)	0.43

How to read it: in calibration model 3 of growth in the output of market services, three variables are tested at the same time: the business climate, the one-month IPI carry-over effect and the index of services production. For the latter, the related coefficient is 0.19 and appears significantly to be non-null insofar as the probability of the associated Student's t test is 0.05. The root mean square error (RMSE) of this model is 0.46%.

Source : Insee

Bibliography

Gorin Y., **Olive P.-D.**, **Renne C.** and **Bortoli C.** (2015), "New advances in the use of INSEE's business tendency surveys to analyse the short-term economic outlook", *Conjoncture in France*, March, p. 21-41.

Method

How is the Index of Services production constructed?

A company's production of services can be estimated based on the turnover it generates. For forty years INSEE has been publishing "turnover indices" for most of the market sectors (excluding agriculture and financial activities, among others). These indices are based on a financial source, the "CA3" form which enterprises must complete to pay value added tax (VAT). Nevertheless, the variations in these indicators include changes in price, which complicates the understanding of cyclical developments. To obtain an assessment of the volume of activity, that is, the change in turnover that does not depend on price variations, it is necessary to deflate (i.e. divide) the turnover value indices by a production price index reflecting the change in prices in the sector in question.

The production price indices for services are calculated from quarterly price data for some 10,000 products collected from a representative sample of about 1,700 enterprises as part of the "Observation of Prices in Industry and Services" survey. Data are not collected for certain specific sectors; in these cases a very similar

price index is used as a deflator: this may be the consumer price index (CPI) for the service in question or the production price index in another service activity that appears to be a good proxy. Insofar as these production price indices are calculated and published 60 days after the end of the reference quarter, they must be converted to monthly indices by appropriate statistical processing (using a well correlated monthly indicator, for example a monthly consumer price index) and be subjected to forecasts for two months out of three.

Production indices at a detailed level are thus defined as the division of turnover sales indices by the associated price deflator. This operation is carried out for the 141 classes of the market service sectors used: transport and warehousing (section H in the French classification of activities, NAF rev. 2); accommodation and food services (I); information and communication (J); real estate activities (L); professional, scientific and technical activities (M); administrative and support services (N); arts, entertainment and recreation (R); "other services" (S, divisions 95 and 96 only).

Once the indices have been calculated at the most detailed level of classification, the indices for broader sectors are obtained by aggregating these elementary indices by Laspeyres indices (with constant weightings over time).

The base for the services output index will be reset every five years; the index currently being published is in the 2010 base, that is, the weightings of the different levels correspond to values calculated in the year 2010. It is also published with a reference 100 in 2010, meaning that the indices for the different levels had an average of 100 in 2010. The constant weightings of the elementary indices are the value added for each sector taken from the national accounts.

The series are published since 2005, corrected for seasonal variations (CSV) and for calendar effects (CWD). ■

Foreign trade

In Q1 2017, world trade grew strongly again (+2.2% after +1.7%), as did world demand for French products (+1.5% after +1.9%). However, French exports contracted (–0.8% after +1.0%), notably due to sales of transport equipment. In Q2, exports are set to rebound (+2.2%), driven mainly by deliveries on major aeronautical and shipbuilding contracts. They are likely to slow down in reaction in Q3 (+0.9%), before returning to higher growth (+1.3%), driven notably by continuing strong world demand.
Imports accelerated in Q1 (+1.4% after +0.6%), above all due to large one-off purchases of manufactured goods, in pharmaceuticals and refined petroleum products. They should stagnate in Q2. In H2, they are likely to return to a pace that is more in line with the content of domestic demand (+0.6% on average per quarter). On average, foreign trade is set to knock 0.3 points off annual growth in gross domestic product in 2017, which is significantly less than in 2016 (-0.8 points).

World trade should accelerate strongly in 2017

In Q1 2017, world trade accelerated again (+2.2% after +1.7%, *Table 1*), driven by dynamic Chinese, South Korean and American imports. Through to the end of the year, it should maintain a steady growth rate of 1.2% on average per quarter, as suggested by the high levels of balances of opinion on export orders in business tendency surveys around the world (*Graph 1*). World trade should continue to benefit from the recovery in imports in the emerging and US economies. On average in 2016, it had slowed down (+1.5% after +2.5%), posting its lowest growth since 2009. In 2017, it is set to accelerate strongly (+5.9%), driven by an upturn in global investment and in processing trade in Asia (*Report* p.19).

In this international context, world demand for French products progressed strongly again in Q1 (+1.5% after +1.9%, *Graph 2*). Through to the end of 2017, it is likely to progress slightly less quickly than world trade (+1.1% on average per quarter): due to its geographical orientation, France does not benefit as intensely as other economies from the recovery in demand in emerging countries. On average over the year, however, world demand for French products should pick up strongly in 2017 (+5.3% after +2.5%).

Exports are expected to pick up by the end of the year 2017

In Q1 2017, French exports fell back (–0.8% after +1.0%, *Table 2*) despite buoyant world demand. Manufacturing exports contracted significantly (–2.0% after +1.8%). This fall was driven mainly by a sharp drop in transport equipment (–6.7% after +4.3%) after the record aeronautical deliveries at the end of 2016. Similarly, sales of refined petroleum products fell (–5.5% after +0.2%) due to stoppages at several refineries. To a lesser extent, exports of "other industrial products" also fell back (–0.9% after +1.4%). However, energy exports rebounded strongly (+20.1% after –11.4%) with the resumption of activity of nuclear power plants that were previously under maintenance. Agricultural exports recovered to some extent, meanwhile (+3.3% after –5.5%). Finally, sales of services accelerated (+1.0% after +0.3%).

In Q2 2017, exports of goods and services are set to regain momentum (+2.2%), notably those of manufactured goods (+2.8%, *Graph 3*). Aeronautical and shipbuilding sales are set to increase sharply, driven by several deliveries on a number of large contracts, including the Meraviglia cruise ship and satellites that could not be launched in March due to industrial action in French Guiana. Exports of energy (+1.0%) and agricultural products (+0.5%) should progress slightly. Exports of services should return to a growth rate slightly below their trend (+0.8%).

Table 1

World trade and world demand for French products

levels ; percentage changes from previous period

	2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
World trade	**–0.6**	**0.7**	**0.7**	**1.7**	**2.2**	**1.4**	**1.2**	**1.0**	**2.5**	**1.5**	**5.9**
Imports of advanced economies	0.1	0.5	0.6	1.3	1.4	1.2	1.0	0.9	4.0	2.2	4.6
Imports of emerging economies	–2.1	1.3	0.7	2.4	3.8	1.6	1.6	1.3	–0.6	–0.1	8.8
World demand for French products	**–0.1**	**1.3**	**0.5**	**1.9**	**1.5**	**1.3**	**1.1**	**1.0**	**3.5**	**2.5**	**5.3**

Forecast

Source: INSEE

In H2 2017, French exports should continue to be marked by the delivery schedules of major aeronautical and shipbuilding contracts. Manufacturing exports should therefore slow down in reaction in Q3 (+0.5%), before accelerating in Q4 (+1.3%). Agricultural exports should show a recovery (+10.0% then +5.0%), provided that the summer harvests return to normal. Energy exports should continue to increase, although less than in H1 (+1.0% per quarter).

All in all, exports are expected to follow the same profile as manufacturing exports, accelerating in Q2 (+2.2%), slowing in Q3 (+0.9%) and accelerating once again in Q4 (+1.3%). Over the year as a whole, they should be stronger in 2017 than in 2016 (+2.8% after +1.9%), but French exporters are set to lose market share once again.

Imports are likely to remain dynamic in 2017

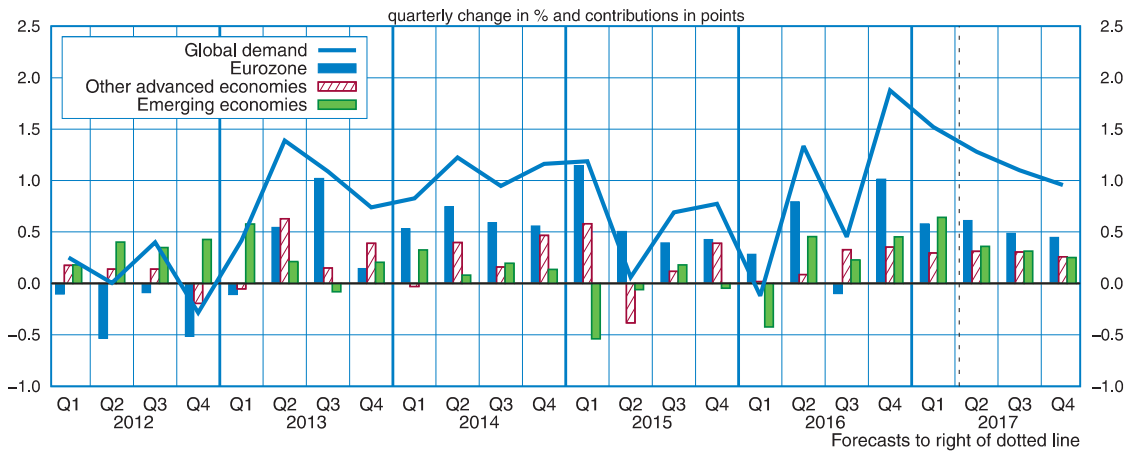
French imports gathered pace in Q1 2017 (+1.4% after +0.6%), especially those in manufactured goods (+3.0% after +0.3%). Imports of refined petroleum products rebounded sharply (+27.7% after –10.7%), while those of "other industrial products" also accelerated significantly (+2.7% after +0.3%), notably in pharmaceuticals, as did imports of capital goods (+1.8% after +0.6%), driven by dynamic investment. However, imports of services fell once again (–0.1% after –0.3%). Likewise, energy imports contracted (–8.8% after +9.5%), as did those of agricultural products (–0.4% after –0.1%).

In Q2, manufacturing imports should contract in reaction (–0.3%), as the dynamic purchasing at the start of the year in pharmaceuticals and refined petroleum products would appear to be mainly a one-off. Over the last three quarters of the year, imports of services should increase at the same pace as exports of these products (+0.8% per quarter). Imports of agricultural products should fall back slightly (–0.5%) in Q2, then more sharply in H2 (–3.0% in Q3), with the upturn in domestic agricultural production. Energy imports, which have reached a very high level, should fall back gradually (–0.5% in Q2, –6.0% in Q3 and –4.0% in Q4).

1 – World trade and new export orders

Sources: Markit, DG Trésor, INSEE forecast

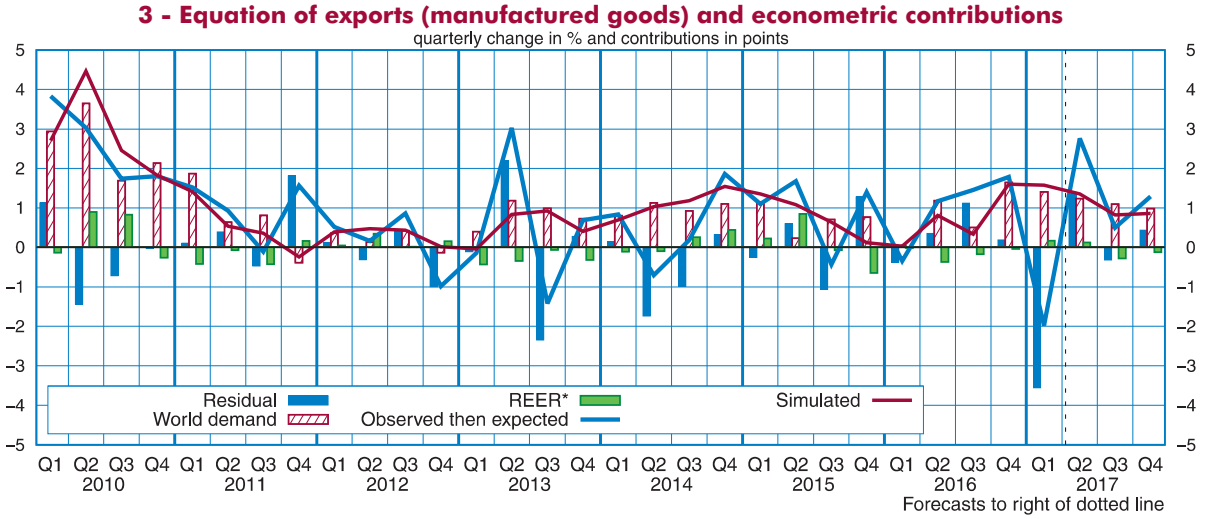
2 - World demand for French products and contributions of the main partners



Sources: DG Trésor, INSEE forecast

All in all, imports are set to stall in Q2 2017, before returning in H2 to a growth rate more in line with domestic demand (+0.5% then +0.7%). Over 2017 as a whole, imports should decelerate slightly (+3.5% after +4.2% in 2016), but still increase more significantly than exports. Foreign trade is therefore likely to hold back growth in gross domestic product again (–0.3 points), although less than in 2016 (–0.8 points). The improvement should mainly come from agricultural products, energy, and also the tourism balance (*Focus*). ■

3 - Equation of exports (manufactured goods) and econometric contributions



*REER: real effective exchange rate
Sources: INSEE, DG Trésor

Table 2

Foreign trade growth forecast

variations in % at chain-linked previous year prices, contributions in points

	Quarterly changes								Annual changes		
	2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Exports											
All goods and services	0.3	0.2	0.6	1.0	–0.8	2.2	0.9	1.3	4.0	1.9	2.8
Manufactured products (68%)*	–0.3	1.2	1.5	1.8	–2.0	2.8	0.5	1.3	3.9	3.0	3.1
Imports											
All goods and services	0.6	–1.1	2.8	0.6	1.4	0.0	0.5	0.7	5.5	4.2	3.5
Manufactured products (68%)*	0.8	–0.9	2.0	0.3	3.0	–0.3	1.0	1.0	5.2	4.4	4.5
Contribution of foreign trade to GDP	**–0.1**	**0.4**	**–0.7**	**0.1**	**–0.7**	**0.7**	**0.1**	**0.2**	**–0.5**	**–0.8**	**–0.3**

Forecast

*Part of exports (resp. imports) of non-energy industrial goods in exports (resp. imports) in a whole in 2016.
Source: INSEE

In 2017, tourism should no longer impede French growth after costing 0.2 GDP points in 2016

Since 2014, the tourism balance in France has declined sharply: it dropped to 1.3 billion euros in value in 2016, its lowest level since 1988. In volume, the decline in the tourism balance took 0.2 points off economic growth in 2016. This downturn, which goes against the grain in the European Union, is due above all to the disaffection of foreign tourists, mainly as a result of the major terror attacks that hit the country in 2015 and 2016. Their spending in the country declined sharply over this period. By comparison, tourism in Spain has been exceptionally buoyant: in 2016, tourism exports contributed around +0.4 points to Spanish growth in volume, after an increase of +0.2 points in 2015. This popularity has come largely at the expense of countries in the southern and eastern Mediterranean basin, rather than France. At the start of 2017, more and more signs began to emerge suggesting the return of tourists to France, with tourism exports looking set to bounce back in volume in 2017 (+2.5%) after two years of decline.

A sharp downturn in the French tourism balance since 2014

Since 2014, the tourism balance in France has fallen sharply. This atypical deterioration is mainly attributable to the fall in spending by foreign tourists in France. In the national accounts, tourism exports in value, i.e. spending by foreign tourists in France, declined to 38.6 billion euros in 2016 compared with 43.7 billion euros in 2014. Over the same period, tourism imports – i.e. spending by French tourists abroad, which follows the trend of their income – were almost unchanged, at 37.3 billion euros in 2016 against 37.5 billion euros in 2014. Thus the tourism balance, the difference between these two figures, stood at 1.3 billion euros in 2016, its lowest level since 1988, having been at 6.2 billion euros in 2014. This was therefore a loss of 4.9 billion euros in two years (*Graph 1*). In volume, this fall in the tourism balance cost 0.2 points of gross domestic product growth in 2016.

An unusual downturn among the European countries

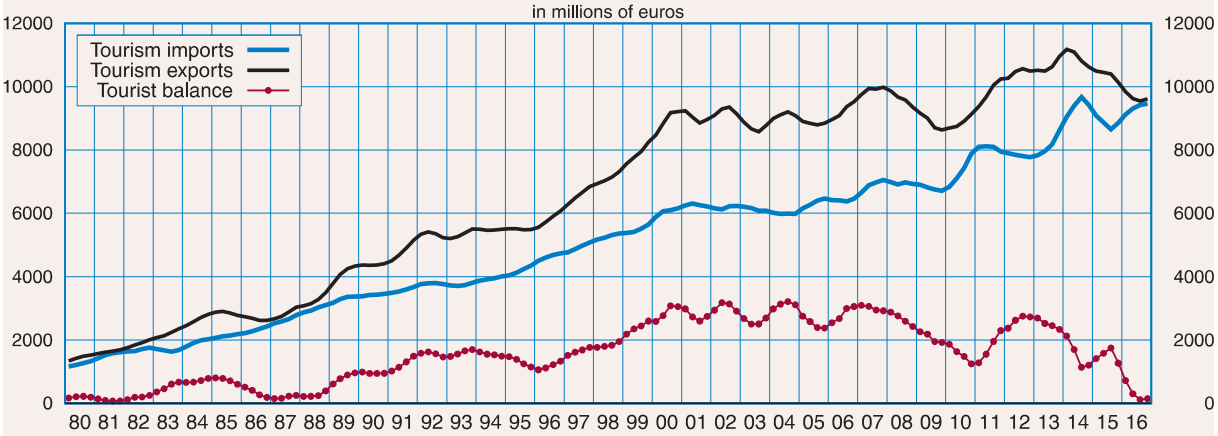
This trend in tourism exports sets France apart from its main European partners. As shown in the balance of payment data, which are more widely available than figures in the national accounts,[1] exports decreased by 5.5 billion euros between 2014 and 2016, dropping from 43.8 billion euros to 38.3 billion euros, a 12.8% decline in real terms. Over this same period, tourism exports grew in real terms by 12.3% in Spain, 7.2% in Italy, 3.2% in Germany and 2.2% in the United Kingdom (*Graph 2*). This drop in tourist income in France began in 2014 and continued until late 2016, mainly as a result of the major terror attacks that hit the country, in January 2015 and November 2015 in the Paris region, then in July 2016 in Nice.

Since 2014, Italians, Japanese and Russians have avoided France

This observation is confirmed by the figures for tourism nights. In 2016, foreign customers spent a total of 123.2 million nights in tourist accommodation in France, all types of accommodation combined (hotels, campsites and other types of tourist accommodation). This number of overnight stays is 7.0 million down on the 2014 total, or a decline of 5.4% in two years[2] (*Graph 3*). Over the same period, the number of overnight stays by foreign tourists increased by 34.4 million in Spain (or a rise of 13.2%), 11.0 million in Croatia (+18.0%), 9.8 million in Italy (+5.2%) and 6.0 million in the United Kingdom (+5.3%).

1. Balance of payments figures are the source for the national accounts and, with just a little reprocessing required, they are very similar. For international comparisons, they have the advantage of being available for many countries, including those that do not produce quarterly national accounts.
2. If the sharp rise in overnight stays in tourist accommodation offered by private individuals via Internet platforms were taken into account, this would reduce this decline. Thus, between 2015 and 2016, overnight stays by foreign tourists would decrease by only 3.9% against –5.2% if only professional accommodation were considered (Franceschi, 2017).

1 - In 2016 the tourism balance reached its lowest level since 1988



Source: INSEE

Concerning only overnight stays in hotels, foreign tourist stays fell by 3.4 million between 2014 and 2016. This decline is due mainly to Italian tourists (–1.3 million overnight stays), Japanese tourists (–1.2 million) and Russian tourists (–1.0 million). Conversely, tourists arrived in greater numbers from the Near and Middle East (+1.0 million) and China (+0.4 million), thus limiting the decline overall.

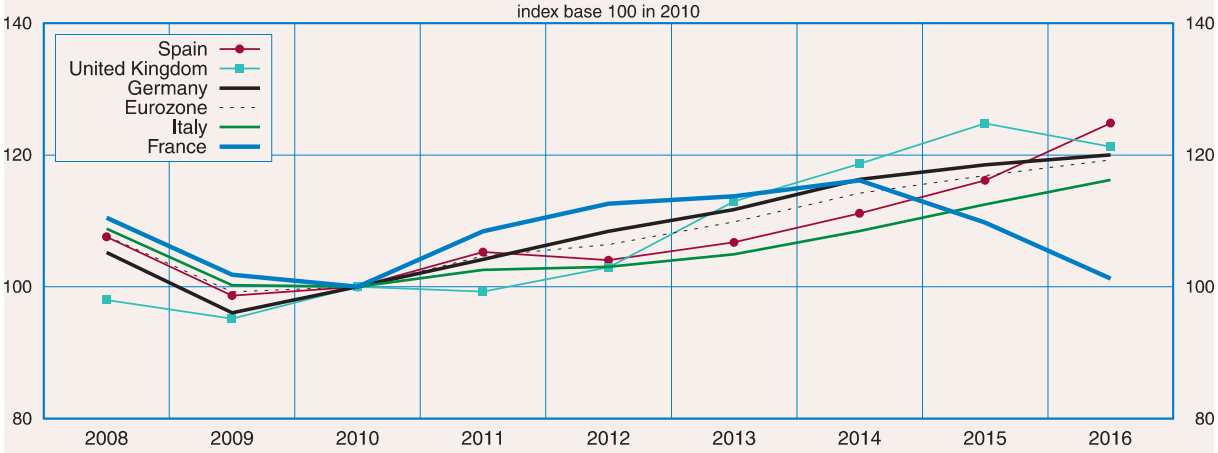
In terms of geographical distribution, Paris and Île-de-France suffered most from the drop in tourist numbers, with 4.6 million fewer foreign overnight stays in 2016 than in 2014. Conversely, in the Auvergne-Rhône-Alpes region the number of overnight stays by foreigners increased by 0.9 million over the same period. Finally, in the coastal areas in the south of the country, a drop in numbers in the Provence-Alpes-Côte d'Azur region (–0.3 million overnight stays) was more than made up for by a rise in Nouvelle Aquitaine (+0.3 million) and Occitanie (+0.2 million).

There may have been a counterpart to the fall in tourist numbers in France, especially in the Paris area, with a substantial increase in numbers in the United Kingdom over the same period. Tourist arrivals in London, where foreign visitor numbers increased by 9.5% between 2014 and 2016, are likely to rival those in Paris where numbers dropped by 9.3%.

Coastal tourism has strongly favoured Spanish growth since 2014

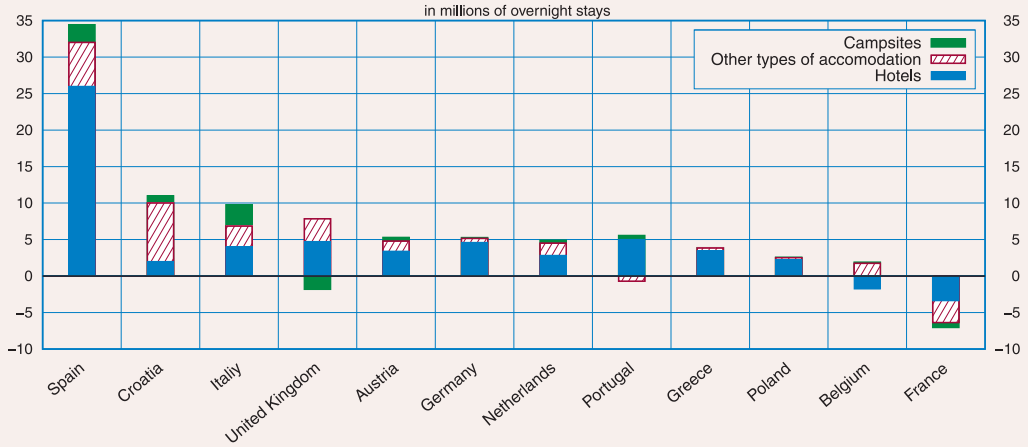
French tourism is holding up well in coastal areas, making it less likely that similar substitution phenomena will occur between France and Spain, since the exceptional vigour of Spanish tourist exports (+12.3% between 2014 and 2016 in real terms) is due mainly to the coastal areas. Thus the large increase in the number of overnight stays in hotels alone for the period under consideration (+25.9 million) is mostly concentrated in three regions: the Canary Islands (+6.5 million overnight stays), the Balearic Islands (+5.8 million) and Andalusia (+5.3 million). Almost half of this sharp increase can be attributed to British nationals (+10.1 million) and, to a lesser extent, French nationals (+3.0.million). Conversely, Spain is also affected by the decline in the number of Russian tourists (–3.7 million), whose purchasing power has fallen considerably since the Russia-Ukraine crisis and the sharp depreciation in the rouble. All in all, in 2016, tourism exports contributed as much as +0.4 points to Spanish growth, which had already seen a rise of +0.2 points in 2015.

2 - Tourism exports



Sources: Eurostat, INSEE Calculations

3 - Variation of overnight stays by foreigners between 2014 and 2016



Source: Eurostat

The recent buoyancy of tourism in Spain is mainly due to a substitution for countries in the southern and eastern Mediterranean

Spain has been able to benefit from a transfer of tourists, at the expense of several other countries in the southern and eastern Mediterranean basin. Tourism exports from several countries in the region have certainly declined substantially since the 2011 "Arab spring" and the ensuing political troubles: in real terms, tourism exports shrank by 58% in Egypt between 2010 and 2015, by 43% in Tunisia and by 24% in Lebanon (*Graph 4*). Only Moroccan tourism has stood up well (+6% between 2010 and 2016). More recently, Turkey has undergone the most serious deterioration in its tourism (–25% between 2014 and 2016), with the many terror attacks it has suffered and increasing geopolitical tensions. Thus the exceptional dynamics of Spanish tourism for the last two years seems to be more a consequence of transfer phenomena at the expense of these countries, rather than a substitution for tourism in France. Nevertheless, the French context may have limited the ability of the national tourism sector to take advantage of these transfers.

In early 2017, tourists are returning to France

However, towards the end of 2016 tourists gradually began to return to France. For the first time since 2015, overnight stays by foreigners increased year on year in Q4 2016 (+3.0%) then in Q1 2017 (+4.7%). This was particularly true for Île-de-France: overnight stays by foreigners began to recover towards the end of 2016 (+3.1% compared with the end of 2015), then much more clearly at the start of 2017 (+12.8%). These overnight stays are now back to levels similar to pre-2015 (*Graph 5*). Passenger numbers in French airports have also increased significantly since the end of 2016: in December 2016, the number of passengers on international flights to France was 10% higher than in December 2015.

The business climate in accommodation and food services confirmed an overall improvement and in early spring there were also some encouraging signs: from the beginning of 2015 to autumn 2016 it was hovering around 95, i.e. 5.points below its long-term average, and dipping occasionally after the terror attacks, but since then it has picked up and in May 2017 stood above its long-term average.

All in all, in the scenario described in this *Conjoncture in France*, tourism exports are expected to bounce back in volume in 2017 (+2.5%) after two years of major decline (–4.7% in 2015 and –6.9% in 2016). Imports are set to increase more moderately, in a similar way to French households' purchasing power. Overall, the tourism balance should pick up substantially and should no longer hamper growth in 2017 (after –0.2 points in 2016). This scenario is subject to several uncertainties. On the one hand, it assumes that there will be no major terror attack in France between now and the end of the year. On the other hand, the return of foreign tourists is currently being observed over the winter months, and compared with the previous year. Since numbers of foreign visitors are highest during the summer months, it will only be at the end of the summer period that a more accurate diagnostic can be made for 2017 overall. ■

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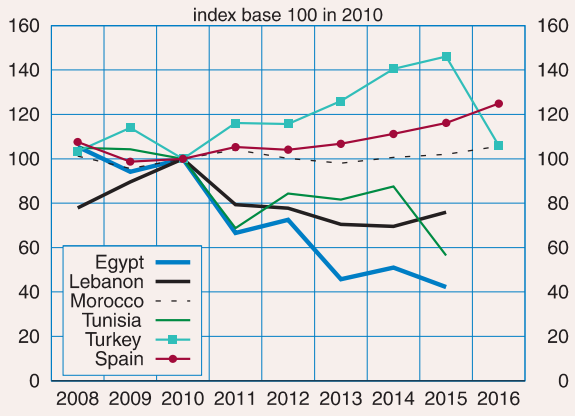
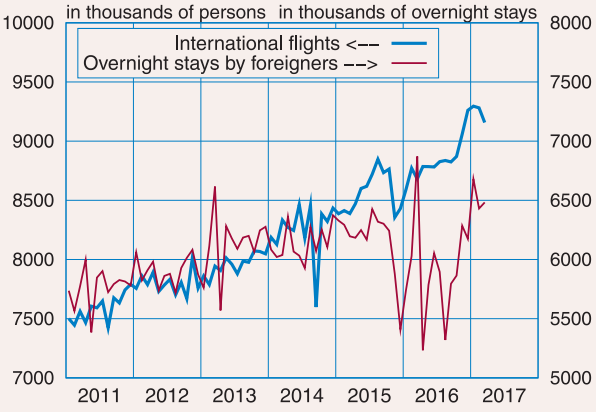
4 - Tourism exports (in real terms)



Sources: IMF, INSEE calculations

5 - Airport passenger arrivals and overnight stays by foreigners in France



Sources: SOES, DGAC, INSEE calculations

Employment

Non-farm market payroll employment in France continued to rise solidly in Q1 2017 (+76,000 jobs, after +60,000 in Q4 2016). It is expected to rise by +45,000 in Q2, bringing the number of job creations in H1 2017 to +121,000. It should slow in H2 (+82,000) especially since the effect of higher employment intensity of growth linked with measures to reduce the cost of labour is likely to lessen, as the hiring premium for SMEs is to come to an end. Over the year as a whole, it should therefore increase by 203,000 jobs, practically the same as in 2016 (+205,000).
In the non-market sector, employment is likely to slow in 2017 (+17,000, after +49,000 jobs in 2016) as a result of the expected decline in the number of subsidised employment contracts.
All in all, 222,000 jobs should be created in 2017, slightly fewer than in 2016 (+255,000). The pace of job creations is expected to be less sustained in H2 (+81,000) than in H1 (+142,000).

Market sector payroll employment should continue its sharp rise in 2017

In 2016 in France (excluding Mayotte), payroll employment in the non-farm market sectors accelerated significantly (+205,000, after +108,000 in 2015, Table 1), with a more marked increase in H2 (+117,000 jobs after +88,000 in H1). In Q1 2017, market sector employment continued to rise steadily (+76,000): it once again declined in industry (–5,000) but picked up in construction (+9,000); temporary employment continued to rise (+17,000) and employment in the tertiary sector excluding temporary work accelerated (+55,000, after +25,000).

Payroll employment should continue to rise in the market sectors through to the end of 2017, albeit a little more moderately in the second half-year (*Graph 1*). The pick-up in activity is expected to sustain job creations. In addition, the tax credit for encouraging competitiveness and jobs (CICE) and the Responsibility and Solidarity Pact (PRS) should continue to boost growth by adding about 20,000 jobs in H2 2017, as they did in H1. However, the planned withdrawal of the hiring premium for SMEs on 30 June 2017 is likely to slow job creations in H2 (about –20,000 jobs, after+20,000 in H1).

Through to the end of 2017, temporary employment should stabilise and tertiary sector employment excluding temporary work is expected to slow down

In 2016, temporary employment increased significantly (+82,000, after +54,000 in 2015). After growing slightly in H1 2016 (+13,000), it accelerated sharply in H2 (+70,000). As temporary employment is particularly sensitive to fluctuations in activity, it picked up sooner than other components of employment and approached the high levels it had reached before the 2008-2009 economic crisis. It is likely to slow in H1 2017, however (+29,000), then stabilise in H2 (*Graph 2*).

Table 1

Change in employment

in thousands, SA

	2016				2017				2016 H1	2016 H2	2017 H1	2017 H2	2016	2017	Level end 2016
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4							
Mainly non-agricultural market sectors (1)	**52**	**36**	**57**	**60**	**76**	**45**	**41**	**41**	**88**	**117**	**121**	**82**	**205**	**203**	**16,483**
Industry	–7	–9	–2	–4	–5	–5	–5	–5	–15	–6	–10	–10	–21	–20	3,147
Construction	–4	–2	–3	–3	9	3	6	6	–6	–6	12	12	–12	24	1,334
Temporary employment	7	6	28	42	17	12	0	0	13	70	29	0	82	29	671
Market services excl. tempory employment	56	41	34	25	55	35	40	40	96	59	90	80	155	170	11,332
Agricultural workers	**1**	**2**	**3**	**0**	**1**	**0**	**0**	**0**	**3**	**3**	**1**	**1**	**5**	**2**	**301**
Mainly non–market service sectors	**12**	**18**	**14**	**6**	**13**	**6**	**–1**	**–1**	**30**	**20**	**19**	**–2**	**49**	**17**	**8,058**
Self–employed	**–1**	**–1**	**–1**	**–1**	**0**	**0**	**0**	**0**	**–2**	**–2**	**0**	**0**	**–4**	**0**	**2,811**
TOTAL EMPLOYMENT	**64**	**54**	**72**	**65**	**90**	**52**	**41**	**40**	**118**	**137**	**142**	**81**	**255**	**222**	**27,653**

Forecast

(1) Sectors DE to MN and RU

Source: INSEE

Employment in the tertiary market sector excluding temporary employment accelerated in 2016 (+155,000, after +120,000 in 2015). It gained momentum in Q1 2017 (+55,000). With business leaders remaining optimistic about prospects for growth in their workforce, employment in services excluding temporary employment should remain favourable in Q2 (+35,000, *Graph 3*). It should therefore increase by +90,000 in H1, before slowing slightly in H2 2017 (+80,000).

All in all, tertiary sector employment including temporary employment is set to rise by 199,000 in 2017 (+119,000 in H1 2017, then +80,000 in H2).

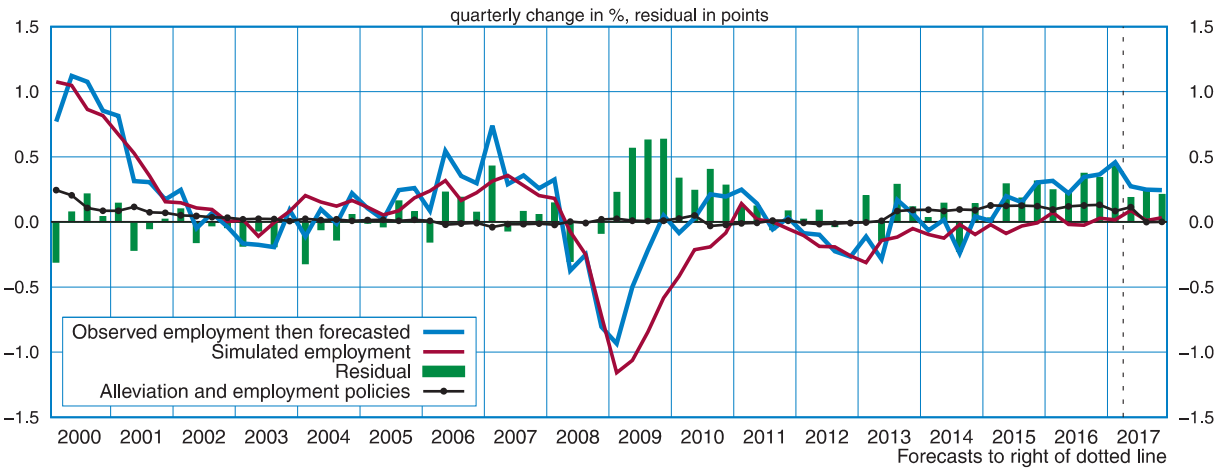
Job losses in industry are expected to continue into 2017

Net job losses in industry reached –21,000 in 2016, after –34,000 the year before. In Q1 2017, there were 5,000 job destructions in this sector. As the opinions of business managers in industry on changes in their workforce remain relatively stable, the drop in employment is likely to continue at the same pace throughout the last three quarters of 2017 (–5,000 jobs per quarter). Industry is therefore set to lose 20,000 jobs across the whole year.

Employment in construction should return to growth in 2017

Having fallen almost continuously since late 2008, payroll employment in construction returned to growth in Q1 2017 (+9,000). In the business

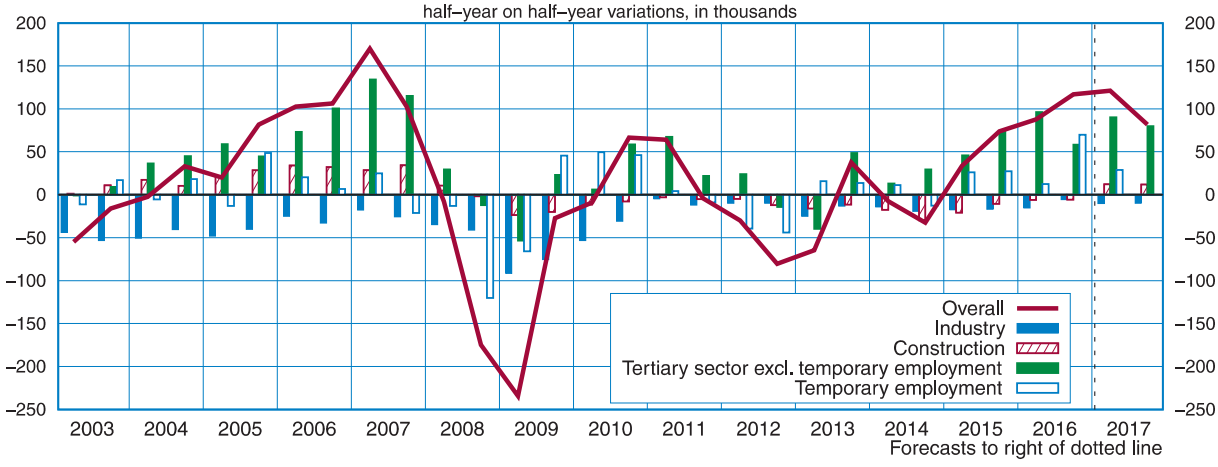
1 - Employment observed in the non-agricultural market sector, simulated and residual employment



Note: The equation residual for employment is the spread between the observed employment and the simulated employment from past and current variations in employment and activity and from effects of employment policies (included, over the recent period, the effects of the CICE, the PRS and the employment plan). A positive residual, such as that observed in 2015, indicates that observed employment showed better growth than past behaviour would lead us to expect. Estimation period: 1984-2009.

Source: INSEE

2 - Year-on-year change in payroll employment in the non-farm market sectors



Source: INSEE

tendency surveys the expectations of entrepreneurs concerning growth in their workforce have improved substantially in civil engineering and construction. Employment in construction is expected to continue to increase until the end of the year and should reach 24,000 in 2017.

Non-market payroll employment is expected to level off

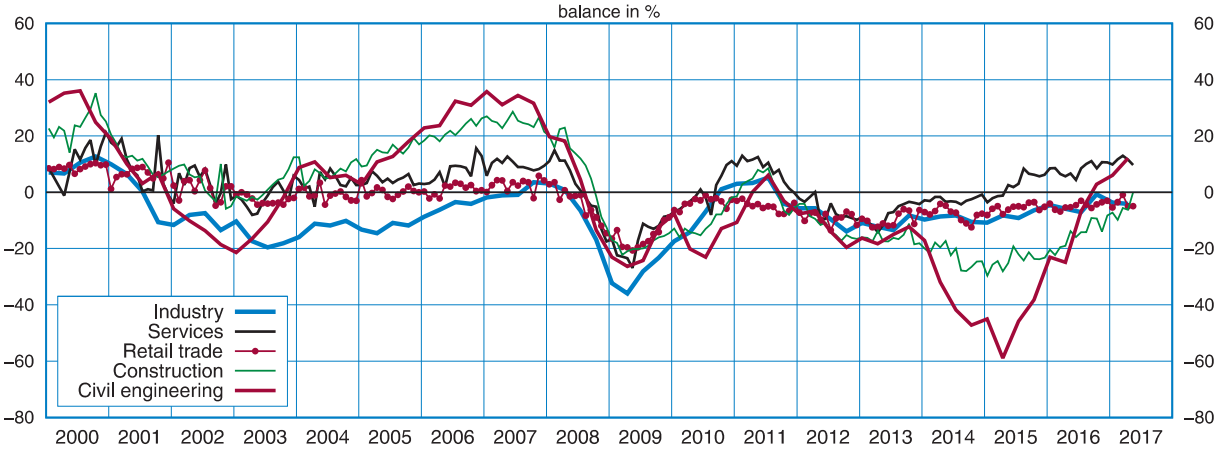
In 2016, non-market payroll employment increased by 49,000, driven mainly by private employment in the sector (+30,000) as well as by subsidised contracts and civic services (+9,000, *Table 2*).

In 2017, non-market payroll employment is expected to grow more slowly (+17,000), mainly because of the reduction in the number of beneficiaries of subsidised employment contracts: the number of beneficiaries of the "Future Jobs" programme is likely to continue to decline in 2017 (–24,000 after –21,000 in 2016); for the other schemes, even assuming a small additional budget for around 75,000 new entrants in H2, across the year as a whole the number of beneficiaries is likely to fall back (–22,000 after +19,000 in 2016). The number of people in civic service should continue to rise while non-subsidised public employment and private employment are expected to retain their slight upward trend (*Focus*).

Total employment is set to increase by 222,000 in 2017

Taking into account the self-employed and agricultural workers, net job creations, all sectors combined, should reach 222,000 in 2017, slightly less than in 2016 (+255,000). Over the year, employment is likely to slow in H2 (+81,000, after +142,000 in H1): this dip is likely to stem on the one hand from the decline in public subsidised employment and on the other from market sector payroll employment after the end of the hiring premium for SMEs.■

3 - Balance of opinion of business leaders on expected workforce



Source: INSEE, Business tendency surveys

Table 2

Change in subsidised employment and civic service in the non–market sector

in thousands

	2016				2017				2016 H1	2016 H2	2017 H1	2017 H2	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4						
"Future Jobs"	–2	–4	–7	–7	–4	–4	–7	–8	–6	–14	–9	–15	–21	–24
CUI-CAE incl. ACI*	13	10	–4	0	6	–2	–13	–13	23	–4	4	–26	19	–22
Civic service contracts	2	2	3	4	0	0	3	5	4	7	0	8	11	8
Total	**13**	**7**	**–7**	**–4**	**2**	**–7**	**–17**	**–16**	**20**	**–11**	**–5**	**–34**	**9**	**–39**

Forecast

* Since July 2014, recruitment by integration workshops and sites (ACI) no longer takes the form of a CUI–CAE (*Contrat unique d'insertion – Contrat d'accompagnement dans l'emploi* – Single integration contract – Employment support contract) but instead a CDDI (*Contrat à durée déterminée d'insertion* - Fixed-term integration contract). Nevertheless, in order to ensure that the scope of this analysis remains constant when tracking subsidised jobs, the CUI–CAE forecasts given here include ACIs.
Scope: Metropolitan France

Sources: DARES, INSEE calculations

What do companies tell us about the barriers to hiring?

For many years, INSEE has been asking enterprises about past and future changes to their workforce, the existence of recruitment difficulties and production constraints due to a lack of staff. Since January 2017, this information has been completed by a number of new questions that reveal the presence of barriers to hiring felt by companies and provide information about their type. What transpires is that half of enterprises are confronted with barriers at the time of hiring workers on open-ended contracts or fixed-term contracts of long duration, a third do not encounter any barriers and the others do not feel that this issue concerns them, probably because they have not recruited any new employees recently. Hiring is held back by uncertainty about the economic situation (barrier mentioned by 28% of enterprises), difficulty in finding skilled workers (27% of enterprises), employment costs that are deemed too high (23% of enterprises) and labour market regulation (18% of enterprises).

Since January 2017, new questions have been added to the business tendency survey to evaluate the barriers to hiring felt by companies. These questions complete those on the workforce that have already existed for many years, in particular on past and future changes to the workforce, difficulties experienced with recruitment or the production constraints linked to a lack of employees.

Recruitment difficulties have increased since the beginning of 2016

Since the beginning of 2016 the steady recovery in employment in the non-farm market sectors has been accompanied by a slight increase in difficulties recruiting staff encountered by businesses (*Graph 1*). In April 2017, 31% of enterprises in industry, services and construction stated that they experienced difficulties recruiting staff, compared to 26% at the beginning of 2016.

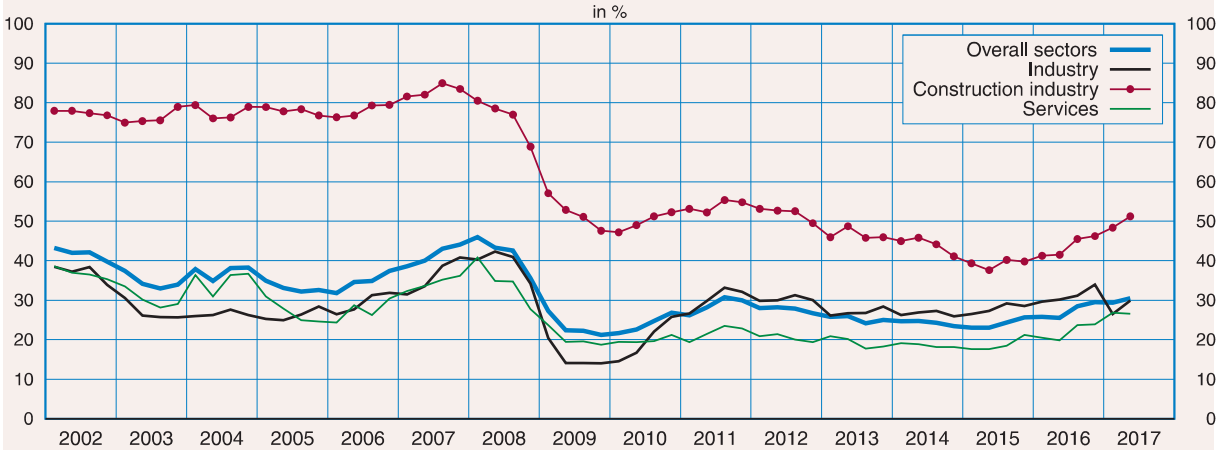
It was mainly service companies that contributed to the increase: 27% of them reported encountering hiring difficulties in April 2017, compared to 21% at the beginning of 2016. The level of recruitment difficulties, however, remains below the average prior to 2008 (34%). Recruitment difficulties have also intensified in construction industry companies (51% in April 2017 compared to 41% at the beginning of 2016), but again they remain lower than the average before 2008 (64%). In industry, this proportion has practically returned to its average pre-2008 level (30%).

The increase in recruitment difficulties implies that a growing proportion of enterprises are not managing to develop their business as much as they would like. Thus the proportion of enterprises that have seen their activity hampered by a lack of employees has increased since 2016, at the same time as the proportion that have experienced recruitment difficulties (*Graph 2*): at the beginning of 2017, this figure passed the 10% mark once again to reach its highest level since October 2008. The increase is significant in services where this proportion is at its highest since the end of 2008. In the construction sector, the proportion of enterprises affected by these difficulties has risen, but remains substantially lower than its pre-crisis level. In industry, since 2011 this proportion has been hovering slightly above the average measured prior to 2008.

New questions in the business tendency survey on barriers to hiring

An increase in recruitment difficulties is expected in phases when activity and employment are picking up, as enterprises need to hire more people than before. However, the intensity of the link between employment growth and recruitment difficulties can vary from one recovery phase to another, in particular according to the nature of the barriers that business leaders encounter in their hiring processes. The decision to hire new employees therefore depends on the match between the labour supply and the skills sought by the enterprise, the level of the cost of labour and the constraints linked to labour regulations.

1 - Proportion of enterprises encountering recruitment difficulties



Note: like any business tendency survey variable concerning employment, the results are weighted by the size of the workforce in the enterprises surveyed; for example, in April 2017, the industrial companies reporting recruitment difficulties employed 30% of the workforce in the sector.

Source: INSEE, business tendency surveys

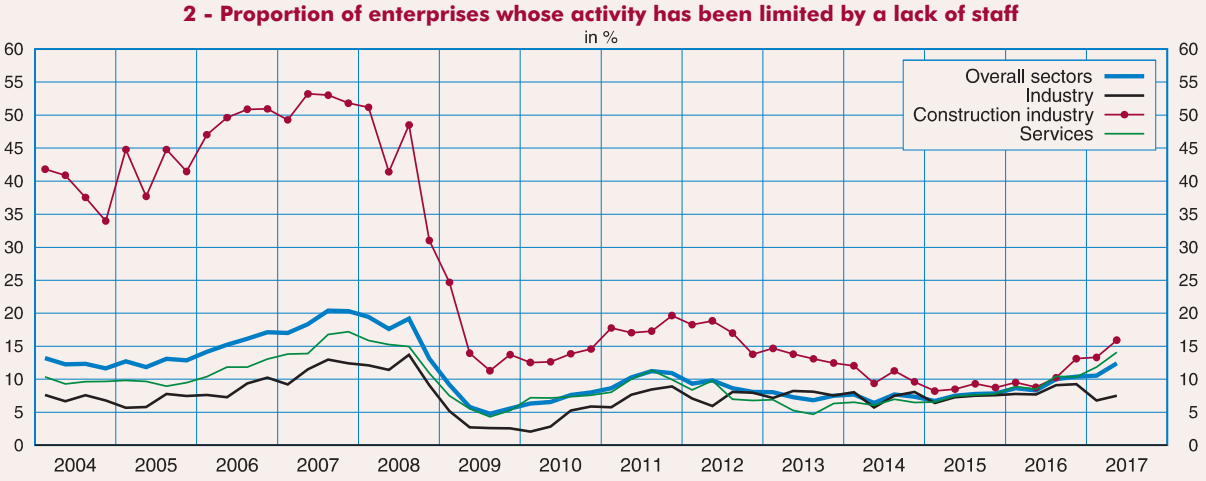
To measure the scale of these different parameters, INSEE has added some new questions to the business tendency surveys (*Table 1*). Since January 2017, approximately ten thousand enterprises in the services, industry and construction sectors have been providing information each quarter on the existence and nature of the main barriers which, according to them, prevent them from hiring more workers on open-ended contracts or fixed-term contracts of long duration. The scope of the survey covers about 70% of employment in the non-farm market sector excluding trade and other service activities.

Almost half of companies report barriers to hiring

Almost half (47%) of enterprises in industry, services and construction report that they encounter barriers that prevent them from hiring more workers on open-ended contracts or fixed-term contracts of long duration (*Table 2*). Three quarters of enterprises in the construction sector report the existence of barriers to hiring on open-ended contracts or fixed-term contracts of long duration (73%); this is the case considerably less often in industry (52%) and services (43%).

Across all sectors, a third (33%) of enterprises state that they do not encounter any barriers. Yet they are no less concerned by a hiring process, in fact there are even more of them than the average declaring that they have increased their workforce (*Graph 3*). Finally, a fifth of enterprises do not feel concerned (responding "not applicable"), probably because they have no plans to hire workers on open-ended contracts or fixed-term contracts of long duration in the short term; in fact, they report a stable or falling workforce more often than the other enterprises, and the corresponding balance of opinion fell over the past year. On this

2 - Proportion of enterprises whose activity has been limited by a lack of staff



Note: for each sector, the results are weighted by the turnover of the enterprises surveyed; the series covering all the sectors is obtained by calculating an average of the three sector series weighted by workforce.

Source: INSEE, business tendency surveys

Table 1 - New questions asked in the business tendency surveys

Are there any barriers that are currently preventing you from hiring more workers on open-ended contracts or fixed-term contracts of long duration?

YES ☐ NO ☐ Not applicable ☐

If YES, what are the main barriers?

- uncertainty about the economic situation ☐
- unavailability of skilled labour ☐
- recruitment costs ☐
- social contributions too high ☐
- wage level too high ☐
- direct financial costs of dismissals ☐
- legal risks connected to dismissal proceedings ☐
- uncertainties as to whether labour legislation will remain in place ☐
- other ☐

Table 2 - Existence of barriers to hiring on open-ended contracts or fixed-term contracts of long duration

in %

	YES	NO	Not applicable
Industry	52	28	20
Services	43	36	21
Construction industry	73	20	6
All sectors	**47**	**33**	**20**

Note: the results are weighted by the workforces of the enterprises surveyed

Source: INSEE, business tendency surveys of April 2017

assumption, among enterprises likely to hire in the short term, 59% report barriers to hiring on open-ended or long-term fixed contracts.

Uncertainty of the economic situation and unavailability of skilled labour: two barriers to hiring mentioned more often

Across all sectors, the main barriers to hiring mentioned by enterprises (*Table 3a*) are uncertainty linked to the economic situation (28%) and unavailability of skilled labour (27%)[1]. The construction industry stands out once again, as uncertainties about the economic situation play a significantly bigger role in this sector. On the other hand, the responses given by industrial and service enterprises are relatively homogeneous.

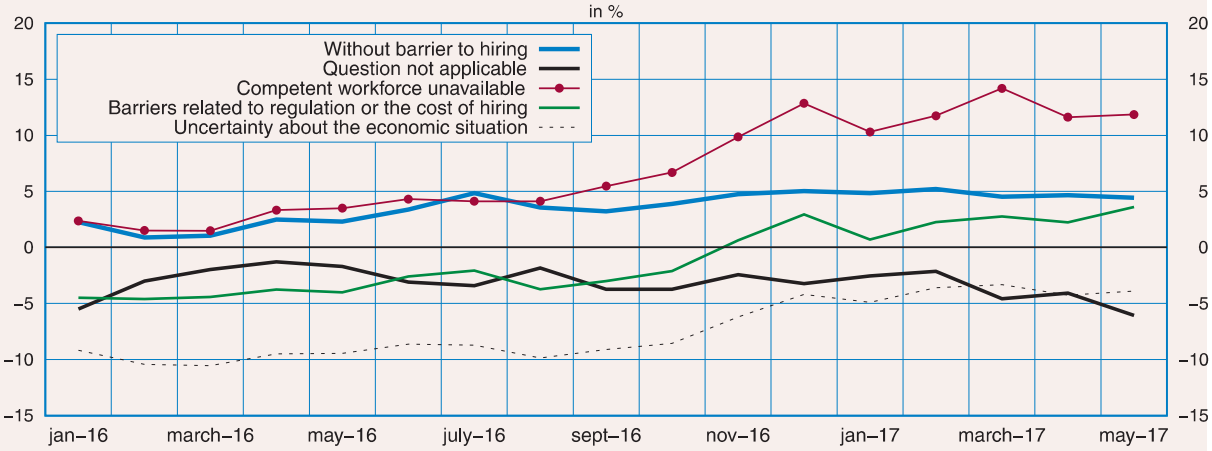
1. In a survey conducted between June and September 2014, the Banque de France questioned enterprises on their labour management practices over the previous three years, providing a first measurement of the scale of the barriers to hiring. The levels that were reported were substantially higher than those presented in Table 3 here, but the classification according to frequency of the barriers to hiring is relatively similar. The discrepancy in the levels could be due to the difference in the way the questions were asked: in the Banque de France survey, the enterprise could indicate whether a criterion had an "influence" or a "strong influence" on hiring. The results obtained here are relatively close to those obtained for "strong influences" on hiring alone in the earlier surveys.

The barrier linked to the cost of labour most often mentioned is that of the level of social contributions (18%) while the issue of high wage levels is raised less often (7%). Barriers to hiring linked to legislation governing the labour market seem to play a role on a comparable scale, with the legal risks relating to dismissals (14%) being mentioned more often than their cost (10%).

Contrasting situations regarding barriers to hiring

Companies hampered in their hiring mention 2.8 different barriers on average. Certain barriers seem to be particularly connected, insofar as companies tend to mention them together. In particular, the three responses concerning the level of regulation (uncertainties as to whether labour legislation will remain in place, dismissal costs and the legal risks involved in dismissing staff) are very often similar: two thirds of companies that have reported at least one of these barriers have also reported a second one and 30% mention all three. Regarding the barriers linked to the cost of labour (cost of recruitment, level of social contributions and wage levels that are too high), the different responses are also clearly correlated: 72% of firms that say that recruitment costs are too high also report being held back by the level of social contributions. Similarly, 65% of enterprises that consider wage levels too high also state that social contributions are too high.

3 - Balance of opinion on past changes in the workforce according to the type of barrier to hiring reported in 2017



Note: statistics calculated without weighting by the enterprises' workforces, but controlling for the respective weight of the scope of the three business tendency surveys used (services, industry and construction industry).

Source: INSEE, business tendency surveys

Table 3a – Proportion of enterprises mentioning each barrier to hiring

in %

	Uncertainty of economic situation	Skilled labour unavailable	Recruitment costs	Social contributions too high	Wage level too high	Dismissal costs	Legal risks linked to dismissals	Labour legislation remaining in place	Other
Industry	34	29	5	17	5	12	14	11	5
Services	24	24	6	17	7	9	13	10	3
Construction industry	54	41	9	32	7	22	26	21	4
All sectors	**28**	**27**	**6**	**18**	**7**	**10**	**14**	**11**	**4**

How to read it: industrial companies reporting barriers to hiring and mentioning uncertainty about the economic situation as one of the main barriers employ 34% of the workforce in the sector.
Notes: the results are weighted by the workforces of the enterprises surveyed. Several modalities are possible for the same enterprise.
Source: INSEE, business tendency surveys of April 2017

Companies' responses can therefore be summarised by aggregating all the modalities relating to costs on one side, those relating to regulation on another and retaining the responses on the "unavailability of skilled labour" and the "uncertainty of the economic situation" as they are (*Table 3b*).

The correlation between these different groups (*Table 4*) reveals contrasting situations for enterprises regarding the barriers that limit their ability to hire workers. First of all, enterprises that have difficulties recruiting skilled labour do not particularly mention barriers connected to cost or regulation (zero correlation), and are held back considerably less than others by uncertainty about the economic situation (negative correlation). Then enterprises that report barriers due to regulation are often the same ones that say labour costs are too high. They report a demand constraint ("uncertainty about the economic situation") a little more often than average, although the correlation between the response on the uncertainty of the economic situation and those on the barriers linked to costs (0.14) or regulation (0.13) is relatively low.

Barriers linked to a lack of skilled labour hold back production more

Enterprises that report a problem of availability of skilled labour are most often in a job creation dynamic, with balances of opinion on past workforce that are higher than average (*Graph 3*). Most of them also report recruitment difficulties (84% of them, compared to an average of 31%; *Table 5*).

In addition, 45% state that their activity is limited by a lack of employees and that they therefore suffer production constraints due to employment, compared to an average of 11% (*Table 6*).

Modelling with individual data confirms that the production constraints due to a lack of employees are mainly linked to difficulties in recruiting skilled labour (*Table 7*). Although barriers due to costs and regulation also increase production constraints, their influence is significantly more limited.

Table 3b - Proportion of enterprises mentioning different types of barrier to hiring

in %

	Uncertainty of economic situation	Skilled labour unavailable	Barriers related to costs	Barriers related to regulation
Industry	34	29	19	19
Services	24	24	22	16
Construction	54	41	35	34
All sectors	**28**	**27**	**23**	**18**

How to read it: industrial companies reporting barriers to hiring linked to regulation employ 19% of the workforce in the sector.
Notes: the results are weighted by the workforces of the enterprises surveyed. Several modalities are possible for the same enterprise.

Source: INSEE, business tendency surveys of April 2017

Table 4 - Correlation of the responses to the different barriers to hiring

	Uncertainty of economic situation	Skilled labour unavailable	Barriers related to costs	Barriers related to regulation
Uncertainty of economic situation	1	–0.34	0.14	0.13
Skilled labour unavailable	–0.34	1	0.00	–0.03
Barriers related to costs	0.14	0.00	1	0.40
Barriers related to regulation	0.13	–0.03	0.40	1

Source: INSEE, business tendency surveys of April 2017

Table 5 - Proportion of enterprises stating they have recruitment difficulties, according to their response on the existence of barriers to hiring

in %

	Barriers to hiring	Uncertainty of economic situation	Skilled labour unavailable	Barriers related to costs	Barriers related to regulation	No barriers to hiring	Not applicable
Industry	52	40	77	55	51	7	9
Services	57	42	85	58	53	9	8
Construction	61	51	90	65	61	18	24
All sectors	**56**	**42**	**84**	**58**	**53**	**9**	**10**

How to read it: 52% of employment in industrial companies reporting barriers to hiring is located in companies that experience recruitment difficulties.

Source: INSEE, business tendency surveys of April 2017

In fact, enterprises that report barriers to hiring due to costs (of recruitment, wages, dismissals) or regulation report recruitment difficulties and production limited by employment less often than companies that struggle to hire skilled workers.

Finally, enterprises that report more demand constraints ("uncertainty about the economic situation") are in a dynamic that is less favourable to employment than the average; they experience fewer recruitment difficulties or production constraints than the other two categories of companies encountering barriers to hiring, but more than those that do not report any barriers. ■

Table 6 – Proportion of enterprises whose activity is limited by a lack of employees, according to their response on the existence of barriers to hiring

in %

	Barriers to hiring	Uncertainty of economic situation	Skilled labour unavailable	Barriers related to costs	Barriers related to regulation	No barriers to hiring	Not applicable
Industry	19	11	30	23	20	2	1
Services	29	11	50	24	21	4	1
Construction	22	13	35	23	21	4	11
All sectors	**27**	**11**	**45**	**24**	**21**	**4**	**2**

How to read it: in 19% of industrial companies reporting barriers to hiring, activity has been limited by the insufficiency of a workforce that is difficult to increase.

Table 7 - Influence of the barriers to hiring on production constraints

Barriers to hiring mentioning by enterprises	Coefficient	Standard deviation	P-value	Test
Uncertainty of economic situation	–0.47	0.06	0.00	***
Skilled labour unavailable	1.27	0.07	0.00	***
Barriers related to costs	0.15	0.06	0.02	**
Barriers related to regulation	0.14	0.06	0.03	**

Note: Modelling of enterprises' responses to the question "Is your activity limited by the insufficiency of a workforce that is difficult to increase?" according to the responses to the questions on the existence of barriers to hiring. The model is a probit model and it takes into account controls on the size of the sector of activity (results not shown).

Source: INSEE, business tendency surveys of April 2017

Joint production and extension of the scope of quarterly payroll employment estimates

Until the Q4 2016 results, INSEE, in partnership with the French Ministry of Labour's Directorate for Research, Studies and Statistics (DARES), used to publish estimates of payroll employment in the competitive sector in Metropolitan France on a quarterly basis, approximately 70 days after the end of the quarter. These estimates were mainly based on the following administrative sources:

- "BRC" summary statements of contributions and "DSN" electronic payroll declarations sent by enterprises to URSSAF (social security contribution collection offices) and processed by INSEE;

- for temporary employment: the monthly statements transmitted to Pôle Emploi (French employment agency) or the DSN declarations from temporary employment agencies, processed by DARES.

Since the Q1 2017 results, the 70-day estimate has been calculated in partnership with the Central Agency of Social Security Associations (ACOSS) and DARES. Its scope has been extended to all employees and the French overseas departments (apart from Mayotte). In relation to the previous publication, payroll employment in agriculture and the civil service have been added, while the scope of Private Individuals' Employees has been extended. All business sectors are now included.

As before, the levels of employment are derived from the annual employment estimates produced by INSEE. These estimates measure "registered" employment in the workplace at the end of the year, as defined by the International Labour Office (ILO), after processing for multiple activities:

- employment is measured over the last week of the year and any jobs declared in the administrative data (employment declarations and payroll files) are included;

- processing for multiple activities leads to people who occupy several jobs during the last week of the year being counted only once – for their main job – which is the occupation from which they obtain the most remuneration over the year.

Quarterly rates of change are now applied to these annual employment baselines. These rates are produced by:

- INSEE for agriculture, the civil service and Private Individuals' Employees;

- DARES and Pôle Emploi for temporary employment;

- ACOSS for the private sector apart from temporary employment, agriculture and Private Individuals' Employees.

INSEE is responsible for synthesising all of the data provided by the three partners. As before, when new annual employment estimates become available each year (in March and in the autumn), the quarterly series are realigned with them. The classification of the scope as public or private is based on the employers' legal category. The public scope (or civil service) corresponds to that which is monitored annually by INSEE via the System for Information on Civil Servants (SIASP).

The following sources are used for the extension of the scope in quarterly series:

- payroll declarations centralised by the Mutualité sociale agricole (MSA – agricultural social insurance mutual benefit fund) for agriculture;

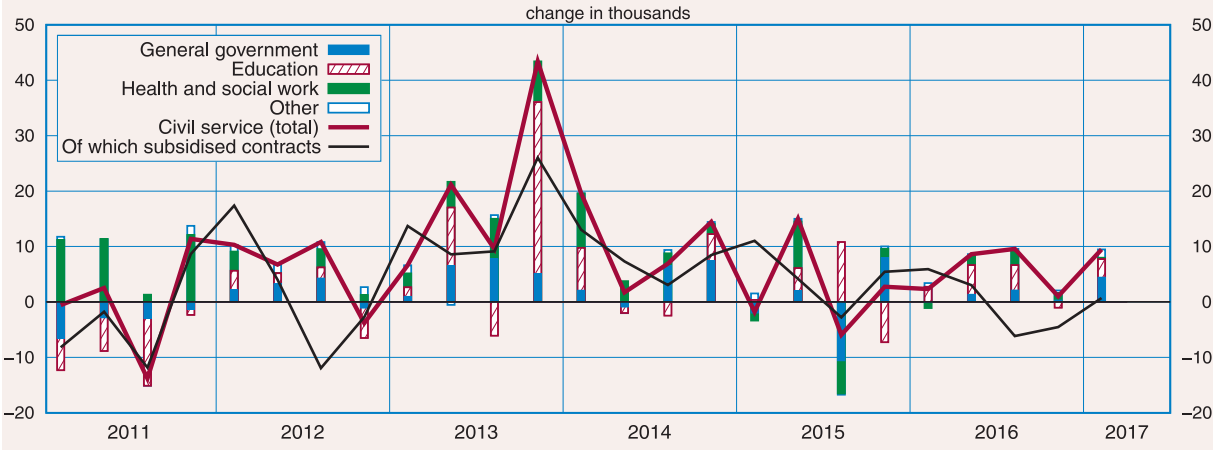
- the "DNS" simplified nominative employment declarations, the "CESU" universal employment service cheque and the "PAJE" child support service for Private Individuals' Employees[1];

- the BRC, DSN and payroll files for the civil service.

These quarterly series have been available since late 2010.

1. At the start of the joint production between ACOSS, DARES and INSEE, within the scope of individual family employers, the quarterly variations are derived from a smoothing of the annual data; over the period not covered by the annual employment estimates, recent trends are extended.

Quarterly employment estimates in the civil service



Source: INSEE, employment estimates

Within this scope, the quarterly employment estimates state that in Q1 2017, just over 300,000 people held a salaried post in the agricultural sector. Since the end of 2010, the quarterly changes in salaried employment in this sector, after adjustment for seasonal fluctuations, have been relatively consistent, following a slightly upward trend. In 2016, it rose by 4,900, after +1,600 in 2015 and +3,600 in 2014.

At the same time, at the end of March 2017, 460,000 people were employed by private individuals in their homes. Their activities were varied: housework, cooking, gardening and childminding in parents' homes. In addition, 370,000 people were also employed by private individuals for social welfare-related activities: mainly childminders. Since the end of 2010, the employment of private individuals in homes has been declining. In social welfare, employment was up slightly in 2011 and 2012 but it has since fallen back.

Lastly, in the first quarter of 2017, 5.8 million people held a salaried post in the civil service (as civil servants or contract staff members). Nearly half of them worked in the general government sector (including local authorities), just under a quarter in education, nearly a fifth in health and less than a tenth in social welfare. After remaining almost stable in 2011, civil service employment picked up in 2012 (+24,000) and in 2013 (+81,000), before slowing during the next two years (+43,000 followed by +10,000). This profile is linked to the subsidised employment contract profile in particular (*Graph*): +7,000 in 2012, and then +57,000 in 2013 with the establishment of the emplois d'avenir ("future jobs") scheme, followed by +32,000 in 2014 and +18,000 in 2015.

Finally, public employment picked up slightly in 2016 (+22,000), driven by the implementation of the Pacte de sécurité (Security Pact), which increased the number of employees in the police and justice system and stopped the decline in the number of military personnel. Since the end of 2010, the quarterly fluctuations in civil service employment have originated mainly from the education sector (*Graph*). In 2013, the figures were affected by the change in the competitive examination timetable for primary and secondary school teaching posts in the French National Education system. ■

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Unemployment

In Q1 2017, the number of unemployed fell by 115,000 in France due to a rise in employment and an unexpected fall in the activity rate. In this way, the ILO unemployment rate fell by 0.4.points to 9.6% of the labour force, after 10.0% in Q4 2016.

Through to the end of the year, the rise in employment is expected to be higher than that in the labour force, leading to a further fall in the unemployment rate. At the end of 2017, it should stand at 9.4% in France, i.e. 0.6 points lower than a year earlier.

The unemployment rate fell by 0.4 points in Q1 2017

In Q1 2017, the number of unemployed fell by 115,000 (*Table*): the unemployment rate stood at 9.6% in France (excluding Mayotte), after 10.0% in Q4 2016 (*Graph*). This fall is the result of a solid increase in employment on the one hand, and an unexpected drop in the activity rate on the other. Over one year, the unemployment rate fell by 0.6 points, with a 185,000 drop in the number of unemployed. This takes it to its lowest level since early 2012. In Metropolitan France, the unemployment rate fell by 0.4 points to reach 9.3% at the beginning of 2017, the same level as in Q2 2012. The halo of unemployment[1] increased by 20,000 people between Q4 2016 and Q1 2017, and by 58,000 since Q1 2016.

The youth unemployment rate fell again

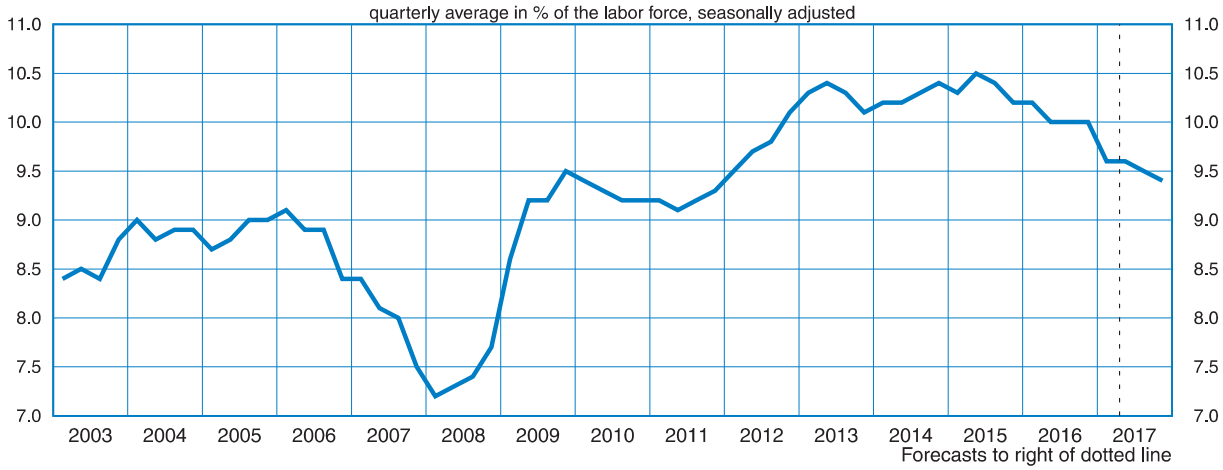
In Q1 2017, the youth unemployment rate stood at 22.3% of the labour force in France. It dropped by 1.4 points against 2016, after already having fallen 1.7 points in the previous quarter; over one year, it fell by 2.6 points. Young people in particular benefited from the recovery of temporary employment (see *Employment sheet*). The unemployment rate for 25-49-year-olds stood at 9.0% in Q1 2017, falling by 0.4 points from the previous quarter and 0.6 points over one year. However, the unemployment rate for the over 50s stabilised over the quarter, at 6.9%, and barely varied year on year (+0.1 points).

Since the beginning of 2016, the unemployment rate has only decreased for men

In Q1 2017 in France, the male unemployment rate fell by 0.6 points compared to the previous quarter (to 9.5%) whereas the female rate remained steady (at 9.8%). After peaking at +1.0 point in Q3 2015, the gap between the male and female unemployment rates

1. The halo of unemployment is made up of economically inactive persons as defined bi the International Labour Office (ILO): it refers to people who are seeking employment but who are not available and people who wish to work but are not seeking employment, whether they are available or not.

Unemployment rate (ILO definition)



Scope: Population of households, people aged 15 or over
Source: INSEE, Employment Survey

narrowed, and by the beginning of 2017 the male unemployment rate was once again lower than the female rate (–0.3 point). The relative employment dynamics by sector, and especially the improved short-term outlook for temporary employment and construction, have been more beneficial to men than women: the male unemployment rate has dropped by 1.1 points since the beginning of 2017, whereas the female rate has remained steady.

The unemployment rate should fall slightly through to the end of 2017

In 2016, the labour force grew by 196,000, after +38,000 in 2015. This rise stems primarily from the trend increase in the activity rate, in particular for older workers, due to the increase in the effective retirement age. However, it was limited by ongoing early retirements under the specific "long careers" scheme, and by the jobseekers' training plan announced early in 2016. In 2017, the spontaneous growth in the labour force (+91,000) is expected to be lower than in 2016 (+103,000): the effect of the increase in the retirement age, which was pushed back again at the beginning of 2017, to 62 years, is expected to partly be offset by the effects of the "long careers" scheme. In addition, it is assumed that the jobseekers' training plan will be extended until the end of 2017. Nevertheless, the effect of the ramp-up of that scheme is thought to have culminated at the end of 2016, meaning that its downward impact on the labour force should have petered out early in 2017. Finally, the fall in unemployment should encourage some inactive people to enter the labour market, via the effect of economic downturns (see *Focus*), which is expected to increase the labour force slightly. Overall, in 2017, in spite of a rebound in Q2 after the dip at the beginning of the year, the increase in the labour force is expected to be smaller (+83,000) than that of net job creations (+234,000) and the number of unemployed is therefore forecast to see a moderate fall. At the end of 2017, the unemployment rate is expected to stand at 9.4% of the labour force in France, or 0.2 points lower than in Q1 2017 and 0.6 points lower than a year earlier. ■

Changes in the labour force, employment and unemployment in Metropolitan France

in thousands, SA, and in %

	Quarterly changes								Annual changes		
	2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Population of the 15-64 age bracket	–6	–6	–6	–6	0	0	0	0	–55	–24	–1
Population of the 15-59 age bracket	1	1	1	1	–3	–3	–3	–3	–43	3	–14
Labor force	**76**	**–18**	**84**	**55**	**–37**	**73**	**24**	**24**	**38**	**196**	**83**
including:											
(a) Contribution of the population and the trend activity rate	*26*	*26*	*26*	*26*	*23*	*23*	*23*	*23*	*121*	*103*	*91*
(b) Estimated effects of economic downturns	*2*	*2*	*2*	*2*	*4*	*4*	*4*	*4*	*–4*	*8*	*15*
(c) Estimated effects of public policies	*1*	*–10*	*–18*	*–18*	*2*	*7*	*–2*	*–3*	*4*	*–45*	*3*
(d) Other short-term fluctuations (residual)	*47*	*–36*	*74*	*44*	*–66*	*40*	*0*	*0*	*–83*	*130*	*–26*
Employment	**61**	**59**	**63**	**69**	**77**	**71**	**46**	**40**	**114**	**252**	**234**
Reminder: End-of-period employment *(see "Employment" note)*	64	54	72	65	90	52	41	40	131	255	222
ILO unemployment	**15**	**–77**	**20**	**–14**	**–115**	**2**	**–22**	**–16**	**–76**	**–56**	**–151**
	Quarterly average								Average in the last quarter of the period		
ILO unemployment rate (%)											
France (including the overseas departments)	10.2	10.0	10.0	10.0	9.6	9.6	9.5	9.4	10.2	10.0	9.4

Forecast

How to read it:
- the Employment line presents variations in the number of people in employment as a quarterly average, for consistency with the other data in the table,
- employment and unemployment are not estimated here within strictly equivalent scopes: total population for employment. population of households (excluding collective) for unemployment. As the impact of this difference is very minor (the population outside of households represents less than 1% of the active population), it is neglected here for the unemployment forecasting exercise,
- in (a), the contribution of demographics and of trend activity behaviour includes all the effects of pensions reforms up to and including that in 2010.

Source: INSEE

New labour force projections and the effects of economic downturns

In each *Conjoncture in France*, labour force forecasts are indispensable to anticipate changes in unemployment. For this purpose, changes in the labour force, both past and future, are broken down according to different factors, in particular its trend component and the estimated effects of public policy (internships, training, etc.).

For the June 2017 *Conjoncture in France*, several changes have been implemented. First of all, the trend labour force has been revised – it is now derived from the new projections published by INSEE in May 2017. Secondly, an estimation of the "effects of economic downturns", corresponding to the behaviour whereby people enter and leave the labour force as a result of the economic conditions, completes the components in the "reconciliation table" usually presented.

The new labour force projections have led to a slight reduction in the trend variation over the recent period

INSEE revises its long-term labour force projections approximately every 5 years. The new projection exercise published in May 2017 is based on a method similar to that used for the previous exercise which was published in 2011: projections of the activity rate for each sex and age group taken from the Labour Force Survey are applied to the new demographic projections (Blanpain et Buisson, 2016).

For people aged 15 to 54, a trend activity rate is estimated for each sex and five-year age group, then projected. The estimation is done in two steps. Firstly, the observed activity rate is smoothed by a moving average. Then, for most of the age groups, the trend activity rate (TA_t) is estimated econometrically from this smoothed rate on the assumption that it follows a logistic trend:

$$TA_t = \frac{T_0 + T_1.\exp\left(v.\left(t-d\right)\right)}{1+\exp\left(v.\left(t-d\right)\right)} + \varepsilon_t$$

This function is indeed well suited to forecasting transition phenomena between an initial level T_0 and a final level T_1 occurring at a speed v around a downturn point d. Now, such transition phenomena are observed for the activity rates of most age groups. Nevertheless, this function has the disadvantage of being highly sensitive to the last points observed. Thus, if in the last year or years of the sample the activity rates are affected by cyclical phenomena, these rates will be under or over-estimated in the forecasts for a lasting period. It is to reduce this kind of bias that a prior smoothing is applied to the observations before the estimation.

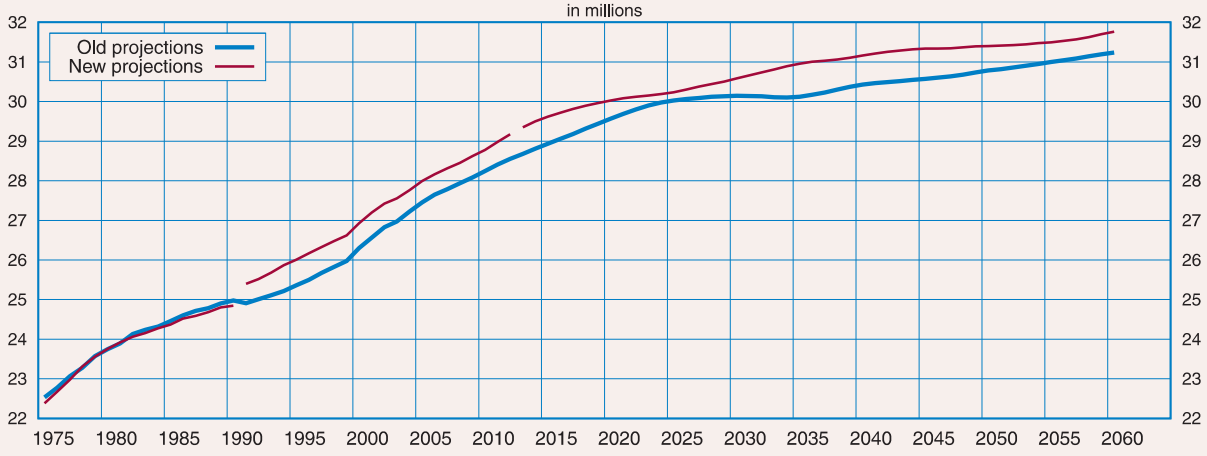
Furthermore, certain age groups are affected by specific phenomena that make it necessary to enrich the model. Supplementary variables, x_t, such as for example the apprenticeship rate for young people, or the activity cessation rate in the steel industry for men aged 50 to 54, can then be added to the logistic function. The model to be estimated is then written:

$$TA_t = \frac{T_0 + T_1.\exp\left(v.\left(t-d\right)\right)}{1+\exp\left(v.\left(t-d\right)\right)} + x_t.\beta + \varepsilon_t$$

Finally, for people aged 55 to 69, the projected activity rates are drawn from the Destinie microsimulation model. This approach allows for greater inclusion of the diversity of individual situations and the impact of the different measures affecting retirement behaviour.

The geographical scope of the new demographic projections covers France (all of Metropolitan France plus the five overseas Departments (DOM)), whereas before it concerned only Metropolitan France. This aspect leads to a substantial revision of the levels between the two last projection exercises (*Graph 1*).

1 - Comparison of the active populations of people aged 15 and over between the last two projection exercises



Scope: people aged 15 and over in ordinary households
Geographical scope of the old projections: Metropolitan France
Geographical scope of the new projections: Metropolitan France until 1990, France excluding Mayotte from 1991 to 2013, France from 2014 onwards.
Source : INSEE, labour force projections

Accordingly, over the period 2015-2060, the labour force is a little less dynamic in the new projections: its growth is slightly above 7%, whereas it was close to 8% in the previous exercise. This difference is explained by several factors (*Graph 2*). First of all, the migratory balance hypothesis has been reduced in the new demographic projections, to +70,000 people a year compared to +100,000 previously. This revision lowers the forecast for the number of men aged 25 to 54, and as a consequence the number of people in employment in that age group.

Over the decade 2015-2025, the revisions between the last two labour force projections are also due to a different impact of the 2010-2011 pension reform (which raised the age of pension eligibility from 60 to 62 years and at the same increased the age at which the reduced rate is cancelled). In the 2011 projections, the model used led to the estimation of an effect on retirement behaviour that was relatively spread out over time, whereas it has quite a marked effect before 2015. In the new exercise, the effect of this reform, which has already made itself felt, is therefore less pronounced over the projection period.

Furthermore, between 2025 and 2035, the inclusion of the 2014 pension reform (lengthening of the contribution period) in the new projections induces an increase in the activity rate of 55-69-year-olds, and therefore the number of people in employment. Over this period, the effect of this reform partly offsets the fall in the population of men aged 24 to 59.

For the years 2015 to 2017, the inclusion of the new projections has only moderately affected the diagnostic of the trend variation in the labour force. The effect of the 2010-2011 and 2012 pension reforms (easing of the conditions for entitlement to the "long careers" scheme), which is today indirectly included in the trend variation, was not previously included but rather counted under "estimated effects of public policy" Accordingly, by adding in the effect of these reforms, the trend labour force increased in the previous exercise by 117,000 in 2015, 104,000 in 2016 and 113,000 in 2017. This growth is now +121,000 in 2015, +103,000 in 2016 and +91,000 in 2017 (*Table 1*).

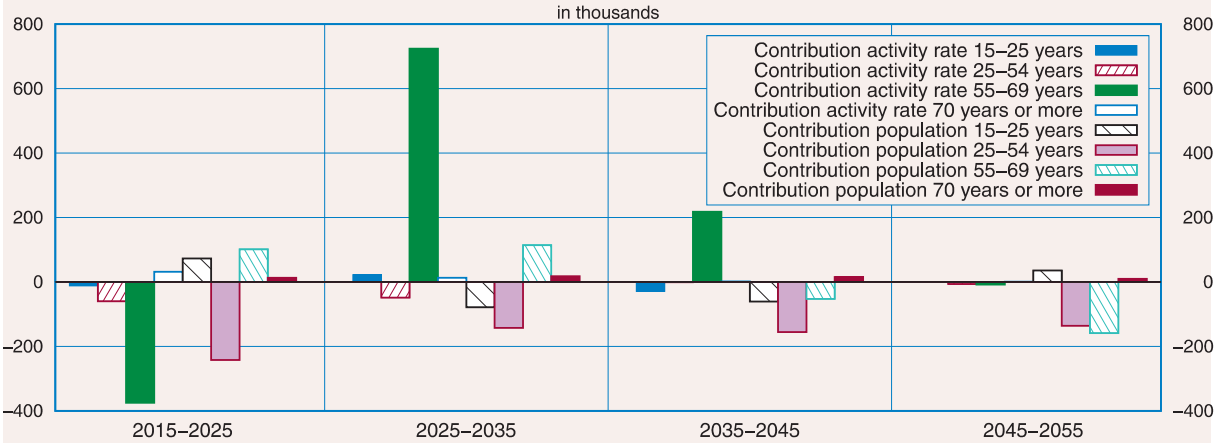
In 2017, the improvement in the economic outlook is expected to contribute to the return of 15,000 people to the labour market

The new labour force projection exercise has also provided an opportunity to estimate the scale of the "effects of economic downturns" on the past and to use them for forecasts in the labour force reconciliation table. The term "effects of economic downturns" is used to refer to all the phenomena by which the economic situation can affect the labour force, with two opposing types of behaviour:

- The "discouraged worker effect": in a phase where the economic outlook is poor, the number of "active" people can fall because some of them, in particular those most remote from employment, give up looking for work out of discouragement or choose not to enter the labour market. For example, this type of effect is observed in the younger age groups, who are liable to choose to remain in education in an unfavourable economic situation.

- The "added worker effect": in a phase where economic conditions are unfavourable, the labour force can increase if certain inactive people start looking for work, for example if another member of the household has lost his job. This effect is observed mainly among certain female intermediate age groups.

2 - Contribution to the revision of the change in the labour force by decade



Scope: people aged 15 and over in ordinary households
Geographical scope of the old projections: Metropolitan France
Geographical scope of the new projections: Metropolitan France until 1990, France excluding Mayotte from 1991 to 2013, France from 2014 onwards.
Source : INSEE, active population projections

Table 1 - Comparison of labour force trends, old and new version

	2015	2016	2017
New trend, including post-2010 retirement reforms	**121**	**103**	**91**
Old trend, including post-2010 retirement reforms	**117**	**104**	**113**
(a) Contribution of population and trend activity rate	128	123	119
(b) Estimated effects of post-2010 retirement reforms	–11	–19	–6

Source: INSEE, active population projections

The effects of economic downturns are estimated by linear regression, by modelling the effect of an economic outlook variable on the difference between the observed activity rate (TAO_t) and the trend activity rate (TAT_t). The economic outlook variable chosen is the difference between the unemployment rate observed in Metropolitan France and a reference rate (8.5%, i.e. its average between 1980 and 2016):

$$TAO_t - TAT_t = \alpha + \eta.(U_t - 8{,}5) + \varepsilon_t$$

This coefficient η is used to capture the effects of economic downturns: for a given age group, a negative value reflects a discouraged worker effect (high unemployment tends to reduce the activity rate) and a positive value corresponds to an added work effect (a poor economic situation leads to an increase in the activity rate). In practice, only certain age groups are affected by significant downturn effects (*Table 2*): although some of them experience an added worker effect, discouraged worker behaviour predominates. Accordingly, on average over the period in question, for all the categories, an increase of 10,000 unemployed leads to a fall of about 1,500 in the labour force (*Graph 3*). This is a scale comparable to that estimated by Lhermitte (2003).

Altogether, based on these estimations, the poor economic conditions – mainly the high level of unemployment – can be expected to have discouraged about 50,000 people from entering or remaining in the labour market. The improvement in the situation in 2016 is thought to have led almost 10,000 people to enter or return to the labour market. In 2017, the unemployment rate is expected to continue to fall, leading to the entry or return of an extra 15,000 people to the labour force. Taking this effect into account helps to reduce the unexplained part of the changes in the labour force ("other short-term fluctuations (residual)" line in the labour force reconciliation table), even if in certain quarters the extent of this part still seems to be considerably greater. ■

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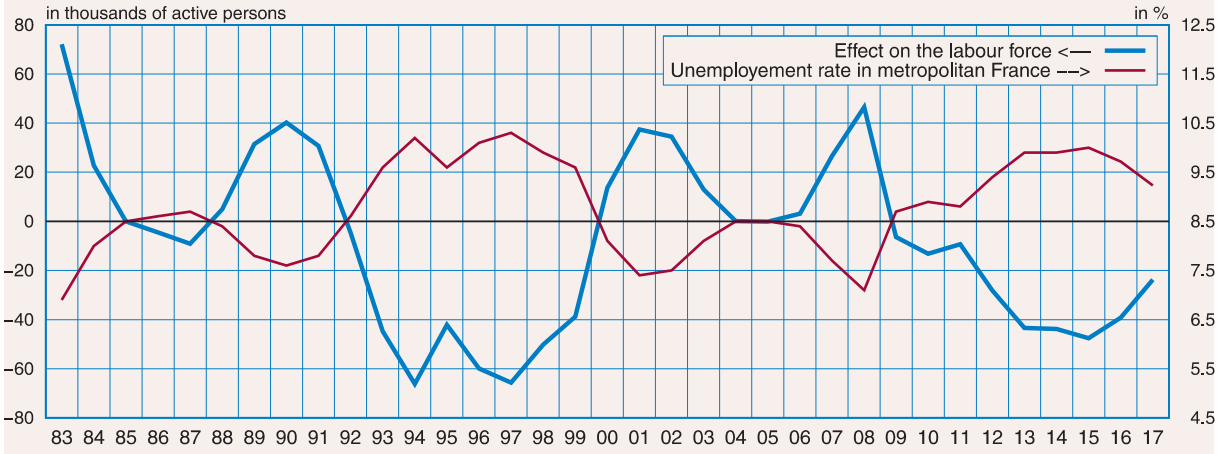
Koubi M. and **Marrakchi A.** (2017), "Méthodologie de projection de la population active à l'horizon 2070", *Document de travail*, n° 1702.

Lhermitte S. (2003), "Quel ralentissement de la population active attendre en 2004?", *Conjoncture in France*, December, p. 37-51.

Table 2 - Result of modelling by category and effects on the labour force

	η	Type of effect	Effect on the labour force			
			2014	2015	2016	2017
Women aged 15 to 19 years	–0.75	discouraged worker	–20	–22	–18	–11
Women aged 20 to 24 years	–0.41	discouraged worker	–11	–11	–9	–5
Women aged 40 to 44 years	0.25	added worker	8	8	7	4
Women aged 45 to 49 years	0.33	added worker	10	11	9	5
Women aged 50 to 54 years	0.29	added worker	9	10	8	5
Men aged 15 to 19 years	–1.07	discouraged worker	–29	–32	–26	–16
Men aged 20 to 24 years	–0.42	discouraged worker	–11	–11	–9	–5
Men aged 25 to 29 years	–0.20	discouraged worker	–5	–6	–5	–3
Men aged 50 to 54 years	0.16	added worker	5	5	4	3
Total effect on the labour force			**–44**	**–48**	**–39**	**–24**
Contribution to the variation in the labour force				**–4**	**8**	**15**

3 - Unemployment rate and effect on the labour force



Source: INSEE

Consumer prices

In May 2017, inflation stood at +0.8% year on year, according to the provisional estimate. Through to the end of 2017, it should increase slightly to +1.1% year on year. Prices of services and food should accelerate moderately, and those of manufactured products fall less than in previous months. These movements should be partly offset by a fall in energy inflation. After slipping at the end of 2016, core inflation[1] remained sluggish in early 2017 (+0.5% year on year in April). Through to December 2017, it is expected to increase a little but remain moderate at +0.8%, as the contained rise in wages limits inflationary pressures.

Headline inflation should climb back over 1%

In May 2017, according to the provisional estimate of the consumer price index, headline inflation fell back to +0.8% after +1.2% in April (*Graph 1*). This fall was driven by a marked slowdown in the prices of energy products (+5.4% after +9.3%) and a moderate one in food prices (+0.4% after +0.7%). Manufactured product prices fell at the same rate as in the previous month (–0.7%) and inflation in services stabilised at +1.0%.

Headline inflation should increase slightly over H2 2017 to stand at +1.1% year on year in December 2017 (*Table*). The prices of services should accelerate moderately and the fall in the prices of manufactured products ease little by little, but energy inflation should fall, as the rise in energy prices at the end of 2016 drops out of the calculation of the year-on-year figures.

Energy inflation is set to slip by a base effect

After accelerating strongly in Q1 2017, energy prices started to slow down in May (+5.4% year on year, after +9.3%), as the rise in spring 2016 dropped out of the year-on-year calculation. Based on the assumption that the price per barrel of Brent remains stable at $53 (€47.3), energy inflation is likely to continue slipping back, driven by a base effect through to the end of the year. It should stand at +2.4% year on year in December 2017.

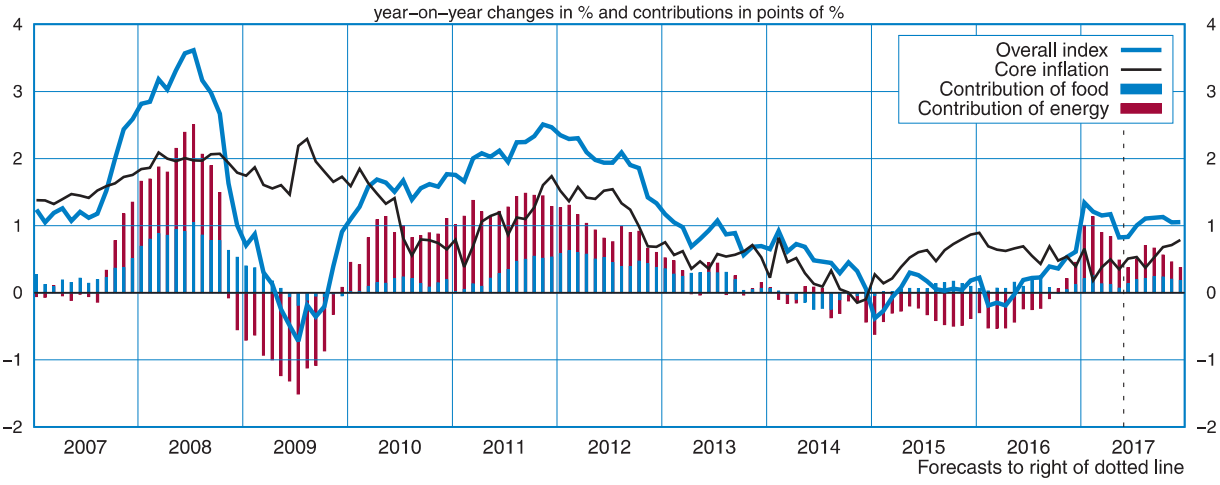
Food product prices should accelerate moderately

The rise in food prices should pick up slightly through to the end of 2017: +1.1% year on year in December 2017, after +0.4% in May 2017.

After increasing sharply over the winter, the prices of fresh food fell back at the beginning of the spring (–0.3% in May against +11.0% in February). These prices should then become more dynamic again over the summer due to the poor weather conditions for production in April. The rise should ease thereafter (+2.6% year on year in December)[2].

1. The core inflation indicator calculated by INSEE is estimated by excluding the prices of energy, fresh food, public tarifs from the overall index. This indicator is corrected for tax measures and is seasonally-adjusted.
2. Methodological modifications made to the calculation of the index in 2017 have an influence on the profile of the year on year change in these prices, downwards in May and June, and upwards at the end of the year.

1 - Inflation in France



Source: INSEE

Excluding fresh food, food prices should continue to accelerate moderately (+0.9% in December 2017, after +0.5% in May). More particularly, the prices of dairy products should rise, driven by the increase in milk prices, and meat prices should accelerate following the recent rise in prices on wholesale markets.

Manufactured product prices should almost stop falling

The prices of manufactured products should continue to fall through to the end of 2017, but less sharply (–0.2% year on year in December 2017, after –0.7% in May). The prices of "other manufactured products" should even start increasing again (+0.3% year on year in December 2017, after –0.3% in April). The past fall in commodity prices should stop weighing down on the prices of manufactured products, although without the recent upturn in commodities working through yet. In addition, the price of new cars should accelerate sharply, after being limited in 2016 by big promotions.

Prices of clothing and footwear are likely to be uneven from one month to the next over the summer, due to the change in the calendar of the sales compared to last year. They should then increase at a regular pace of +0.1% year on year.

Prices of health goods are likely to continue falling significantly (–2.4% year on year in December 2017, after –2.3% in April 2017), notably those of medicinal products, in line with the objective set out in the Social Security Financing Act for 2017. Prices of spectacles and contact lenses should stop falling, however.

Prices of services are set to accelerate moderately

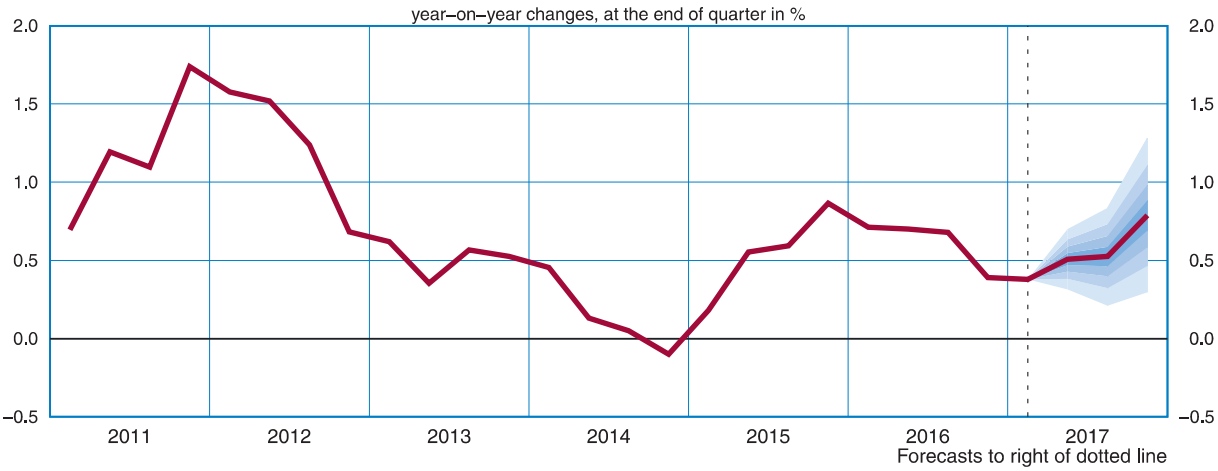
Prices of services should accelerate moderately through to the end of 2017 (+1.4% year on year in December, after +1.0% in May 2017). More particularly, prices of health services should accelerate markedly (+2.4% year on year in December 2017, after +0.3% in April 2017), driven by the increase in the price of GP consultations in May, and the base effect linked to the fall in medical biology prices in mid-November 2016. Prices of transport services should remain dynamic (+1.8% year on year in December 2017, after +4.5% in April), with air transport prices remaining much higher than one year previously, driven by the oil price. The overall rise should be limited, however, by the contained wage increases and small rise in rents (+0.8% in December 2017, after +0.6% in April), which are index-linked to past inflation.

Core inflation is expected to increase a little

After increasing in 2015, core inflation slipped back in 2016, as the past depreciation of the euro no longer buoyed up import prices. It remained sluggish in early 2017 (+0.5% in April 2017, after +0.4% in December 2016) and should increase moderately through to the end of 2017, to +0.8% year on year (*Graph 2*).

On average over the year, it should be almost stable (+0.5% after +0.6%): the acceleration in headline inflation (+1.1% after +0.2% in 2016) is likely to be driven mainly by energy prices (contribution of +0.7 points to headline inflation). ■

2 - The core inflation forecast for France and risks around the forecast



How to read it: the fan chart plots 80% of the likely scenarios around the baseline forecast. The first and darkest band covers the likeliest scenarios around the baseline, which have a combined probability of 20%. The second band, which is a shade lighter, comprises two sub-bands just above and just below the central band. It contains the next most likely scenarios, raising the total probability of the first two bands to 40%. We can repeat the process, moving from the centre outwards and from the darkest band to the lightest, up to a 80% probability.

Source: INSEE

French developments

Consumer prices

changes as %

CPI* groups (2017 weightings)	April 2017		May 2017		June 2017		December 2017		Annual averages	
	yoy	cyoy	yoy	cyoy	yoy	cyoy	yoy	cyoy	2016	2017
Food (16.3%)	**0.7**	**0.1**	**0.4**	**0.1**	**0.8**	**0.1**	**1.1**	**0.2**	**0.6**	**1.1**
including: fresh food (2.4%)	*3.5*	*0.1*	*–0.3*	*0.0*	*1.9*	*0.0*	*2.6*	*0.1*	*3.7*	*4.5*
excluding: fresh food (13.9%)	*0.3*	*0.0*	*0.5*	*0.1*	*0.6*	*0.1*	*0.9*	*0.1*	*0.1*	*0.6*
Tobacco (1.9%)	**2.8**	**0.1**	**2.6**	**0.1**	**2.4**	**0.0**	**2.3**	**0.0**	**0.1**	**2.2**
Manufactured products (26.2%)	**–0.7**	**–0.2**	**–0.7**	**–0.2**	**–0.4**	**–0.1**	**–0.2**	**0.0**	**–0.5**	**–0.6**
including: clothing and footwear (4.3%)	*–0.1*	*0.0*	*–0.5*	*0.0*	*1.2*	*0.1*	*0.1*	*0.0*	*0.1*	*–0.1*
medical products (4.3%)	*–2.3*	*–0.1*	*–2.2*	*–0.1*	*–2.4*	*–0.1*	*–2.4*	*–0.1*	*–3.0*	*–2.4*
other manufactured products (17.5%)	*–0.3*	*–0.1*	*–0.3*	*–0.1*	*–0.2*	*0.0*	*0.3*	*0.1*	*–0.1*	*–0.2*
Energy (7.5%)	**9.3**	**0.7**	**5.4**	**0.4**	**3.1**	**0.2**	**2.4**	**0.2**	**–2.8**	**6.2**
including: oil products (3.8%)	*15.0*	*0.6*	*8.2*	*0.3*	*4.1*	*0.2*	*3.3*	*0.1*	*–5.4*	*10.1*
Services (48.2%)	**1.0**	**0.5**	**1.0**	**0.5**	**1.1**	**0.5**	**1.4**	**0.7**	**0.9**	**1.1**
including: rent-water (7.8%)	*0.6*	*0.0*	*0.5*	*0.0*	*0.5*	*0.0*	*0.8*	*0.1*	*0.6*	*0.6*
health services (6.0%)	*0.3*	*0.0*	*1.5*	*0.1*	*1.6*	*0.1*	*2.4*	*0.1*	*0.2*	*1.3*
transport (2.8%)	*4.5*	*0.1*	*1.7*	*0.0*	*1.8*	*0.1*	*1.8*	*0.1*	*–1.5*	*2.1*
communications (2.4%)	*–2.2*	*–0.1*	*–3.8*	*–0.1*	*–4.0*	*–0.1*	*–2.2*	*–0.1*	*2.0*	*–2.6*
other services (29.2%)	*1.2*	*0.3*	*1.4*	*0.4*	*1.5*	*0.4*	*1.7*	*0.5*	*1.3*	*1.5*
All (100%)	**1.2**	**1.2**	**0.8**	**0.8**	**0.8**	**0.8**	**1.1**	**1.1**	**0.2**	**1.1**
All excluding energy (92.5%)	0.5	0.5	0.5	0.4	0.6	0.6	0.9	0.9	0.5	0.7
All excluding tobacco (98.1%)	1.1	1.1	0.8	0.7	0.8	0.7	1.0	0.9	0.2	1.1
Core inflation (61.3%)**	**0.5**	**0.3**	**0.4**	**0.2**	**0.5**	**0.3**	**0.8**	**0.5**	**0.6**	**0.5**

Provisional Forecast

yoy : year-on-year
cyoy : contribution to the year-on-year value of the overall index
*Consumer price index (CPI)
**Index excluding public tariffs and products with volatile prices, corrected for tax measures.
Source: INSEE

Wages

In 2017, nominal wages in the market sectors accelerated slightly: +1.4% as an annual average after +1.2% in 2016 for the basic monthly wage and +1.6% after +1.3% for the average wage per capita.

Due to a rebound in energy prices, household consumer prices are likely to increase by 1.0% in 2017 after remaining virtually stable in 2016 (–0.1%). As a result, the average wage per capita looks set to slow considerably in real terms (+0.5% after +1.4%).

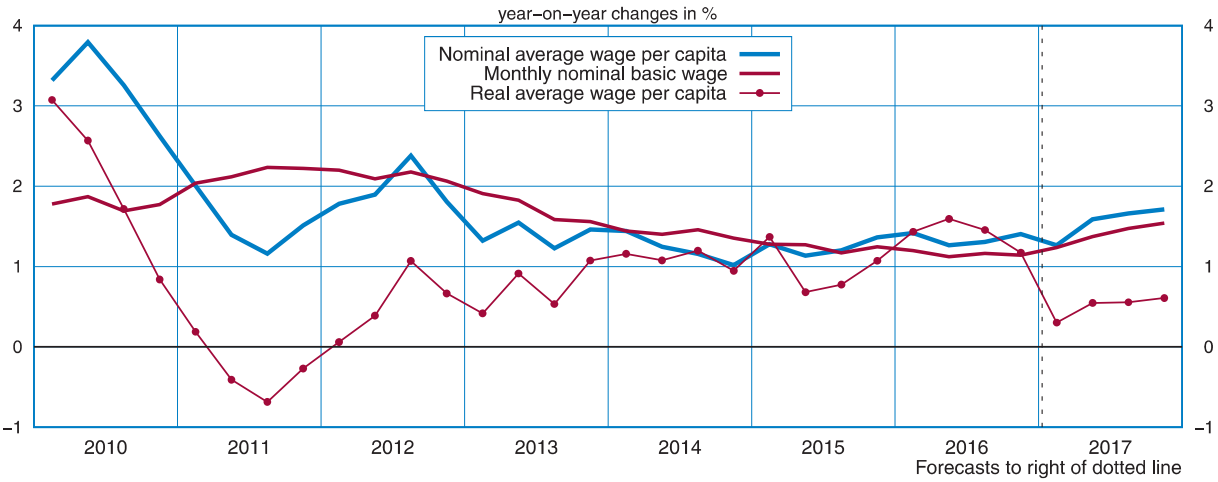
In general government, the nominal average wage per capita should accelerate substantially in 2017 (+2.5% on average over the year after +0.8% in 2016) with the effect of statutory measures and increases in the index point in July 2016 and February 2017. It is likely to accelerate in real terms too (+1.4% after +0.9%).

In the market sectors, nominal wages are set to accelerate slightly in 2017

In early 2017, the minimum wage was increased a little more (+0.9%) than the previous year (+0.6%) and unemployment decreased (–0.6 points over the year); in particular, inflation has risen since the end of 2016. These three factors are the reason for a slight acceleration in the nominal basic monthly wage[1] in the non-agricultural market sectors in 2017: it looks set to rise by 1.4% as an annual average, after +1.2% in 2016 (*Graph* and *Table*). The average wage per capita, which covers a wider range of remunerations (bonuses, profit-sharing and overtime payments), is also likely to accelerate and again increase a little faster than the basic monthly wage (+1.6% as an annual average after +1.3% in 2016). This increase is likely to be a little more pronounced in H2 2017 (+0.9% half-year on half-year after +0.8% in H1 2017 and H2 2016).

1. For a definition of *basic monthly wage* and *nominal average wage per capita*, see the "Definitions" section on the website www.insee.fr

Change in the nominal and real average wage per capita and basic wage



Scope: non-agricultural market sector
Sources: INSEE, Dares

In 2017, real wages are likely to slow

After virtual stability in 2016 (–0.1%), household consumer prices[2] are likely to accelerate in 2017, to +1.0%, mainly due to a rebound in energy prices from the end of 2016. As a result, real wages look set to slow considerably as an annual average: +0.4% in 2017 after +1.2% in 2016 for the basic monthly wage and +0.5% after +1.4% for the average wage per capita. In the course of the year, the purchasing power of the average wage per capita is likely to be stable in Q1 2017, then increase slightly.

2. Inflation is measured here by the variation in household consumer prices, provided by the quarterly national accounts.

In the civil service, nominal wages are likely to accelerate in 2017

In general government, the index point was raised in February 2017 (+0.6%), after a previous increase in July 2016 (+0.6%), the first for six years. In addition, some category-based measures have been introduced in 2017 and the agreement on "professional career paths, careers and remunerations" has resulted in an increase in gross wages. However, the individual purchasing power guarantee scheme, renewed in 2017, is likely to yield less because of the index thaw and the agreement on "professional career paths, careers and remunerations", which began in 2016. As an annual average, the average wage per capita in general government looks set to accelerate substantially in nominal terms: +2.5% in 2017 after +0.8% in 2016. Given the expected rise in prices, the real average wage per capita should accelerate a little less strongly (+1.4% after +0.9%). ■

Variation in the basic monthly wage and the average wage per capita in the non-farm market branches and in general government

in %

	Quarterly growth rates								Half-yearly rates				Annual averages		
	2016				2017										
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016 H1	2016 H2	2017 H1	2017 H2	2015	2016	2017
Basic monthly wage	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.7	0.8	1.2	1.2	1.4
Average wage per capita in the non-farm market branches	0.5	0.1	0.3	0.5	0.4	0.4	0.4	0.5	0.6	0.8	0.8	0.9	1.2	1.3	1.6
Average wage per capita in general government (GG)													0.9	0.8	2.5
Household consumer price index (quarterly national accounts)	–0.2	0.0	0.1	0.3	0.5	0.1	0.2	0.3	–0.2	0.4	0.6	0.5	0.3	–0.1	1.0
Real basic monthly wage	0.5	0.2	0.2	0.0	–0.2	0.3	0.2	0.1	0.7	0.2	0.1	0.3	1.0	1.2	0.4
Real average wage per capita (non-farm market branches)	0.8	0.1	0.2	0.1	–0.1	0.3	0.2	0.2	0.8	0.3	0.2	0.4	1.0	1.4	0.5
Real average wage per capita (GG)													0.6	0.9	1.4

Forecast

Sources: INSEE, Dares

Household income

In 2017, household income should accelerate in nominal terms (+2.2% after +1.7%), as earned income again increases more quickly than the previous year. However, the purchasing power of household income is set to slow down significantly (+1.1% after +1.8% in 2016), due to the acceleration in consumer prices (+1.0% after –0.1%). After virtually stagnating at the end of 2016 and in early 2017, it should progress moderately over the last three quarters of the year.

Earned income to accelerate in 2017

In 2017, household earned income should accelerate again: +2.6% after +1.9% in 2016 and +1.5% in 2015 (*Table 1*). The rise in payroll in the non-farm market sectors should be more sustained (+2.9% after +2.4% in 2016; *Graph* and *Table 2*), with employment (+1.4% after +1.0% in 2016) and average wage per capita (+1.6% after +1.3%) both making contributions. The operating income of sole proprietors should progress moderately (+1.1% after +1.5%).

Property income should almost stabilise in 2017, after falling back for two years: dividends received should rebound as the financial situation of companies improves, and life insurance income should fall less sharply. The gross operating surplus of households[1] as the owners of their homes should slow down a little (+2.0% after +2.2%), as the positive effect of mortgage renegotiations fades out.

1. In the national accounts, the gross operating surplus of pure households takes account, among other things, of housing services: the added value is the difference between the rent (actually paid by tenants or imputed for home owners) and the intermediate consumption of the owners, notably banking margins on real-estate loans.

Table 1

Household gross disposable income

	Quarterly changes in %												Annual changes in %		
	2015				2016				2017						
	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	2015	2016	2017
Gross disposable income (100%)	**0.4**	**0.1**	**0.5**	**0.5**	**0.4**	**0.3**	**0.7**	**0.4**	**0.6**	**0.6**	**0.5**	**0.5**	**1.1**	**1.7**	**2.2**
including:															
Earned income (70%)	0.5	0.2	0.5	0.6	0.6	0.2	0.5	0.6	0.8	0.7	0.6	0.7	1.5	1.9	2.6
Gross wages and salaries (62%)	*0.5*	*0.3*	*0.4*	*0.5*	*0.6*	*0.3*	*0.6*	*0.8*	*0.8*	*0.7*	*0.6*	*0.7*	*1.5*	*2.0*	*2.8*
GOS of sole proprietors[1] (8%)	*0.7*	*–0.7*	*0.8*	*1.4*	*0.7*	*–0.7*	*0.2*	*–0.4*	*0.5*	*0.7*	*0.5*	*0.4*	*1.3*	*1.5*	*1.1*
Social benefits in cash (35%)	0.1	0.3	0.3	0.6	0.5	0.4	0.5	0.3	0.5	0.5	0.5	0.5	1.5	1.8	1.9
GOS of "pure" households (13%)	0.6	0.5	0.6	0.7	0.4	0.6	0.5	0.7	0.2	0.5	0.5	0.7	2.1	2.2	2.0
Property income (8%)	–0.5	–0.4	–1.1	–1.1	–0.9	–0.9	–0.4	0.3	0.2	–0.2	–0.1	0.0	–2.5	–3.2	–0.2
Social contributions and taxes (–27%)	0.3	0.5	-0.4	0.6	1.0	0.2	–0.4	1.0	0.6	0.7	0.7	0.8	1.7	1.5	2.4
Contributions of households (–11%)	*0.5*	*0.4*	*0.7*	*0.2*	*0.7*	*0.5*	*0.6*	*0.7*	*0.9*	*0.5*	*0.5*	*0.5*	*1.6*	*2.2*	*2.7*
Income and wealth tax (including CSG and CRDS) (–16%)	*0.2*	*0.6*	*–1.1*	*0.8*	*1.1*	*0.0*	*–1.1*	*1.2*	*0.4*	*0.9*	*0.9*	*1.1*	*1.7*	*1.1*	*2.1*
Income before taxes	0.3	0.2	0.3	0.6	0.5	0.2	0.5	0.5	0.6	0.6	0.6	0.6	1.2	1.6	2.2
Household consumer prices (quarterly national accounts)	**0.1**	**0.3**	**–0.1**	**0.0**	**–0.2**	**0.0**	**0.1**	**0.3**	**0.5**	**0.1**	**0.2**	**0.3**	**0.3**	**–0.1**	**1.0**
Purchasing power of gross disposable income	**0.3**	**–0.2**	**0.6**	**0.6**	**0.6**	**0.3**	**0.6**	**0.1**	**0.1**	**0.5**	**0.3**	**0.2**	**0.8**	**1.8**	**1.1**
Household purchasing power by consumption	**0.2**	**–0.3**	**0.5**	**0.4**	**0.5**	**0.1**	**0.5**	**0.0**	**0.0**	**0.3**	**0.2**	**0.1**	**0.4**	**1.3**	**0.7**

Forecast

How to read it: the figures in parentheses give the structure of the year 2016.

1. The gross operating surplus (GOS) of sole proprietors is the balance of the operating accounts of sole proprietorships. It is mixed income, because it remunerates the work performed by the sole proprietor, and possibly the members of his family, but also contains the profit achieved as an enterpreneur.

Source: INSEE

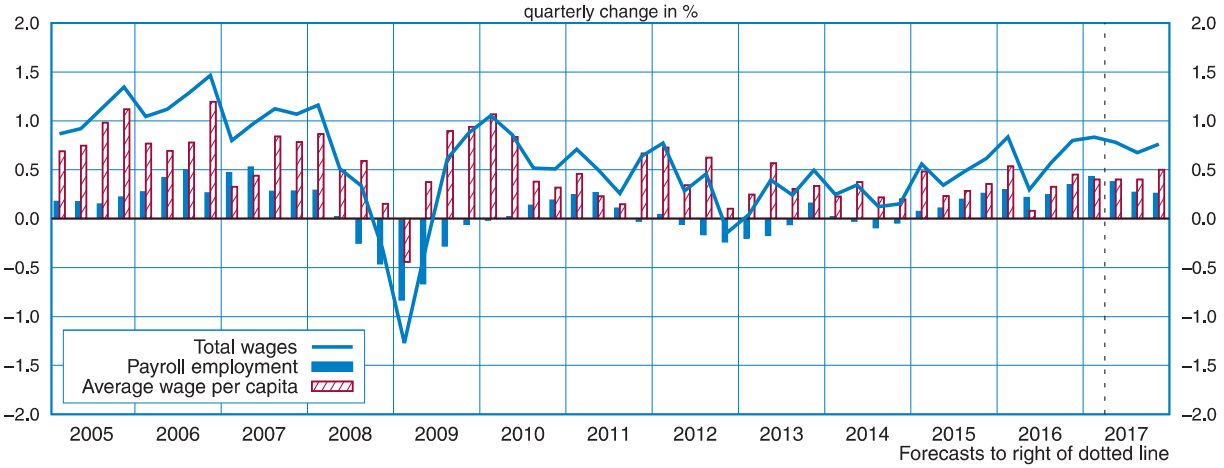
Social benefits should increase almost as in 2016

In 2017, social benefits in cash should increase almost as they did in 2016 (+1.9% after +1.8%, Table 3). This should notably be the case of social security benefits (+1.8% as in 2016). "Other social insurance benefits" should also accelerate a little in 2017 (+2.0% after +1.6%), mainly driven by reimbursements by mutual insurance companies. Finally, social support benefits are set to remain dynamic, thanks to the exceptional increase in the earned income supplement (RSA) scheduled for September 2017 as part of the multi-year plan against poverty and for social inclusion. They should slow down slightly, however (+2.7% after +2.8%) as the ramp-up phase of the activity bonus comes to an end in 2017.

Taxes and social contributions are expected to accelerate slightly

In 2017, taxes and social contributions borne by households should accelerate a little: +2.4% after +1.5%. Social contributions borne by households should grow at a more sustained pace than in 2016 (+2.7% after +2.2%), in line with the expansion in payroll and under the effect of the rise in the old age insurance contribution. Taxes on income and wealth should accelerate significantly (+2.1% after +1.1%), as the effects of the tax reduction measures (20% reduction of income tax for modest households, raising of the exemption threshold and reduction of the rate of the general social contribution on income maintenance benefits) will be more limited in 2017 than those of the measures in 2016. In addition, the wealth tax

Breakdown of the total gross wages received by households in the non-agricultural market sector



Source: INSEE

Table 2

From the payroll of non-financial enterprises to that received by households

	Quarterly changes in %												Annual changes in %		
	2015				2016				2017						
	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	2015	2016	2017
Non-financial enterprises (67%)	0.5	0.3	0.5	0.6	0.9	0.3	0.6	0.8	0.8	0.8	0.7	0.8	1.5	2.5	2.9
including: Average wage per capita	*0.4*	*0.2*	*0.3*	*0.3*	*0.6*	*0.1*	*0.3*	*0.4*	*0.3*	*0.4*	*0.4*	*0.5*	*1.2*	*1.4*	*1.5*
Financial corporations (4%)	0.7	1.2	0.1	0.6	0.0	0.2	1.0	0.3	0.6	0.9	0.8	0.8	1.9	1.5	2.7
General government (22%)	0.2	0.1	0.1	0.0	0.1	0.3	0.6	0.7	0.8	0.6	0.6	0.6	1.0	0.8	2.6
Households excluding sole proprietors (2%)	0.8	0.1	–0.4	–0.3	–0.9	0.3	–1.1	–0.5	0.3	0.0	0.0	0.0	–0.6	–1.8	–0.5
Total gross wages received by households (100%)	**0.5**	**0.3**	**0.4**	**0.5**	**0.6**	**0.3**	**0.6**	**0.8**	**0.8**	**0.7**	**0.6**	**0.8**	**1.5**	**2.0**	**2.8**
including: Non-agricultural market sectors	*0.6*	*0.3*	*0.5*	*0.6*	*0.8*	*0.3*	*0.6*	*0.8*	*0.8*	*0.8*	*0.7*	*0.7*	*1.5*	*2.4*	*2.9*

Forecast

How to read it: the figures in parentheses give the structure of the year 2016.
Source: INSEE

(ISF) should be more dynamic than in 2016, driven by the recovery in real estate prices and the introduction of a mechanism aiming to restrict tax base optimisation possibilities. The measures announced by the new government (increase in the general social contribution, reduction in housing tax, reform of wealth tax) are unlikely to take effect before 2018.

Purchasing power is set to slow down significantly in 2017, eroded by the upturn in inflation

In 2017, nominal gross disposable income of households is set to accelerate (+2.2% after +1.7%), driven in particular by earned income.

However, inflation[2] is likely to rise significantly on an annual average basis (+1.0% after –0.1%), with the result that the purchasing power of gross disposable income should slow down markedly (+1.1% after +1.8%). On an individual level to take account of demographic changes, purchasing power per consumption unit should slow down in comparable proportions (+0.7% in 2017 after +1.3% in 2016).

In the course of the year, income in nominal terms should slow down due to taxation, with the result that purchasing power is likely to become a little less dynamic in H2: +0.5% after +0.6% in H1. ■

2. Inflation is measured here by the variation in household consumer prices, provided by the quarterly national accounts.

Table 3

Social transfers received and paid by households

	Quarterly changes in %												Annual changes in %		
	2015				2016				2017						
	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	2015	2016	2017
Social cash benefits received by households (100%)	**0.1**	**0.3**	**0.3**	**0.6**	**0.5**	**0.4**	**0.5**	**0.3**	**0.5**	**0.5**	**0.5**	**0.5**	**1.5**	**1.8**	**1.9**
Social Security benefits in cash (72%)	0.2	0.3	0.3	0.6	0.6	0.2	0.5	0.3	0.5	0.5	0.5	0.5	1.6	1.8	1.8
Other social insurance benefits (19%)	–0.1	0.0	–0.1	0.4	0.7	0.4	0.6	0.3	0.5	0.6	0.6	0.5	0.8	1.6	2.0
Social assistance benefits in cash (8%)	0.2	0.3	0.6	1.0	–0.8	2.7	0.7	0.3	0.5	0.5	0.6	0.8	2.3	2.8	2.7
Total social contribution burden by households (100%)	**–0.2**	**0.3**	**0.7**	**0.1**	**0.7**	**–0.2**	**0.5**	**0.7**	**0.6**	**0.6**	**0.6**	**0.6**	**1.0**	**1.5**	**2.3**
Actual social contributions paid	–0.2	0.3	0.7	0.1	0.8	–0.3	0.5	0.7	0.8	0.6	0.6	0.7	1.1	1.6	2.5
including: Employers contributions[1] (63%)	*–0.5*	*0.2*	*0.7*	*0.0*	*0.8*	*–0.7*	*0.5*	*0.7*	*0.7*	*0.7*	*0.6*	*0.5*	*0.7*	*1.2*	*2.3*
Contributions of households (37%)	*0.5*	*0.4*	*0.7*	*0.2*	*0.7*	*0.5*	*0.6*	*0.7*	*0.9*	*0.5*	*0.5*	*0.6*	*1.6*	*2.2*	*2.7*

Forecast

How to read it: The figures in parentheses give the structure of the year 2016.
1. Employer contributions are both received and paid by households in the national accounts: they therefore have no effect on gross disposable income.

Source: INSEE

Household consumption and investment

In Q1 2017 household consumption came to a standstill (+0.1% after +0.6%). Expenditure on goods fell back substantially, especially on energy and automobiles, while consumption of services accelerated slightly.
In Q2 2017 household consumption is expected to be more buoyant (+0.4%) due to a rebound in expenditure on goods. Purchases of consumer durables should recover some momentum, with in particular an upswing in expenditure on automobiles. Energy consumption is likely to almost stabilise. Consumption of services looks set to slow slightly: while spending on accommodation and food services and on transport is expected to be sustained thanks to the return of tourists, consumption of leisure services is likely to slow after two dynamic quarters. In H2 2017, household consumption is expected to increase at a pace consistent with the moderate rise in household purchasing power (+0.3% per quarter).
On average over the year, consumption by resident households is expected to slow down sharply in 2017 (+1.2% after +2.1%), in line with their purchasing power (+1.1% after +1.8% in 2016) and adversely affected by the upturn in inflation. However, exports of tourism services are likely to pick up, sustaining this sector which should thus withstand the slowdown in purchasing power.
In Q4 2016 the savings ratio returned to its Q1 level (13.9%), after a temporary rise over the summer (14.3%). It is expected to remain virtually unchanged throughout 2017 and should stand at around 13.9% as an annual average, very slightly down on 2016 (14.0%).
Over 2016 as a whole, household investment in housing bounced back (+2.4%), after four years of decline. It increased sharply once again in Q1 2017 (+1.0%) and is expected to grow almost as much through to the end of the year. On average over the year, household investment is therefore set to accelerate very substantially in 2017 (+3.7%).

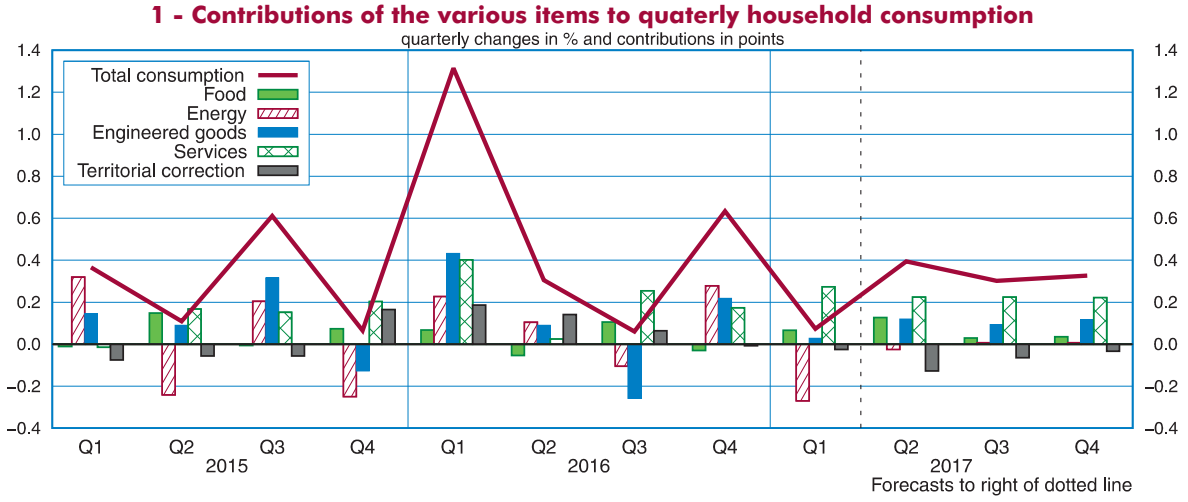
Consumption came to a standstill in Q1 2017

In Q1 2017, household consumption came to a standstill (+0.1%) after a dynamic Q4 (+0.6%, *Graph 1*).

Consumption of goods slipped back (–0.4% after +1.0%). Energy consumption in particular declined sharply (–3.3% after +3.4%): expenditure on heating fell significantly due to the mild end to winter after a fairly cold autumn. Automobile purchases also declined (–1.1% after +2.2%) and expenditure on clothing slowed (+0.6% after +1.1%). However, spending on household durables other than cars picked up sharply (+2.1% after 0.0%) and food consumption rebounded (+0.4% after –0.2%).

Consumption of services accelerated slightly (+0.5% after +0.3%), mainly because expenditure on accommodation and food services recovered briskly after a sluggish Q4, consumption of transport services remained buoyant and consumption of leisure was again vigorous.

1 - Contributions of the various items to quaterly household consumption



Source: INSEE

In Q2 2017, consumption is expected to speed up slightly

In Q2 2017, total household consumption is expected to accelerate slightly (+0.4%, *Table*) due to a rebound in expenditure on goods (+0.5% after –0.4%).

Purchases of consumer durables are likely to pick up (+1.4% after 0.0%): automobile purchases should bounce back (+1.6% after –1.1%) and spending on household durables other than cars should slow (+1.2% after +2.1%). Energy consumption is expected to virtually stabilise (–0.3% after –3.3%) especially that on heating, with temperatures at the start of spring very close to their average. Spending on food is set to accelerate (+0.7% after +0.4%). However, expenditure on clothing is expected to slip back sharply (–0.9% after +0.6%), an after-effect of two dynamic quarters and as a result of the change to the summer sales calendar. Lastly, consumption of services should remain robust (+0.4% after +0.5%): expenditure on accommodation and food services and on transport should continue to increase steadily with the gradual return of foreign tourists,[1] while leisure consumption is likely to slow after two quarters of sharp increases.

In H2 2017, household consumption should continue to rise at a pace in line with the moderate growth in household purchasing power (+0.3% per quarter). Expenditure on services is expected to be as dynamic as in Q2, especially tourism services.

On average over the year, household consumption is expected to slow down considerably in 2017 (+1.2% after +2.1% in 2016), in line with purchasing power which is likely to see its buoyancy stemmed by the upturn in inflation (+1.1% after +1.8%). Purchases of manufactured goods in particular are likely to grow less quickly (+1.2% after +1.7%). A downturn in energy consumption is expected as an annual average (–1.3% after +2.2%) due to the warm temperatures at the beginning of the year. However, thanks to the return of tourists, purchases of market services should withstand the slowdown in purchasing power (+1.8% after +1.7%).

1. For each product, the national accounts measure purchases throughout the territory, irrespective of whether households are resident or not. Resident households' consumption is obtained by adjusting the sum of these purchases across the territory, i.e. by adding spending by tourists residing abroad (which is recorded as tourism service imports) and deducting purchases by non-residents in the territory (which correspond to tourist service exports). This is an overall adjustment, not broken down by product.

Household consumption and investment expenditure

at chain-link previous year prices. SA-WDA

	Quarterly changes in %								Annual changes in %		
	2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Total household consumption expenditures (1)+(2)+(3)	**1.3**	**0.3**	**0.1**	**0.6**	**0.1**	**0.4**	**0.3**	**0.3**	**1.3**	**2.1**	**1.2**
Services (1)	**0.7**	**0.0**	**0.5**	**0.3**	**0.5**	**0.4**	**0.4**	**0.4**	**0.8**	**1.6**	**1.6**
Goods (2)	**1.5**	**0.3**	**–0.5**	**1.0**	**–0.4**	**0.5**	**0.3**	**0.3**	**1.9**	**1.8**	**0.8**
including:											
Food	**0.4**	**–0.3**	**0.6**	**–0.2**	**0.4**	**0.7**	**0.2**	**0.2**	**1.1**	**0.9**	**1.1**
Agriculture goods (AZ)	2.7	–0.9	–0.4	–0.3	–1.8	2.0	0.2	0.2	–0.4	2.2	–0.9
Agri-food products (C1)	–0.1	–0.2	0.8	–0.1	0.8	0.5	0.2	0.2	1.4	0.6	1.6
Energy	**2.7**	**1.3**	**–1.3**	**3.4**	**–3.3**	**–0.3**	**0.1**	**0.1**	**1.4**	**2.2**	**–1.3**
Energy, water and waste (DE)	3.9	3.1	–3.1	5.0	–5.0	0.2	0.0	0.0	1.9	2.9	–2.2
Coke and refined petroleum (C2)	1.5	–1.0	1.2	1.5	–0.9	–1.0	0.2	0.2	0.9	1.3	0.0
Engineered goods (C3 to C5)	**2.1**	**0.4**	**–1.2**	**1.1**	**0.1**	**0.6**	**0.5**	**0.6**	**2.6**	**2.4**	**1.2**
Manufactured goods (C1 to C5)	***1.2***	***0.1***	***-0.2***	***0.6***	***0.3***	***0.4***	***0.3***	***0.4***	***2.0***	***1.7***	***1.2***
Territorial correction (3) = (4)–(5)	**–42.9**	**–57.6**	**–61.3**	**18.6**	**53.7**	**71.6**	**42.7**	**30.6**	**–2.0**	**–78.6**	**40.2**
Imports of touristic services (4)	3.2	2.1	0.8	0.0	–0.3	0.4	0.4	0.4	–5.2	5.2	1.2
Exports of touristic services (5)	–2.6	–2.3	–1.2	0.2	0.5	2.0	2.0	2.0	–4.7	–6.9	2.5
Investment expenditure	**0.8**	**0.7**	**0.9**	**0.9**	**1.0**	**0.9**	**0.9**	**0.8**	**–2.1**	**2.4**	**3.7**

Forecast

Source: INSEE

French developments

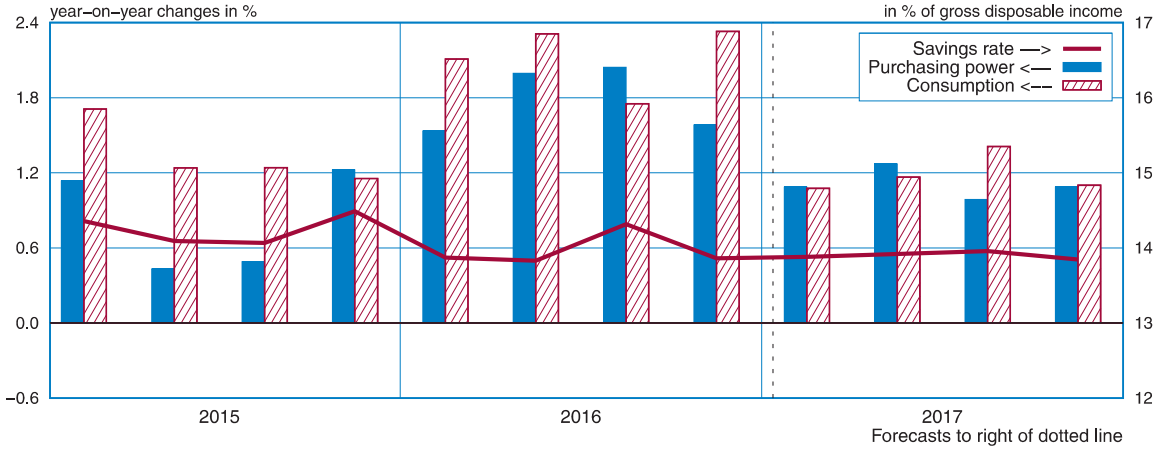
In 2017, the savings ratio is expected to fall back very slightly to 13.9%

Households' savings ratio increased in Q3 2016 to 14.3% of gross disposable income, as household consumption stalled despite purchasing power improving steadily (*Graph 2*). In Q4 2016, the savings ratio was almost back to its Q1 level (13.9%), with consumption rebounding while purchasing power was near stable. It is expected to remain virtually unchanged throughout 2017. Household consumption should increase at a pace similar to household purchasing power. On average over 2017, the savings ratio is likely to continue to fall back very slightly (13.9% after 14.0%), to its lowest since 1990.

Household investment should grow vigorously across 2017 as a whole

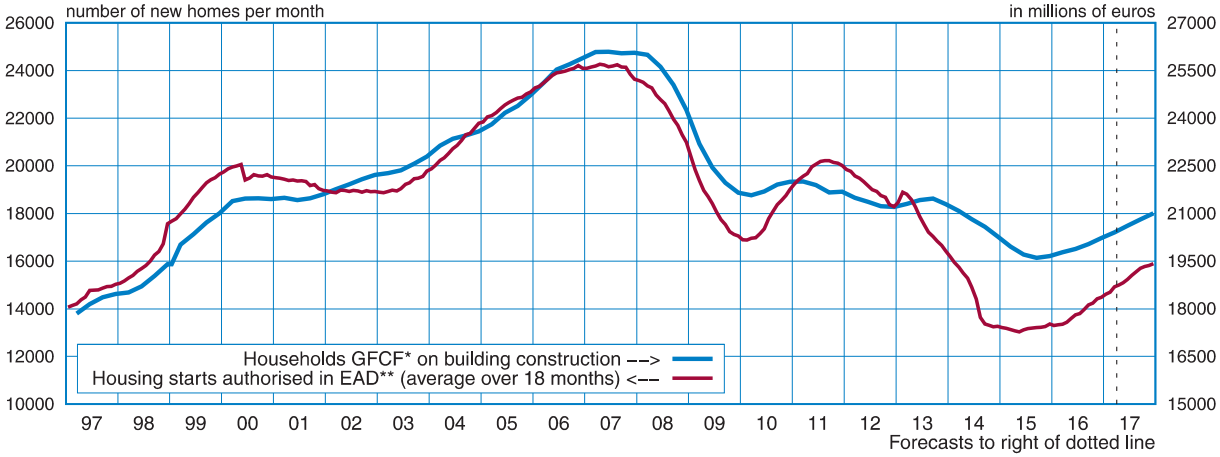
In Q1 2017, household investment continued to rise sharply (+1.0%), for the seventh consecutive quarter. The number of authorised housing starts has grown constantly since the beginning of 2016 (*Graph 3*). In view of the usual time lags between authorisations being granted and construction work actually starting, household investment is expected to remain almost as strong until the end of 2017 (+0.9% on average per quarter). As an annual average, household investment should accelerate strongly in 2017 (+3.7% after +2.4% in 2016). ■

2 - Savings ratio and variations in consumption and in purchasing power of gross disposable income



Source: INSEE

3 - Household investment on construction and housing starts



*GFCF: gross fixed capital formation
**EAD+: estimated actual dates

Sources: INSEE, SOeS

Does household confidence in the economic situation depend on their "well-being"?

The Consumer Confidence Survey (CAMME) provides information each month on household confidence in the economic situation. Households are asked about their personal situation (financial situation, major purchases intentions, etc.) and their economic environment (standard of living in France, future prospects of unemployment, prices, etc.). Since mid-2016 and in association with the Centre for Economic Research and its Applications (CEPREMAP), a module on "household well-being" has been included every three months in the usual survey questionnaire. The questions asked cover feelings of personal satisfaction: households are asked about their degree of satisfaction with life in general (past, present, future), and in relation to certain topics (state of health, relations with family and at work). The aim is to measure the well-being of the French. To what extent is the "well-being" that emerges from these questions correlated with their opinion on the economic situation, and especially on their personal situation?

Initial results indicate that the degree of confidence that households have in the economic situation is indeed linked with their feeling of satisfaction with life in general. This feeling of satisfaction depends in turn on sociodemographic characteristics, and on households' opinions on other areas of their personal life (state of health, feeling of security, relationships at work, etc.).

Household confidence in the economic situation is correlated with their "well-being"

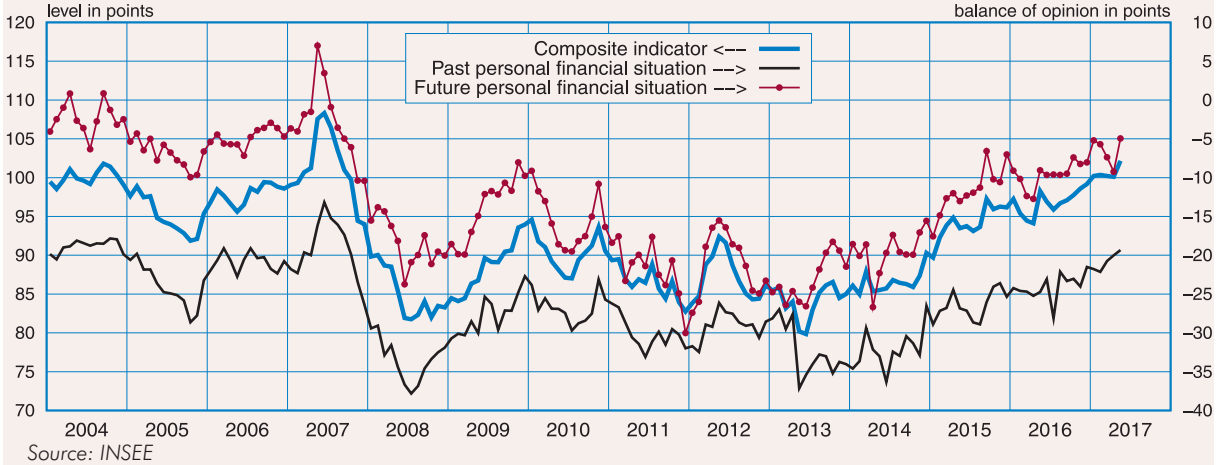
INSEE publishes a composite indicator of household confidence every month. It is calculated as a weighted mean of eight balances of opinion on questions of an economic nature asked in the Monthly Consumer Confidence Survey (CAMME, see *Source*): standard of living in France (future and past), personal financial situation (future and past), major purchases intentions, saving capacity (future and past), future prospects of unemployment. Over the long term, fluctuations in this indicator appear similar to those seen in purchasing power gains per consumption unit (INSEE, 2017). This relationship justifies the use of the confidence indicator as an advance indicator of household purchasing power, and hence of household consumption.

Among the different variables selected for the composite indicator, balances relating to personal financial situation, both future and past, are crucial: each one accounts for 20% of the common factor and both are closely correlated to it (*Graph*).

While households' opinion on the economic environment in France depends to a very large extent on the economic outlook (INSEE, 2016), their perception of their personal financial situation is more likely to depend on their own characteristics, their sociodemographic situation and also their feeling of well-being.

The new "household well-being" module in the consumer confidence survey provides an initial evaluation of this relationship. It has twenty new questions; since June 2016, these questions have been included every three months in the usual survey questionnaire. In June, September and December 2016, the 1,800 households in each survey were asked to rate their degree of satisfaction with their lives ("Overall, how satisfied are you with your life?"), whether at present, in years to come or the previous year; more specific questions focus on their satisfaction with various areas of life: state of health, feeling of security, relationships with family, etc. (see *Source*).

Composite indicator and balances on personal financial situation (past and future) since 2004



Source: INSEE

What is the link between household confidence in the economic situation and households' "well-being" as it emerges from the new module? To answer this question, six of the twenty new variables, covering well-being in general, were first selected: satisfaction with life at present, life in the past and prospects for the future, whether respondents felt happy the day before the survey, satisfaction with standard of living and opinion on what life in France will be like for the next generation. Responses ranged from 0 ("not at all" / "much worse") to 10 ("completely" / "much better"). These six variables appear to be interlinked (*Table 1*). They are also linked to the two variables on households' personal financial situation, past and future.

To test the relationship between these two types of perception - of the economic situation on the one hand, and of well-being on the other - statistical tests were carried out on the theoretical and empirical distribution of respondents when crossing response modalities.

The more satisfied households are with their prospects for life in the future, the more often they think that their personal financial situation will improve. These results are statistically significant. Tests on other pairs of variables reached the same conclusion: households' opinions on the economic situation and their level of well-being are linked. When an ordered multinomial logistic model is applied, this link is seen to persist when households' sociodemographic characteristics are monitored. The relationship between households' feeling of well-being and their positive economic opinion is therefore not determined only by their sociodemographic situation.

For both men and women, the fact of being young, well-off and in good health reinforces the feeling of well-being

How do households form their opinions on their well-being? To answer this question, a summary indicator was constructed using a simple mean across the six new variables selected for their general nature. For the three surveys conducted since June 2016, the indicator is 6.0 for the entire sample. Dispersion of this indicator across the categories is low; for example, the mean is virtually identical for men (6.1) and women (6.0).

Another Logit statistical model was used to discover how the feeling of well-being, measured using this summary indicator, is dependent on sociodemographic characteristics and on three other responses to questions in the "well-being" module which refer to households' satisfaction regarding work, health and sense of security (*Table 2*).

Among the sociodemographic characteristics, age and income seem to be fairly determining: the younger the respondent, the higher the summary indicator; the more household income rises, the more the feeling of well-being increases. Lastly, the better the respondent's level of qualifications, the better he perceives his well-being to be. However, all things being equal, gender does not affect the perception of well-being.

For a defined set of sociodemographic characteristics, the more respondents say they are satisfied with their work in general, or the more satisfied they are with their state of health, or the safer they feel, then the better their perception of well-being, as defined by the summary indicator.

Table 1 - Correlation matrix for variables used in the study

	Present life satisfaction	Prospects of future life satisfaction	Past life satisfaction	Happy the day before	Standard of living satisfaction	Opinion on life in France for the next generation	Past personal financial situation	Future personal financial situation
Present life satisfaction	1	0.63	0.61	0.45	0.56	0.22	0.30	0.23
Prospects of future life satisfaction	0.63	1	0.47	0.38	0.46	0.33	0.27	0.30
Past life satisfaction	0.61	0.47	1	0.38	0.46	0.17	0.20	0.14
Happy the day before	0.45	0.38	0.38	1	0.36	0.12	0.15	0.16
Standard of living satisfaction	0.56	0.46	0.46	0.36	1	0.19	0.35	0.21
Opinion on life in France for the next generation	0.22	0.33	0.17	0.12	0.19	1	0.15	0.17
Past personal financial situation	0.30	0.27	0.20	0.15	0.35	0.15	1	0.37
Future personal financial situation	0.23	0.30	0.14	0.16	0.21	0.17	0.37	1

Scope: entire sample, excluding "don't know" responses, i.e. 4,877 respondents.
Source : INSEE, CAMME survey of June, September and December 2016

Many more questions are on the horizon. To what extent will the perceived level of well-being change over time? Will it be in line with the fluctuations in the indicator of confidence in the economic situation and, more generally, will it be procyclical? To what extent do households' sociodemographic characteristics affect the dynamics of the feeling of well-being that emerges from these surveys? The cyclical analysis of households' responses on their well-being can be continued when there is a sufficiently long timescale to consider. ■

Table 2 - Ordered multinomial Logit model applied to the summary indicator for well-being

		Summary indicator of the well-being "OR" (*Odds Ratio*)
Moral variables		
Work	very satisfied	2.6
	not satisfied	0.4
	moderately satisfied	ref
Health	very satisfied	2.1
	not satisfied	0.3
	moderately satisfied	ref
Security	very safe	1.7
	not safe	0.4
	moderately safe	ref
Sociodemographic variables		
Age and gender	Women <40	2.0
	Women 40-59	ns
	Women >60	ns
	Men <40	1.6
	Men >60	ns
	Men 40-59	ref
Income	Q1	0.7
	Q3	1.3
	Q4	1.9
	Q2	ref
Qualifications	< elementary school	0.5
	higher education	1.5
	high school	ref

Scope: entire sample, excluding "don't know" responses, i.e. 2,023 respondents.
How to read the table: consider the odds ratio ("OR"): if it is greater than 1, this means that the odds of this category being happier are greater than for the reference category.
"ns" means that the category does not differ significantly from the reference category ("ref").
Households are sorted by income quartile.

Source : INSEE

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Insee (2016), "Economic outlook publications influence public opinion on unemployment, not on inflation", *Conjoncture in France*, December, p. 95-98.
Insee (2017), "Electoral periods have a positive albeit short-lived effect on household confidence", *Conjoncture in France*, March, p. 91-93. ■

French developments

Source

The Monthly consumer confidence survey (CAMME) provides information each month on household confidence in the economic situation. Households are questioned about both their personal situation (financial situation, major purchases intentions, etc.) and their economic environment (standard of living in France, future prospects of unemployment, prices, etc.). The responses to each question are summarised in a "balance of opinion". A balance of opinion is calculated as the difference between positive and negative opinions. For example, for the question, "During the last twelve months has the financial situation of your household...", the balance corresponds to the difference between the percentage of households responding "improved significantly" / "improved slightly" and the percentage of those replying, "deteriorated slightly" / "deteriorated significantly". A composite indicator of confidence in the economic situation summarises the concomitant change in responses to these different questions. This is useful for economic analysts, both because it is correlated with households' purchasing power and because it provides information on their propensity to consume in the coming months.

Since mid-2016, in cooperation with the Centre for Economic Research and its Applications (CEPREMAP), a module on "household well-being" has been included in the usual survey questionnaire every three months. Occasionally, other questions are asked on various topics: e.g. housing and the environment.

The questions used here relating to confidence ("economic outlook" module) and those in the "well-being" module are as follows:

Economic outlook module

(1) Do you think that, over the next twelve months, the financial situation of your household will: improve significantly / improve slightly / remain the same / deteriorate a little / deteriorate significantly / don't know
(2) Over the last twelve months, has the financial situation of your household: improved significantly / improved slightly / remained the same / deteriorated slightly / deteriorated significantly / don't know

Well-being module (variables used for the summary indicator)

(1) Overall, how satisfied are you with the life you lead at the moment? (from 0 to 10 / don't know)
(2) When you think about how your life will be in the years to come, are you satisfied with the prospect? (from 0 to 10 / don't know)
(3) And when you think about last year, where do you come on a scale of 0 to 10? (from 0 to 10 / don't know)
(4) During the day yesterday, did you feel happy? (from 0 to 10 / don't know)
(5) How satisfied are you with your standard of living? (from 0 to 10 / don't know)
(6) What do you think life will be like in France for the next generation? (from 0 to 10 / don't know)

Well-being module (other variables used)

(1) How satisfied are you with your health? (from 0 to 10 / don't know)
(2) How satisfied are you in general with your work? (from 0 to 10 / don't know / not applicable)
(3) How safe do you feel when you walk alone at night? (from 0 to 10 / don't know)

Enterprises' earnings

In 2016, the margin rate of non-financial corporations (NFC) stabilised at 31.9% as an annual average, after rising significantly in 2015. It was buoyed by the fall in energy prices and the ramp-up of the policies intended to increase the employment intensity of growth, in particular the Tax Credit for Encouraging Competitiveness and Jobs, the Responsibility and Solidarity Pact and the hiring premium in SMEs. Conversely, real wages were more dynamic than apparent labour productivity, which took its toll on the margin rate.
In 2017, the margin rate should slip slightly, to 31.6%. Growth in real wages and productivity gains should offset each other. The hiring premium and reduction in contributions via the Responsibility and Solidarity Pact should continue to sustain margins. The rise in oil prices, however, is likely to adversely affect the margin rate, even though companies have managed to pass on a part of the rise in their sale prices, notably for exports.

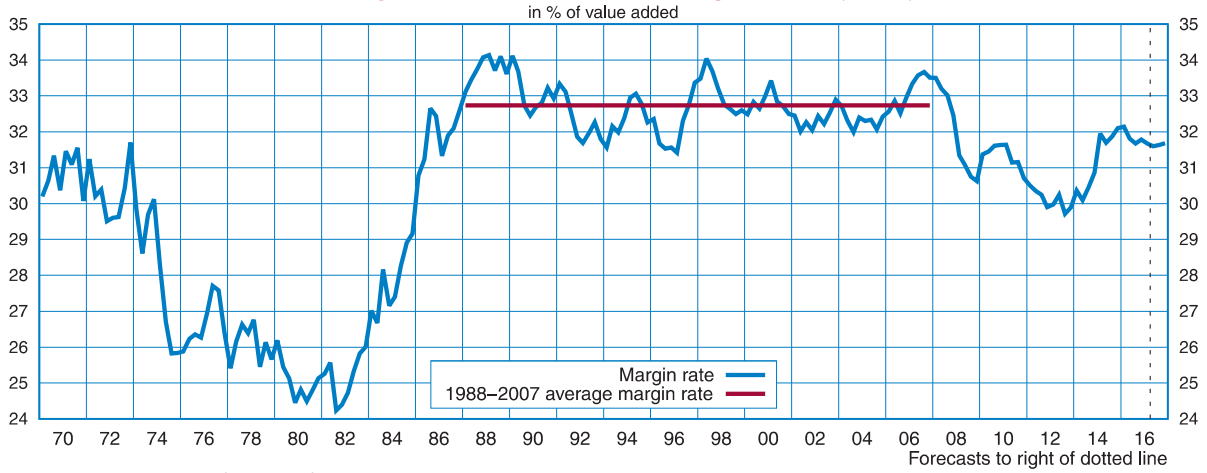
The margin rate stabilised in 2016

In 2016, the margin rate (*Graph 1*) stabilised at 31.9%, after rising significantly in 2015 (+1.5 points). It was buoyed primarily by more favourable "terms of trade", mainly through a further fall in the price of imported energy. This factor contributed +0.6 points to the change in the margin rate (*Table*). In addition, several measures to increase the job intensity of growth boosted margin rates: the hiring premium in SMEs introduced at the start of the year, the second phase of the Responsibility and Solidarity Pact and, finally, the continued ramp-up of the Tax Credit for Encouraging Competitiveness and Jobs (CICE). All taken together, these measures contributed to increasing the margin rate by +0.2 points (*Table*). However, payroll employment was almost as dynamic as value added, and the apparent productivity of labour therefore progressed only weakly, while real wages accelerated. These two factors combined weighed 0.8 points in the change in the margin rate. The sub-annual profile of the margin rate was a little uneven in early 2016, but almost stabilised thereafter (31.8% at the end of 2016, against 32.1% one year earlier).

The margin rate is likely to slip back slightly in 2017

The margin rate is likely to fall a little in 2017. Productivity gains should remain weak, while real wages are set to increase moderately: the total contribution of these two factors to the variation in the margin rate should be zero on average over the year. In addition, the support measures for companies should kick in a little further over the

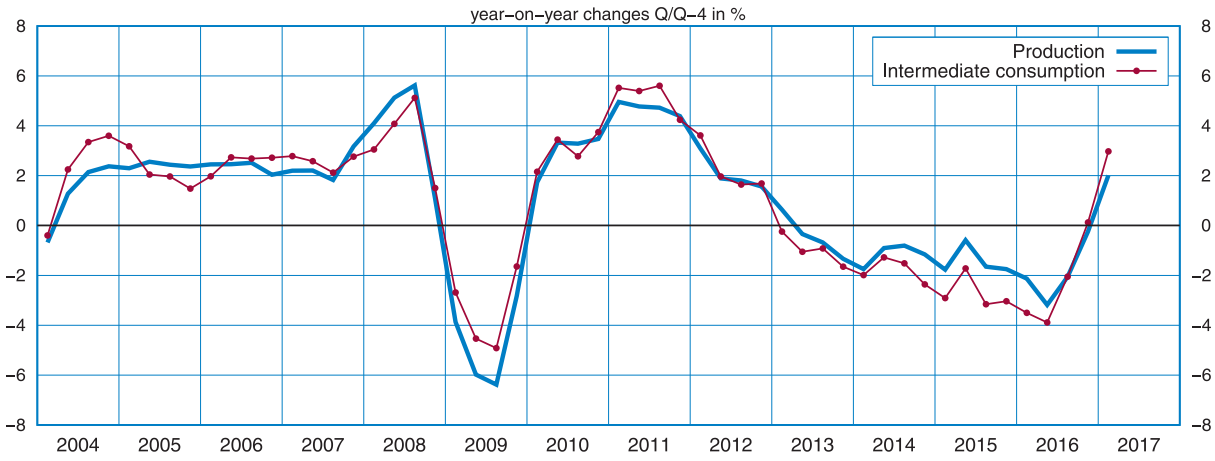
1 - Margin rate of non-financial corporations (NFCs)



Source: INSEE, quarterly national accounts

year on average, contributing a 0.2-point increase in the margin rate. The increase in the employer retirement pension contribution rate on January 1st is likely to have a very limited impact. Finally, terms of trade are likely to deteriorate a little in 2017, after improving significantly over the previous two years, due to the rise in oil prices since the end of 2016. All companies, most notably exporters, managed to pass on a part of the rise in commodity prices in their sale prices at the end of 2016 and in early 2017 (*Graph 2*), with the result that the negative contribution of terms of trade should be moderate: –0.3 points as an annual average. Ultimately, the margin rate should slip a little in 2017 to an annual average of 31.6%. ■

2 - Producer prices and input prices



Source: INSEE, quarterly national accounts

Breakdown of the margin rate of non-financial corporations (NFCs)

in % and in points

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Margin rate (in level)	**31.9**	**31.7**	**31.9**	**32.1**	**32.1**	**31.8**	**31.7**	**31.8**	**31.7**	**31.6**	**31.6**	**31.7**	**31.9**	**31.9**	**31.6**
Variation in margin rate	**1.1**	**–0.3**	**0.2**	**0.2**	**0.0**	**–0.3**	**–0.1**	**0.1**	**–0.1**	**–0.1**	**0.0**	**0.0**	**1.5**	**–0.1**	**–0.2**
Contributions to the variation margin rate															
Productivity gains	0.2	–0.2	0.1	0.0	0.3	–0.3	–0.1	0.1	0.1	0.1	0.2	0.2	0.5	0.1	0.3
Real wage per capita	–0.2	0.1	–0.3	–0.3	–0.5	0.0	–0.1	–0.1	0.1	–0.2	–0.2	–0.1	–0.6	–0.9	–0.3
Employer contribution ratio	0.2	0.0	–0.1	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1
Ratio of the value-added price to the consumer price	0.1	–0.2	0.4	0.4	0.2	–0.2	0.0	0.0	–0.4	0.1	0.0	0.0	0.7	0.6	–0.3
Other factors	0.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.1

Forecast

Note: The margin rate (TM) measures the share of value-added which remunerates capital. Its variation is broken down in accounting terms between:
- productivity changes (Y/L), with Y value-added and L employment, and the ratio of the value-added price to the consumer price, or terms of trade (Pva/Pc), which play a positive role;
- changes to the real average wage per head (SMPT/Pc) and the employer contribution ratio (W/SMPT, where W represents all compensation), which play a negative role.
- others factors: taxes on production net of operating subsidies, including CICE and the emergency plan for employment:[1]

$$TM = \frac{EBE}{VA} \approx 1 - \frac{W.L}{Y.P_{va}} + other\ factors = 1 - \frac{L}{Y}\frac{W}{SMPT}\frac{SMPT}{P_c}\frac{P_c}{P_{va}} + \text{other factors}$$

1. The CICE reduces companies' corporation tax, but in the national accounts it is recorded as a subsidy to companies, as recommended in the latest version of the European System of Account (ESA 2010).

Source: INSEE

Corporate investment and inventory

Investment by non-financial enterprises (NFE) accelerated in Q1 2017 (+1.9% after +0.9%), driven by expenditure on manufactured goods and services. Purchases of capital goods would seem to have been strongly stimulated in anticipation of the end of the one-off additional depreciation allowance. Investments in construction slowed, meanwhile. In Q2 2017, corporate investment should fall back slightly in reaction (–0.2%), before regaining momentum in H2 (+0.8% then +0.7% per quarter). On average in 2017, investment should thus increase by 2.7%, after a dynamic 2016 (+3.4.%). The investment rate is set to increase a little to 22.1% on average in 2017.

In H1 2017, the profile of changes in inventories is likely to be uneven, notably in transport equipment, due to fluctuations in export deliveries of these goods. In Q1 2017, changes in inventories made a positive contribution to growth (+0.7 points of gross domestic product), while their contribution should be clearly negative in Q2 (–0.5.points). In H2, changes in inventories should be almost neutral. All in all over the year, the contribution of changes in inventories to growth should become positive again (+0.4 points, after –0.1.points in 2016).

In Q1 2017, corporate investment accelerated sharply

In Q1 2017, investment by non-financial enterprises (NFE) increased markedly once again (+1.9%), more even than in Q4 2016 (+0.9%; *Table 1*). Investment in manufactured products accelerated strongly (+2.7% after +1.1%). More particularly, expenditure on capital goods was very dynamic, stimulated by anticipation of the end of the one-off additional depreciation allowance in mid-April 2017. Investment expenditure on services also accelerated significantly (+2.2% after +0.6%), whether in services to businesses or in information-communication. Investment in construction slowed, however (+0.4% after +1.0%), driven by expenditure on civil engineering which was affected by the poor weather conditions in January. The investment rate of NFEs reached 22.1% in Q1 2017 (*Graph 1*), exceeding its 2008 high, driven by the trend increase in investment in services in value added since the beginning of the 1980s (*Focus*).

Investment should fall back slightly in Q2 then regain momentum

For Q2 2017, the business tendency surveys are providing contrasting indications of investment by NFEs. According to the business tendency survey in industry, tensions in production capacity eased a little in Q1 2017 and the production capacity

Table 1

Investment by non-financial enterprises (NFEs)

at chain-link previous year prices, SA-WDA

	Quarterly changes												Annual changes		
	2015				2016				2017						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2015	2016	2017
Manufactured products (34%)	1.1	0.9	1.6	3.5	3.2	–2.1	–2.6	1.1	2.7	–1.0	1.0	1.0	4.7	4.2	1.6
Construction (25%)	0.7	–0.2	0.6	0.8	0.3	0.9	–0.3	1.0	0.4	0.6	0.4	0.5	0.4	1.9	2.0
Other (41%)	1.3	0.9	0.1	1.0	1.1	0.5	1.9	0.6	2.2	0.0	0.8	0.7	3.0	3.7	4.4
All non-financial enterprises (100%)	**1.1**	**0.6**	**0.7**	**1.8**	**1.6**	**–0.3**	**–0.2**	**0.9**	**1.9**	**–0.2**	**0.8**	**0.7**	**2.9**	**3.4**	**2.9**

Forecast

Source: INSEE

utilisation rate fell slightly. However, the rate remains above its long-term average and production bottlenecks are increasing slightly. According to the survey of investments in industry, more business managers in industry than average are predicting a rise than a fall in their investment in H1 2017. They are also more optimistic about prospects for their investments in H2 2017 and have globally increased their investment forecast for the year as a whole (+6% in value). In services, however, the balance of opinion on investment prospects fell markedly in April, in particular in information-communication, and only rebounded weakly in May (*Graph 2*).

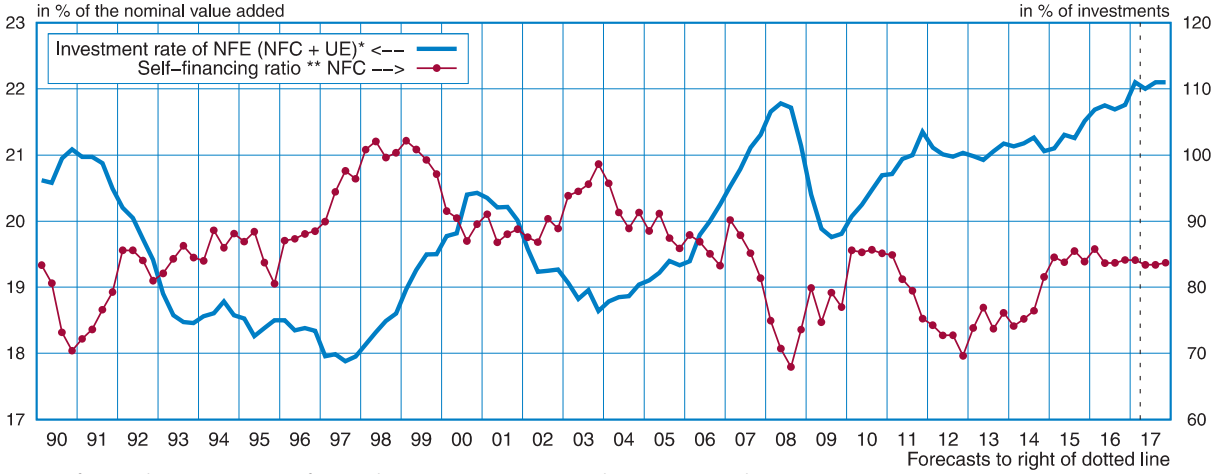
Financing terms remain favourable for corporate investment. Interest rates should remain low through to the end of 2017 after a slight rise at the start of the year. In addition, despite a rise in commodity prices, the margin rate of companies should fall only slightly, and this should not affect their investment capacity: the self-financing ratio of companies should remain high.

Corporate investment should slip a little in Q2 (–0.2%), in reaction to the dynamism of Q1, and then pick up again in H2: +0.8% then +0.7% per quarter. On average over the year, investment should slow in 2017 after a sharp rise last year (+2.9% after +3.4%). Growth in investment should once again outstrip that in added value, and the investment ratio of NFEs is set to increase again slightly (22.1% annual average in 2017).

Investment in manufactured goods set to slip back in the spring and then rebound

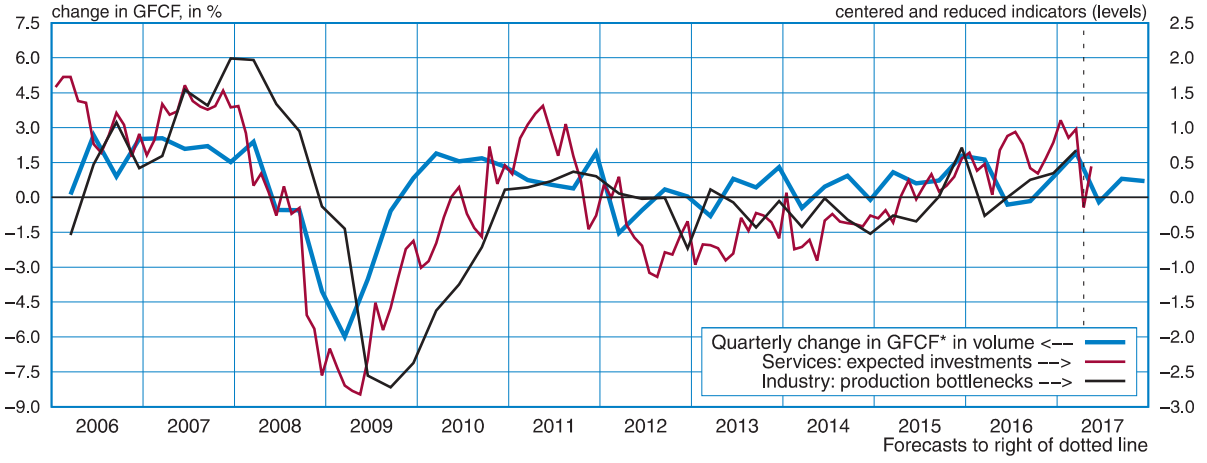
Investment by NFEs in manufactured products is likely to fall back in Q2 2017 (–1.0% after +2.7%). In particular, spending on capital goods should fall

1 - Investment rate and self-financing rate



* Non-financial enterprises: non-financial corporations (NFCs) and unincorporated enterprises (UEs)
** Self-financing rate: ratio of non-financial enterprises savings to their investments.
Source: INSEE, Quarterly national accounts

2 - Opinion on the future trend in investment in services and production bottlenecks in industry



*GFCF: Gross fixed capital formation
Sources: INSEE, monthly survey in services and industry, quarterly national accounts

markedly as they no longer benefit from the incentive of the one-off additional depreciation allowance that came to an end in mid-April. For H2, favourable financing terms for investment and a positive business climate in industry again suggest solid growth (+1.0% per quarter). On average over the year, investment in manufactured goods should increase by 1.6%, less sharply than in 2016 (+4.2%).

Investment in construction is likely to accelerate in the spring

Construction expenditure by companies should accelerate in Q2 2017 (+0.6% after +0.4%), due to the rebound in civil engineering spending from its low level in the winter. Following the timeline of building starts for non-residential buildings and collective housing, investment in building should increase moderately through to the end of 2017. As an annual average, investment in construction by companies should barely accelerate: +2.0% in 2017 after +1.9% in 2016.

Investments in services are at a standstill in the spring

Investments in services should stall in Q2 (0.0%), in reaction against the sharp increase in Q1 (+2.2%). They should return to higher growth in H2 and accelerate as an annual average (+4.4% after +3.7% in 2016).

On average over 2017, the contribution of changes in inventories should become positive again

After hampering growth in gross domestic product (GDP) in Q4 2016 (–0.2 points), the contribution of changes in inventories became clearly positive again in Q1 2017 (+0.7 points). Changes in inventories of manufactured products (+0.8 points after –0.4.points) explain most of this turnaround. For transport equipment in particular, they are the result of big fluctuations in export deliveries. The building up of inventory of agricultural products makes a more modest contribution (+0.1 points).

In the monthly business tendency survey in industry in May 2017, the level of inventories is still deemed to be lower than normal, signalling a propensity to build it up again. However, large deliveries of transport equipment are expected in the spring, with the result that inventories of manufactured products should make a negative contribution to growth in Q2 (–0.5 points), then a positive one by reaction in the following quarter (+0.2.points). In H2 2017, destocking of crude should weigh down slightly on growth (–0.1 points per quarter). All in all, the contribution of changes in inventories to growth in GDP should be negative in Q2 (–0.5 points), then almost neutral in H2. It should become positive again over the year as a whole: +0.4 points in 2017, after –0.1 points in 2016. ■

Table 2

Contribution of inventory changes to growth

in GDP points

	Quarterly changes												Annual changes		
	2015				2016				2017						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2015	2016	2017
Agricultural products	**0.0**	**–0.1**	**0.0**	**0.0**	**–0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.0**	**–0.1**	**0.0**	**0.0**	**–0.1**	**0.2**
Manufactured products	**0.3**	**–0.2**	**0.4**	**0.3**	**0.0**	**–0.7**	**0.4**	**–0.4**	**0.8**	**–0.5**	**0.2**	**0.0**	**0.4**	**0.0**	**0.2**
Agrifood products	0.0	0.0	0.0	0.0	–0.1	0.0	–0.1	–0.1	–0.1						
Coke and refined petroleum products	0.2	–0.1	0.0	0.1	0.1	–0.1	0.0	–0.1	0.1						
Machinery and equipment goods	–0.1	0.1	0.0	0.1	–0.1	0.0	0.2	0.0	0.0						
Transport equipment	0.2	–0.1	0.2	0.0	0.2	–0.4	0.2	0.0	0.5						
Other industrial goods	–0.1	0.0	0.2	0.1	0.0	–0.1	0.1	–0.3	0.3						
Energy, water and waste	**0.0**	**–0.2**	**0.0**	**0.2**	**–0.2**	**–0.1**	**0.2**	**0.2**	**–0.1**	**0.0**	**–0.1**	**–0.1**	**0.0**	**0.0**	**0.0**
Others (construction, services)	**0.0**	**0.0**	**0.0**	**0.0**	**–0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL[1]	**0.3**	**–0.4**	**0.4**	**0.5**	**–0.4**	**–0.7**	**0.7**	**–0.2**	**0.7**	**–0.5**	**0.0**	**–0.1**	**0.3**	**–0.1**	**0.4**

Forecast

1. Changes in inventories include acquisitions net of sales of valuables.

Source: INSEE

The corporate investment rate reached its highest level in 2016, driven mainly by trend growth in expenditure on services

The investment rate of non-financial enterprises, which measures the ratio between their gross fixed capital formation and their value added, reached 21.7% in 2016, surpassing the peak of 2008. This new record has occurred in a favourable economic context but also reflects a trend increase since the start of the 1980s.

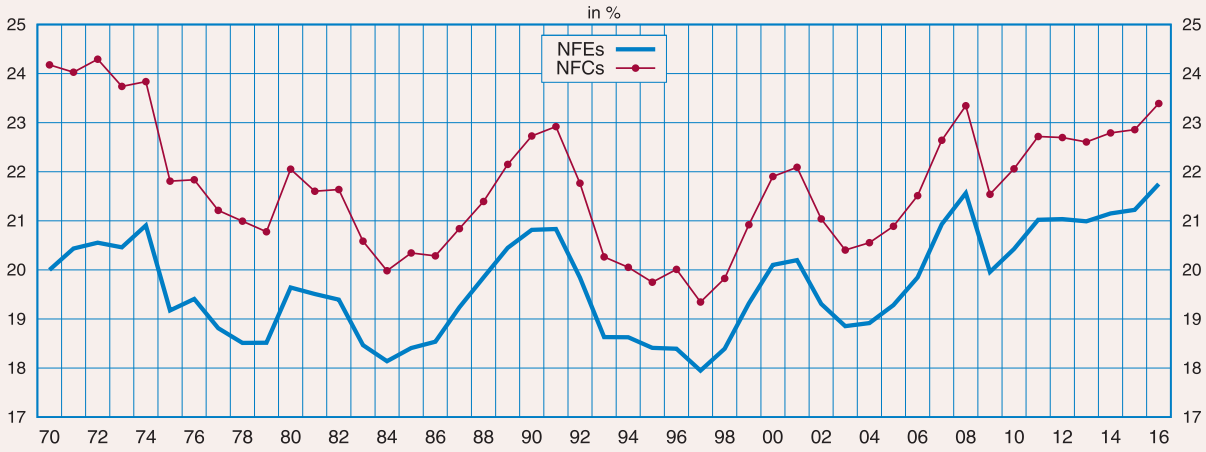
For nearly 40 years, enterprises have been stepping up their investment in research and development (R&D) and in software. Industry in particular has significantly increased its R&D efforts. So despite industry's declining economic weight, it has contributed to raising the investment rate of all enterprises. Above all, the importance of information technology services in production processes has continually increased. Enterprises are making greater use of the services of digital-sector firms and are attaching increasing importance in their production to the development of application software.

The investment rate of non-financial enterprises (NFEs), calculated as the ratio between their gross fixed capital formation (see Concept) and their value added, reached 21.7% in 2016. This is higher than its long-term average (1980-2016) and is slightly above its previous peak in 2008 (*Graph 1*).

The corporate investment rate for market services has shown trend growth since the start of the 1980s

This new peak level has come in an economic context that is favourable to investment, but it also reflects the structural rise in the corporate investment rate witnessed since 1980 (+2.1 points since then), particularly in services (*Graph 2*).

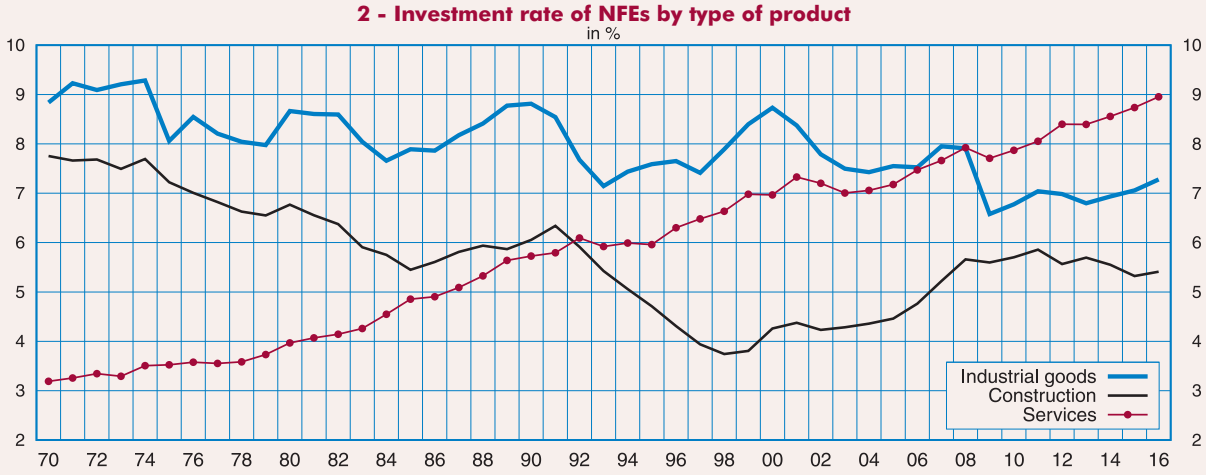
1 - Investment rate of non-financial enterprises (NFEs) and non-financial corporations (NFCs)



Note: in the national accounts, the non-financial enterprise sector encompasses non-financial corporations and unincorporated enterprises.

Source: INSEE, national accounts base 2010

2 - Investment rate of NFEs by type of product



Source: INSEE, national accounts base 2010

Investment in services by NFEs amounted to 9.0% of their value added in 2016, compared to just 4.0% in 1980 (*Table 1*). These enterprises have stepped up their investment in information and communication (+3.0 points), especially in software and IT services but also in services to businesses (+2.0 points), with the latter stemming on the one hand from increased spending on technical studies (engineering and architecture, etc.), and on the other hand from dynamic R&D investment in the 1980s and since 2000.

At the same time, from 1980 to 2016 the rate of corporate investment in industrial products declined, standing at 7.3% in 2016 compared to 8.7% in 1980. It dropped during the crisis of 2008-2009, shedding 1.3 points in one year and not recovering thereafter. Enterprises reduced their rate of investment in equipment and machinery (–1.0 point) in particular. In addition, the rate of investment in construction has dropped since 1980 in general. It has been rising again since the end of the 1990s but overall between 1980 and 2016, it contributed to reducing the total investment rate by 1.4 points.

Enterprises have invested strongly in IT assets

Analysing investments according to asset types in the scope of non-financial enterprises (see *Concept*) reveals the increasing importance of intangible investment and, within it, the extremely vigorous spending on application software.

Investment by non-financial corporations is divided into three main assets: construction, machinery and equipment, and intellectual property. In 2016 these three types of assets each accounted for approximately one third of the total investments of NFCs. Per asset type, the increased investment in information and communication products has resulted in a rise in the investment rate of NFCs in intellectual property rights (+3.7 points since 1980; *Table 2*), with much higher investment in "software and databases" (+2.8 points) than in research and development (+0.7 points). This vigour stems from the increase in the proportion of "application software" programs produced by digital technology firms or within enterprises for own final use.

Table 1 - Investment rate of non-financial enterprises by type of product

in %

	Investment rate		Investment rate variation			
	1980	2016	1980-2016	1980-1990	1990-2000	2000-2016
All products	**19.6**	**21.7**	**2.1**	**1.2**	**–0.7**	**1.6**
Agriculture	**0.2**	**0.1**	**–0.1**	**0.0**	**–0.1**	**0.0**
Industry	**8.7**	**7.3**	**–1.3**	**0.1**	**–0.1**	**–1.4**
Equipment and machinery	3.5	2.5	–1.0	0.3	–0.1	–1.1
Transport equipment	1.9	2.3	0.4	0.2	0.2	0.1
Other industrial products	3.3	2.5	–0.8	–0.3	–0.1	–0.3
Construction	**6.8**	**5.4**	**–1.4**	**–0.7**	**–1.8**	**1.1**
Services	**4.0**	**9.0**	**5.0**	**1.8**	**1.2**	**2.0**
Information and communication	1.6	4.6	3.0	0.9	0.8	1.3
Real estate activities	0.1	0.0	0.0	0.0	0.0	0.0
Services to businesses	2.2	4.2	2.0	0.8	0.4	0.8
Other services	0.1	0.1	0.0	0.0	0.1	–0.1

Source: INSEE, national accounts base 2010

Table 2 - Investment rate of non-financial corporations by type of assets (1980-2016)

in %

	Investment rates		Investment rate variation			
	1980	2016	1980-2016	1980-1990	1990-2000	2000-2016
Fixed assets	**22.1**	**23.3**	**1.3**	**0.7**	**–0.8**	**1.4**
Construction	**8.4**	**7.5**	**–0.9**	**–0.7**	**–1.8**	**1.6**
Dwellings	1.8	1.8	0.0	–0.5	–0.2	0.8
Other buildings and structures	6.6	5.7	–0.9	–0.1	–1.6	0.8
Non-residential buildings	4.0	4.0	0.0	0.0	–0.7	0.7
Other structures	2.6	1.7	–0.9	–0.1	–0.9	0.1
Machinery and equipment	**9.4**	**7.9**	**–1.6**	**–0.1**	**0.3**	**–1.7**
Transport equipment	2.5	2.7	0.2	0.1	0.2	0.0
ICT equipment	0.5	0.6	0.1	0.2	0.2	–0.2
Other machinery and equipment	6.5	4.6	–1.9	–0.3	–0.1	–1.4
Cultivated biological resources	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**
Intellectual property products	**4.1**	**7.9**	**3.7**	**1.5**	**0.7**	**1.5**
Research and development	2.2	2.9	0.7	0.6	–0.1	0.3
Computer software and databases	1.9	4.7	2.8	0.8	0.8	1.2
Entertainment literary or artistic originals	0.1	0.3	0.2	0.1	0.0	0.1

Source: INSEE, national accounts base 2010

However, with regard to investment in machinery and equipment, and even with the inclusion of related services (studies and installation, etc.), it remains clear that the level of relative spending has not returned to its pre-crisis level. Finally, the drop in construction since 1980 is mainly the result of lower relative investment in civil engineering.

The rise in the rate of investment in R&D originates mainly from the greater research efforts in industry, whereas research in software reflects the generalisation of information technology in the economy

The rise in the share of corporate investment in the overall value added of enterprises may either be due to an increase in the investment rate of certain branches, or to branches of activity with an already high investment rate making a greater contribution to value added.

The investment rate of NFEs (excluding real estate activities) increased by 2.1 points between 1980 and 2015. The significant rise in the investment rates of certain branches of activity has made a much greater contribution to this rise than any structural effect (*Table 3*).

There has been a particularly strong rise in the investment rate in the manufacture of machinery and equipment (+18 points between 1980 and 2015), of transport equipment (+13 points) and of "other industries" (+6 points; *Table 3*). Given the size of this last category, it makes the greatest contribution of all industrial branches to the overall increase (+0.7 points). In these three goods-manufacturing branches, the increase in the investment rate originates primarily from a significant rise in the R&D investment effort. Despite the reduction in the relative contribution of these branches to value added, the vigour of their spending on research and development accounts for most of the overall increase.

In services, the investment rate has also risen significantly in information and communication (+17 points since 1980), contributing +1.3 points to the overall increase. In this branch, the relative investment effort has risen strongly in publishing, audio-visual and broadcasting activities, as well as in telecommunications, information technology and information service activities. Investment by these branches has been very dynamic since 2000, especially investment in software, which alone has contributed to most of the rise in the investment rate of these branches.

All in all since 1980, the rise in the corporate investment rate has originated mainly from the intensification of corporate R&D efforts and from the growing computerisation of production technologies, in the IT branch itself and in all market branches as a whole. This computerisation process remains dynamic, indicating that production technologies are in a state of transition. ■

Table 3 - Investment rate of NFEs by branch (1980-2015)

	Investment rate			Contributions of the branches to the investment rate variation					
				1980-2015			1980-1990	1990-2000	2000-2015
	1980	2015	1980-2015	Contribution	Rate variation effect	Structural effect	Contribution		
Total	**16.4**	**18.5**	**2.1**	**2.1**	**2.1**	**0.0**	**1.2**	**0.2**	**0.7**
Agriculture	**30.6**	**36.4**	**5.8**	**–0.3**	**0.2**	**–0.5**	**–0.3**	**0.1**	**0.0**
Industry	**21.8**	**28.3**	**6.5**	**1.0**	**1.6**	**–0.6**	**0.9**	**0.0**	**0.2**
Energy, water, waste	45.5	42.9	–2.7	–0.2	–0.1	0.0	–0.1	–0.2	0.2
Agri-food industry	15.0	12.2	–2.8	–0.1	–0.1	0.1	0.0	–0.1	0.0
Coking and petroleum refining	15.9	52.7	36.7	0.1	0.1	–0.1	0.0	0.0	0.0
Capital goods industries	26.2	43.6	17.5	0.2	0.7	–0.4	0.4	0.2	–0.4
Transport equipment	33.9	47.0	13.1	0.3	0.3	0.0	0.3	0.1	–0.1
Other industrial branches	14.9	20.5	5.6	0.7	0.7	0.0	0.3	0.0	0.4
Construction	**9.1**	**7.1**	**–1.9**	**0.0**	**–0.2**	**0.2**	**0.2**	**0.1**	**–0.3**
Trade services except real estate and financial activities	**12.8**	**15.9**	**3.2**	**1.3**	**1.6**	**–0.3**	**0.5**	**0.0**	**0.8**
Trade	7.2	9.0	1.8	0.4	0.3	0.1	0.1	0.0	0.3
Transport	22.0	24.3	2.3	0.2	0.2	0.1	0.1	0.1	0.1
Accommodation and food	14.4	10.4	–4.0	–0.2	–0.1	–0.1	–0.1	–0.1	0.0
Information-communication	15.6	32.4	16.8	1.3	1.1	0.2	0.3	0.3	0.7
Services to businesses	14.4	16.8	2.3	0.2	0.4	–0.1	0.3	0.0	0.0
Administrative services	11.6	6.9	–4.7	–0.6	–0.2	–0.3	–0.1	–0.1	–0.3
Services to households	11.1	13.4	2.2	0.0	0.0	0.0	0.0	–0.1	0.1

Scope: non-financial enterprises, branches except real estate activities
Note: each branch's contribution to the change in the investment rate of NFEs breaks down into a variation effect for the branch's rate, and a structural effect associated with the change in the branch's relative importance in value added. These contributions are calculated herein according to the method proposed by J.-P. Berthier (2002).
Source: INSEE, national accounts base 2010

Bibliography

Berthier J.-P. (2002), "Réflexions sur les différentes notions de volume dans les comptes nationaux", *Document de travail* n° 8, INSEE.

Lavergne A. and **Méot T.** (2015), "Thirty-five years of information and communication services - the software boom", *Insee Première* n° 1575.

Concept

The measurement of investment has been gradually extended to new types of expenditure

Investment, or gross fixed capital formation, refers to acquisitions minus the transfers of fixed, tangible or intangible assets derived from production processes and used repeatedly or continuously in other production processes for at least one year.

Originally, the national accounts restricted gross fixed capital formation to tangible investments and it excluded services. Expenditure on software was added to investment as of the System of National Accounts in 1993 (1993 SNA), followed by expenditure on research and development and on database acquisition as of the 2008 SNA. Expenditure on software, which has been very dynamic since the start of the 1980s, is divided into "data processing and Internet portals", "standard software" and "application software". Application software is also included in investment when it is developed in-house. In this case, it corresponds to production for own final use, and currently accounts for approximately one third of investment in software (Lavergne and Méot, 2015).

The National Accounts measure investments according to the type of product and type of asset. The "product" relates to the business sector that produces the product purchased for the investment. The "asset" refers to the type of resource enhanced by the investment. For example, when an enterprise hires an architect for the construction of new premises, it is investing in a product - an "architectural service", as well as in an asset - a "non-residential building". The proportion of investments according to types of assets is not calculated for non-financial enterprises because this scope includes sole proprietors whose property is hard to dissociate from their property owned as households. However, this proportion is available exclusively in the scope of Non Financial Corporations (NFCs), in which the overall change in the investment rate is similar to that in the scope of NFEs (+1.3 points between 1980 and 2016). ■

International developments

Oil and raw materials

OPEC limits its supply

In Q1 2017, the price of Brent hovered around $55 on average, up 6.8% on Q4 2016, due to the entry into force of the agreement between the OPEC countries to cut back their production. Supply was thus reduced significantly, due to the sharp decrease in the output of the countries in the cartel, while demand stagnated. Overall, the physical market was in deficit.

In Q2, production by the OPEC countries should barely increase, while American supply should increase again and demand is likely to return to its upwards trend. The physical market should remain in deficit, while stocks should fall, although remaining at high levels.

Through to the end of 2017, the conventional assumption is that the oil price should level out at around $53, slightly below its level in Q1 2017. The upward pressure of the deficit on the physical market is likely to be contained by stock levels that remain very high. However, the oil price will depend on the one hand on the ability of the OPEC countries to continue complying with the terms of the production reduction agreement, which was renewed at the end of May, and on the speed of the upturn in unconventional production in the United States, on the other.

Commodity prices in Euros again increased significantly in Q1 2017. Prices of industrial commodities soared, in particular those of iron. They fell back again in April, however, erasing the greater part of the rise posted over the previous six months.

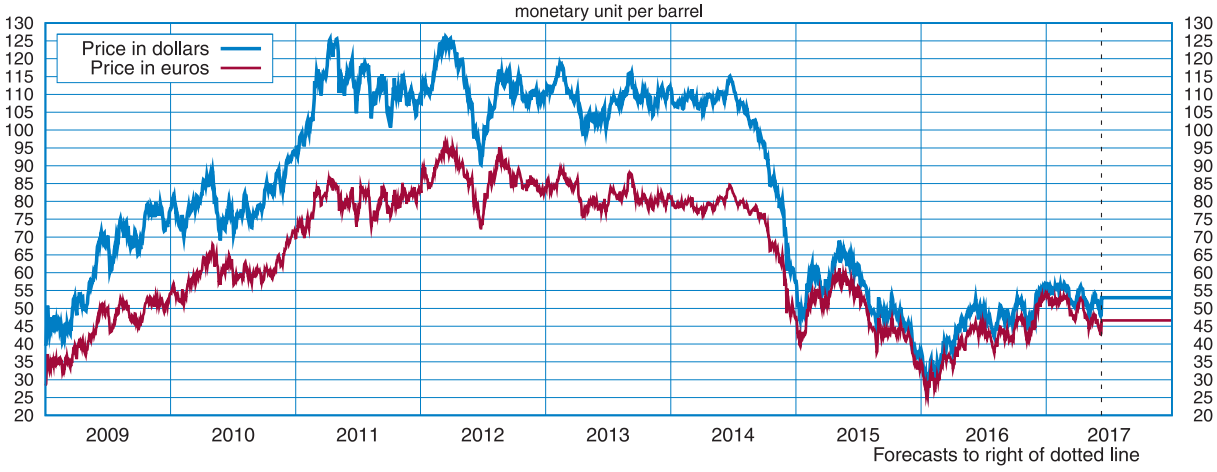
In Q1 2017, the average price of Brent increased

In Q1 2017, with the entry into force of the agreement to reduce the production of the OPEC countries, the price per barrel of Brent stood at $55 on average, up 6.8% on Q4 2016 ($51) and 54% higher than its average level in Q1 2016 ($35). It has fallen back slightly since then and should fluctuate around $53 per barrel through to the end of the year (*Graph 1*).

Supply set to increase slightly through to the end of 2017, but without offsetting the fall in Q1

In Q1 2017, supply fell back sharply (–1.2 million barrels per day or Mbpd), as the OPEC countries complied with the agreement on the whole (*Graph 2*). Saudi Arabia cut its output by 0.6 Mbpd, which was more than required by the agreement. Iraq reduced its production by 0.2 Mbpd. Russia, which is also bound by the agreement with OPEC, cut back by 0.1 Mbpd. Iran is exempted from making a reduction and stabilised its production. In Nigeria, which is also exempted from making a reduction, scheduled maintenance on the Bonga offshore platform cut production by 0.1 Mbpd over the quarter. However, Libyan production continued to grow slightly (+0.1 Mbpd). Through to the end of 2017, Saudi production should increase slightly to a level in line with its commitments. Iraqi and Iranian outputs are likely to level out on average at their

1 - Price of Brent in euros and in dollars



Source: Macrobond

Q1 levels. All in all, the production of OPEC and Russia should barely increase through to the end of 2017.

In the United States, production is set to carry on increasing in Q2 2017, driven mainly by conventional sources. In H2, the resumption of unconventional production should also boost US supply. All in all, after a sharp fall in Q1 2017, world production should increase slightly through to the end of 2017.

Demand to return to its trend growth rate

In Q1 2017, world demand stagnated. The non-OECD countries, including China, increased their demand, while US demand fell back under the effect of the mild winter and lower demand for vehicle fuel. As global supply fell at the same time, the physical market showed a deficit.

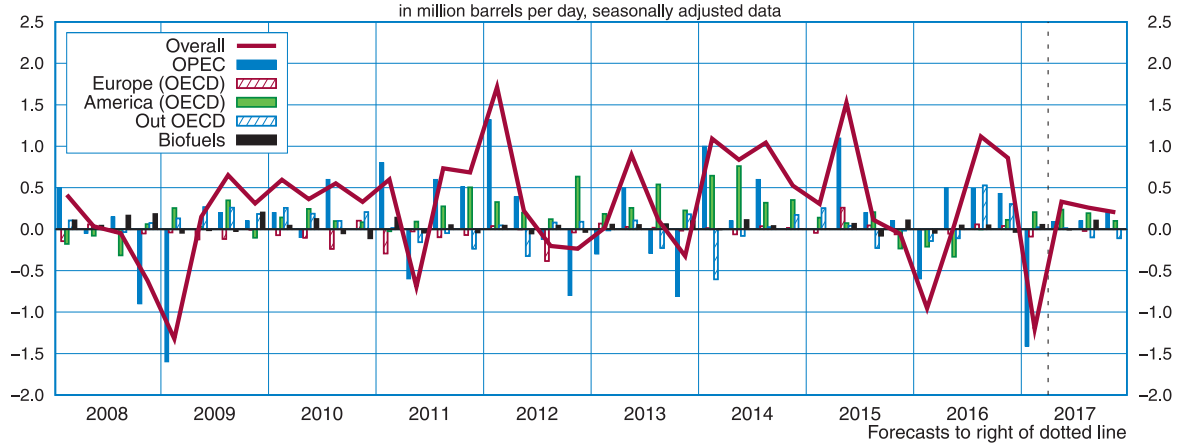
Through to the end of 2017, the demand of the emerging economies should remain buoyant and US demand rebound. Global demand should increase at a pace close to its trend. The progression in supply should just be sufficient to meet the rise in demand, with the result that the deficit that appeared in Q1 should remain almost unchanged through to the end of the year (*Graph 3*).

Despite a deficit on the physical market, the high level of stocks should contain price rises

At 516.5 million barrels in May 2017, crude stocks in the United States are at a level well above their average between 2011 and 2014 (*Graph 4*). The upwards pressure on prices driven by the deficit on the physical market should therefore be contained by the very high level of commercial reserves which can absorb that deficit.

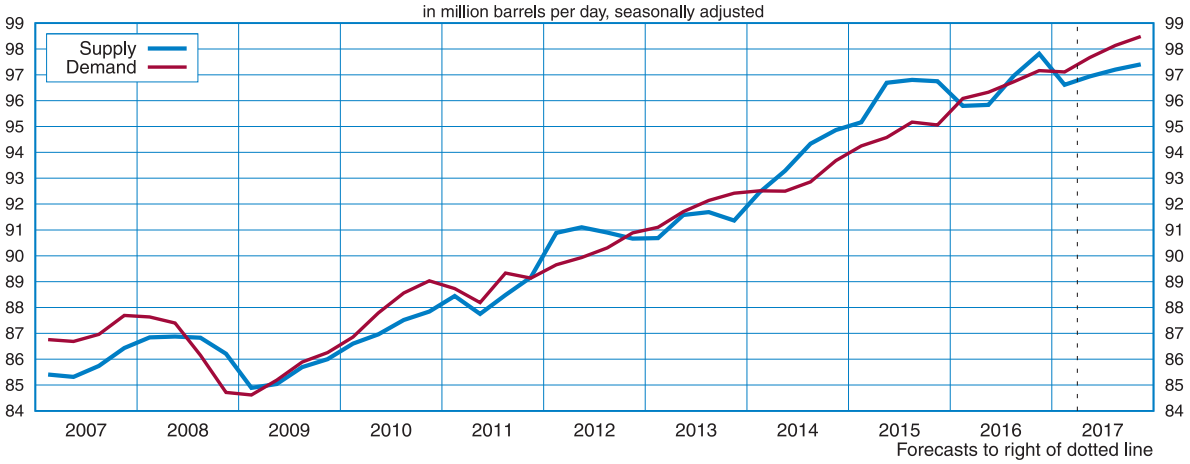
There are some uncertainties surrounding the supply scenario. First of all, the scenario is based

2 - Principal contributing factors to the variation in global oil supply



Sources: IEA, INSEE

3 - World oil market



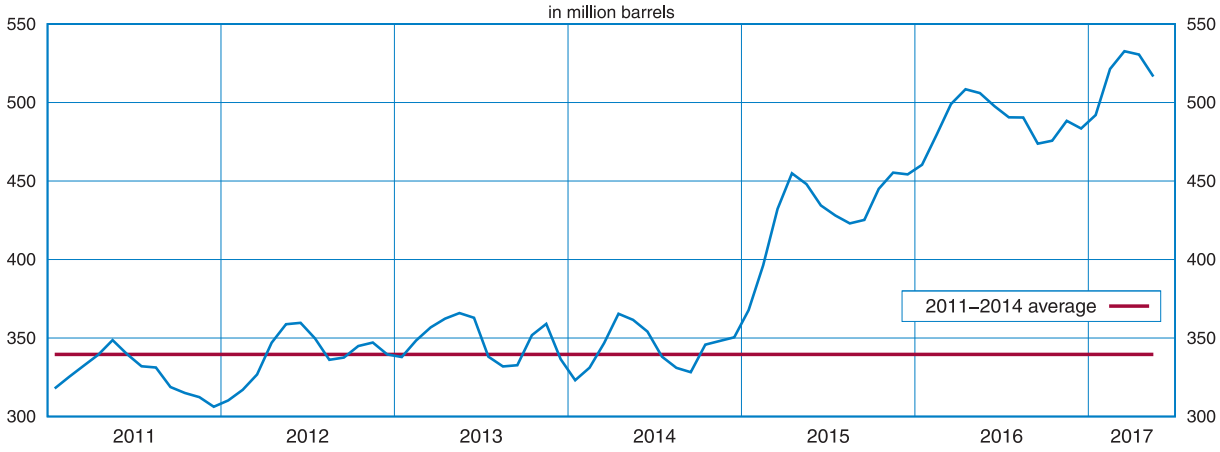
Sources: IEA, INSEE

on continuing compliance with the production reduction agreement of the OPEC countries, which was renewed at the end of May. If the agreement were to be less well respected than in Q1, the deficit on the physical market is likely to narrow, thus exerting downwards pressure on prices. Conversely, if the cartel were to further accentuate the reduction in its output, as Saudi Arabia did in Q1, the physical market deficit should deepen, thereby favouring a rise in prices. In addition to this, unconventional production in the United States could recover more quickly than expected and weigh down on prices.

Commodity prices continued to increase in Q1 2017 but fell back again in April

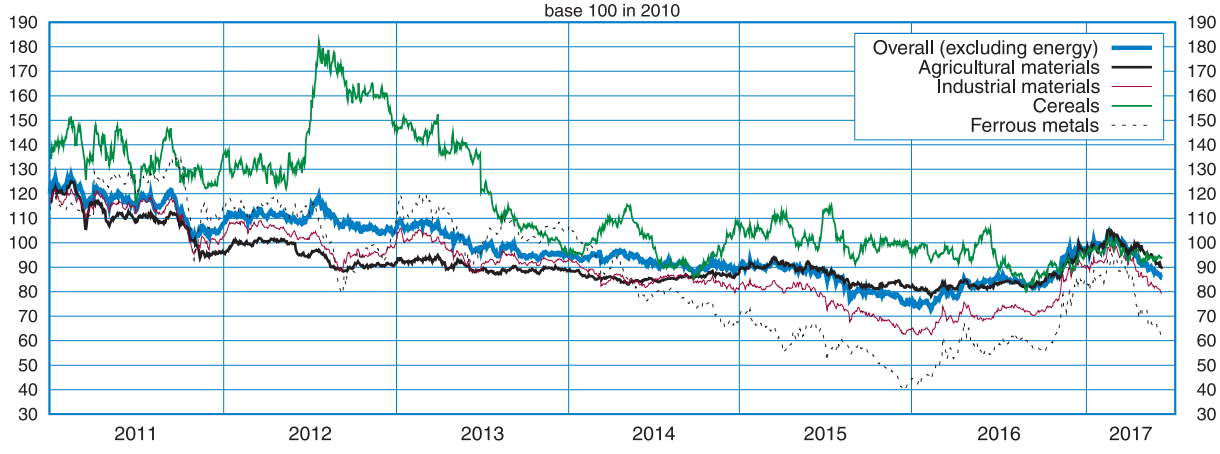
In Q1 2017, prices of commodities as a whole expressed in Euros increased sharply (+8.8%), returning to a level close to that in Q3 2013 (*Graph 5*). Cereal prices continued to climb (+6.9%). Industrial commodity prices increased sharply again (+13.5%), notably iron prices (+23.4%), driven by sustained Chinese demand and by the recovery in steel production. Commodity prices fell significantly in April, however, wiping out most of the rise posted over the previous six months. ■

4 - U.S. crude oil inventories



Source: US Department of Energy

5 - Prices of non-energy commodities in euros



Source: HWWI

Financial markets

The CAC 40 at its highest since 2008

Monetary policies continue to diverge on either side of the Atlantic. On the one side, the US Federal Reserve raised its rates once again in March 2017 and is likely to increase them two more times in 2017, comforted by a core inflation rate that is close to its 2% target and the low level of unemployment. On the other side, core inflation remains moderate in the Eurozone and the ECB is pursuing its accommodating monetary policy, having decided to extend its purchase programme through to December 2017.

The credit market continues to improve in the Eurozone, although lending is increasing much less quickly than the monetary base. Situations continue to vary between the European countries: outstanding corporate loans are progressing in France, Germany and, for the first time since 2009, in Spain, while they are still decreasing in Italy. For loans to households, amounts outstanding are significantly more dynamic in France than among its partners, despite interest loans being at equivalent levels.

Since the results of the presidential election, French sovereign yields have fallen, narrowing the gap with German yields to its 2015 level, while the CAC 40 has soared to its highest since 2008.

In the wake of the election of Donald Trump and the rise in the Fed's base rates, the euro fell against the dollar at the end of 2016, but has risen again since, returning to its level of summer 2015. For the forecast, the euro exchange rates have been set to $1.12, £0.87 and 124 yen.

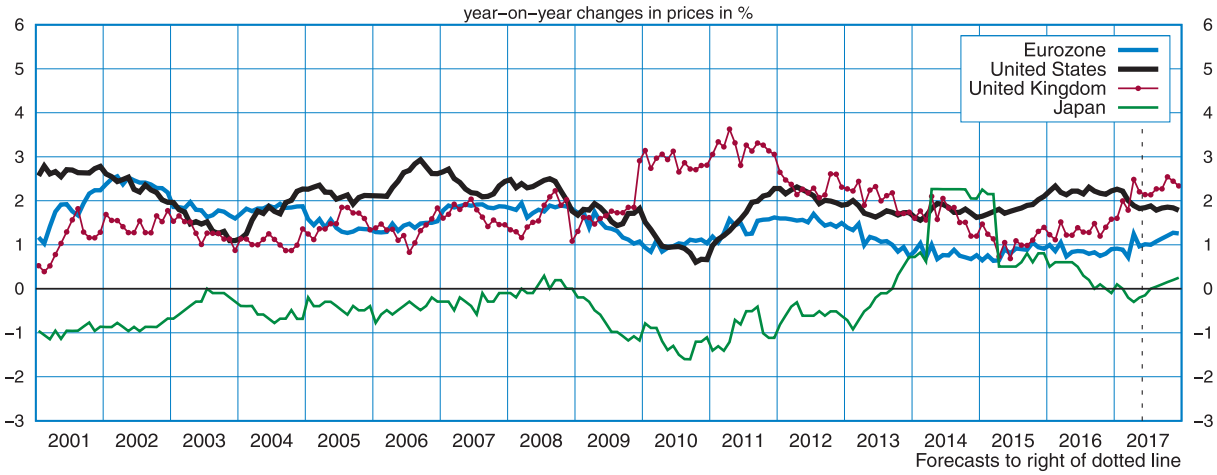
The Federal Reserve raised its base rate again in March and is set for two further hikes in 2017

In March 2017, the American central bank (Fed) raised its base rates again by one-quarter of a point, from 0.75% to 1%, after the rise in December 2016. The Fed's objectives have been achieved: the unemployment rate is levelling out at a low level (4.3%) and core inflation has remained close to the 2% threshold since January 2016 (*Graph 1*). As a result, the Fed should continue to normalise its monetary policy through two more base rate hikes before the end of 2017.

The ECB maintains its accommodating monetary policy

The European Central Bank (ECB), meanwhile, announced in December 2016 that it is to extend its accommodating policy through to December 2017. It is pursuing its sovereign security purchases, although reducing their volume from €80 billion to €60 billion a month since April 2017. In the Eurozone, core inflation remains moderate, well below the 2% mark. Base rates therefore remain at a historically low level: the deposit facility rate has been at –0.40% since March 2016.

1 - Inflation in the world



Sources: Eurostat, BLS, JSB, ONS

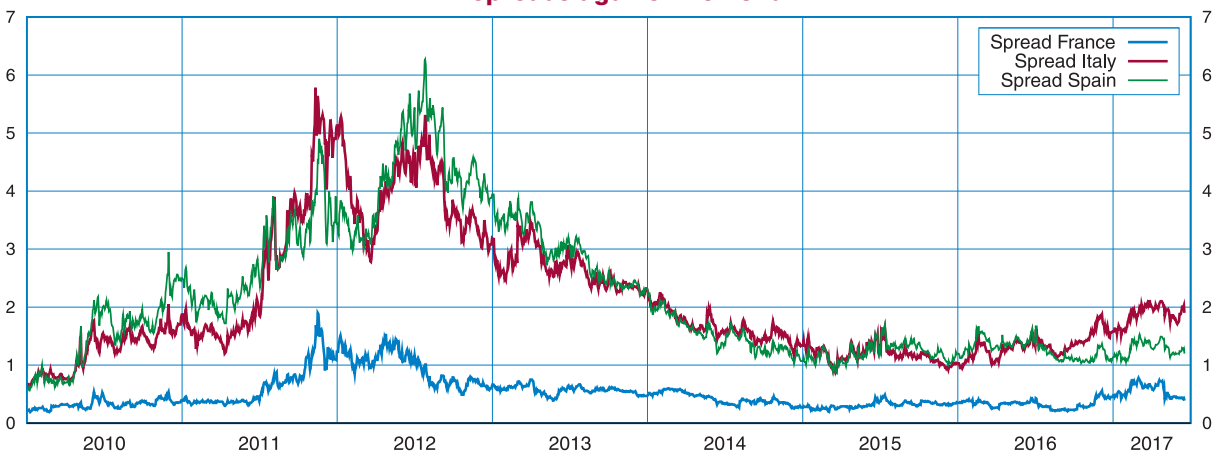
After the French presidential election, the French-German spread has returned to its 2015 level

Sovereign yields of the advanced countries rose in the wake of the election of Donald Trump and the Fed base rate hike. At the beginning of June, the French 10-year yield stood at around 0.6%, after reaching a low of 0.2% in July 2016 and exceeding the 1.0% mark in Q1 2017. The spread between the French and German rates increased to as much as 74 basis points in mid-April 2017, but has narrowed again since the first round of the French presidential election, returning to its 2015 level (*Graph 2*). The Italian-German spread remains high (at around 180 basis points), notably when compared to the Spanish-German spread, due to the difficulties of the Italian banking system, political uncertainties in the country and considerable outflows of private capital from Italy (*Focus*). Yield spreads within the Eurozone remain much smaller than between 2011 and 2013, however.

Lending to households is more dynamic in France than in the rest of the Eurozone

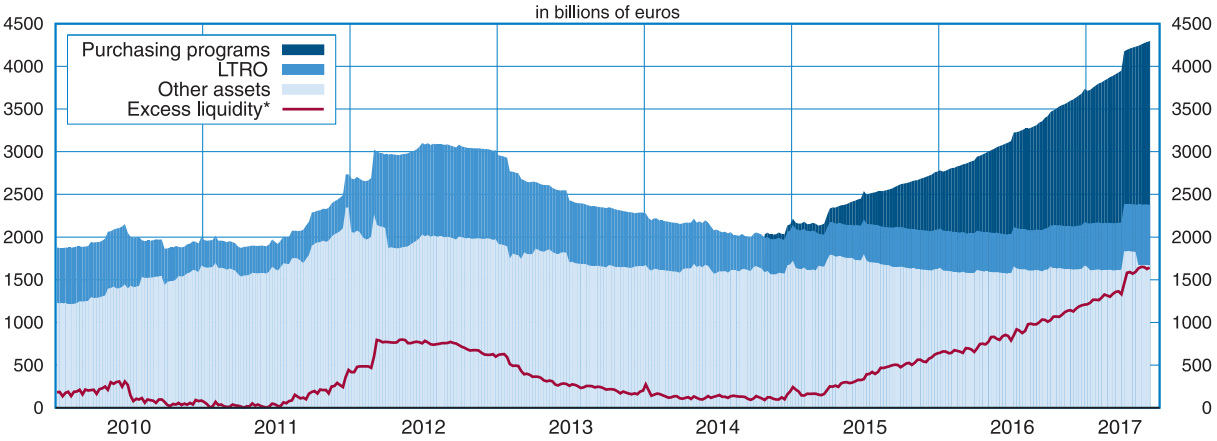
Outstanding loans to non-financial corporations in the Eurozone have been increasing since January 2016, continuing the improvement that started in early 2014. Year on year, outstanding loans increased by 1.6% in April 2017. This upturn in lending remains modest, however, in relation to the sharp growth in the monetary base carried out by the ECB. The surplus liquidities that the banks leave in reserve with the ECB therefore continue to swell (*Graph 3*). Outstanding corporate loans are dynamic in France (+5.2% year on year) and in Germany (+4.3%). In Spain, they are progressing for the first time since 2009. Outstanding corporate loans continue to fall in Italy, however. Interest rates on new loans have converged between the main Eurozone countries (at around 1.5%), except in Spain where they remain higher (2.1%).

2 - Spreads against the Bund



Source : Macrobond

3 - ECB balance sheet and excess liquidity



*Excess liquidity: the banks' deposits with the Central Bank in excess of the minimum reserves.
Source: European Central Bank, INSEE calculations

Regarding lending to households, France stands out from its main European partners by its much greater dynamism: year-on-year growth in amounts outstanding reached 5.5% in April 2017, against 2.6% for the Eurozone as a whole (*Graph 4*). Yet rates on new loans to households are comparable in the Eurozone.

The cycle of easing in the credit market would appear to be drawing to a close in Europe in the wake of the upturn in sovereign yields, according to the latest credit surveys conducted by the ECB among private banks.

Stock market indices rising on the whole since the beginning of the year

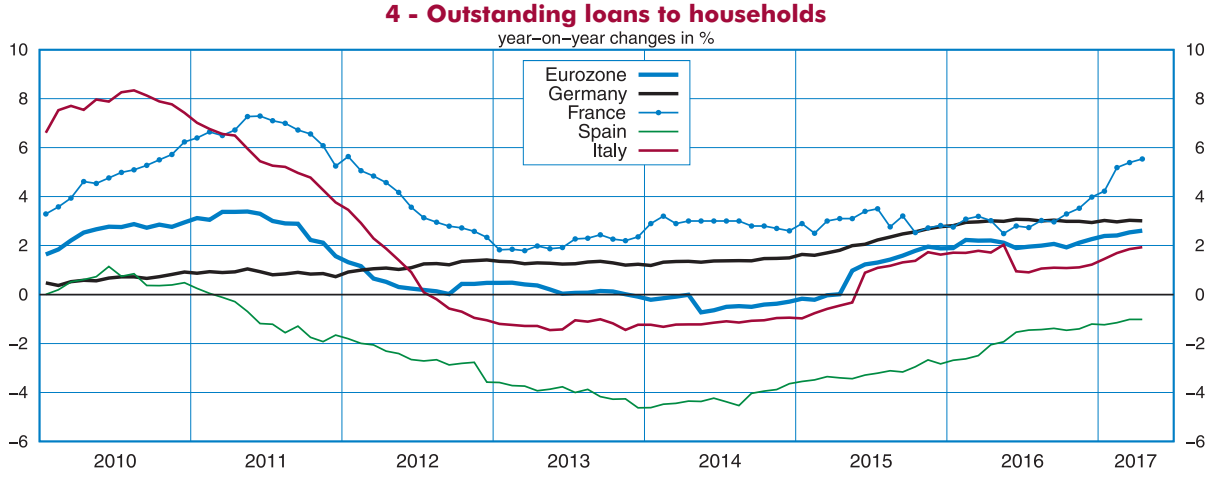
Stock market indices have been rising on the whole since the beginning of the year (*Graph 5*): the CAC 40 in particular surged upwards after the first round of the French presidential election, to stand at its highest since 2008 in early May 2017.

Volatility of the European indices increased somewhat before the French elections, especially for the CAC, but has fallen back again since. It remains low in light of past shocks.

The dollar has fallen against the Euro since the beginning of 2017

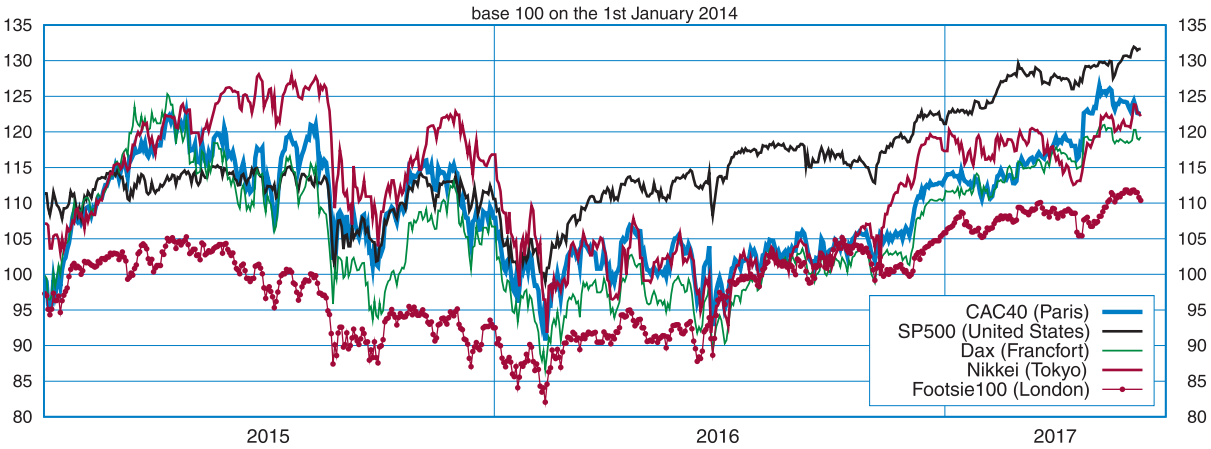
The election of Donald Trump and the Fed base rate hike contributed to a marked rise in the dollar against the euro at the end of 2016. Since the beginning of 2017, it has fallen again. In May 2017, it was trading at $1.12 to the euro, as in summer 2016. The exchange rate of sterling has levelled out at around £0.87 to the euro, after a marked fall before and after the Brexit referendum. The yen has been fluctuating since December 2016 at around 124 yen to the euro. All in all, the French effective exchange rate fell slightly at the end of 2016 and in Q1 2017, due to the inflation gap between France and its main partners, among

4 - Outstanding loans to households



Sources : European Central Bank, Banque de France

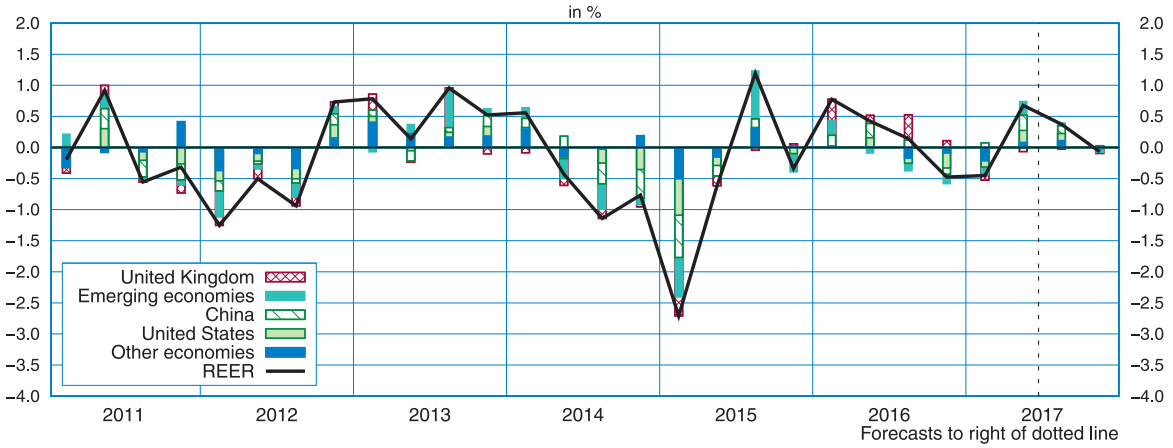
5 - Stock market indices of the advanced countries



Source: Macrobond

other factors (*Graph 6*). By convention, the exchange rate of the euro against the various currencies has been set to its last known level in early June ($1.12, £0.87 and 124 yen for one euro) through to the end of 2017. There is uncertainty surrounding the euro-dollar exchange rate, however, which will depend on the pace at which US monetary policy is tightened and on the scale of the fiscal stimulus that is finally implemented. ■

6 - Quarterly change in real effective exchange rate (REER) of France and its contributing components



Source: Macrobond, INSEE calculations

Why have Eurosystem imbalances increased again since spring 2015?

The "Target 2" cross-border payment system (Trans-European Automated Real-time Gross settlement Express Transfer system) is a payment system that enables banks in the Eurozone to carry out cross-border transfers of funds in real time. The system records and manages cross-border transfers within the Eurozone. For example, when a Spanish resident makes a purchase from a German seller, his Spanish commercial bank asks the Spanish central bank to record a transfer to the Bundesbank, which then credits the account of the German seller with his commercial bank. This conversion of "Spanish" Euros into "German" Euros is recorded in the "balance" in the system, with Spain as the debtor and Germany as the creditor. The balances per country, or "Target 2 balances" thus track the net liquidity positions of the national central banks with the Eurosystem payment system.

"Target 2" imbalances have been growing again since Q2 2015

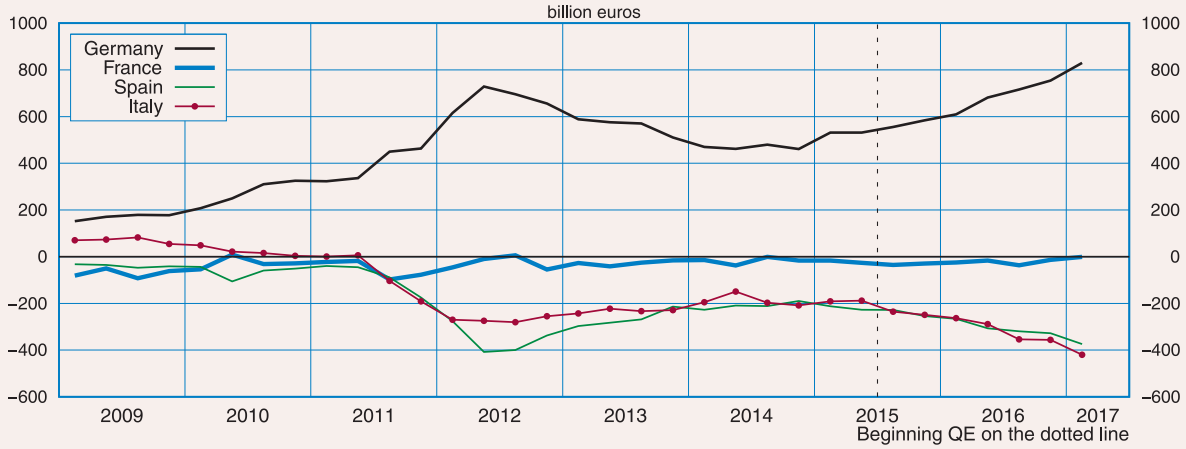
Prior to the 2008-2009 crisis, the Target 2 balances were in equilibrium, as international flows due to imbalances in current account balances were globally offset by financial flows, because, roughly speaking, the German commercial banks were lending to the banks in the southern countries of the Union. In the sovereign debt crisis, and in particular from mid-2011 to mid-2012, the imbalances grew (*Graph 1*): Germany showed an increasingly large surplus, while Spain and Italy went into deficit, a sign of the difficulties their financial institutions were having obtaining refinancing from their counterparts in the sounder countries in the Eurozone. These gaps then gradually closed.

Between Q2 2015 and Q4 2016, however, the imbalances between the Eurosystem central banks have been widening again, with the German balance even reaching its historical highest level in Q1 2017, and the Spanish and Italian balances showing a symmetrical deterioration.

The growing imbalances coincide with the BCE's Quantitative Easing

The return of these imbalances coincided with the start of the Quantitative Easing (QE) conducted by the European Central Bank (ECB), which is to say implementation of the programme of securities purchases by the Eurosystem, and more particularly purchases of sovereign securities, at a pace of €80 billion per month (reduced to €60 billion a month since April 2017). According to the ECB, this deterioration in the Italian and Spanish balances is a direct technical consequence of this purchase programme and the mechanism is as follows: the Italian and Spanish national central banks buy mainly from non-resident holders, who keep the majority of their assets in their German branches, thereby causing a "mechanical" deterioration of their target 2 balances to the benefit of German surpluses. In fact, between april 2015 and december 2016, the deterioration in the Target 2 balances of Italy (by €165.Bn) and Spain (by €116 Bn) corresponds more or less to the purchases of Italian (€202 Bn) and Spanish (€145 Bn) sovereign securities by the Eurosystem over that period.

1 - Target 2 balances



Source: European Central Bank

Residents have sold more sovereign securities to the Eurosystem than non-residents

However, if this had been the predominant mechanism, holdings of government securities by non-residents would have fallen sharply in favour of the resident national central banks (Dor, 2016), and according to the balance of payments data, it is mainly residents who have sold government securities to the Eurosystem (*Table 1*). As an illustration of this, Italian government debt increased by €40 Bn from april 2015 to december 2016, while that held by all residents increased by €79 Bn over the same period. As the Bank of Italy purchased €202 Bn in government securities, this means that the debt held by other Italian residents fell by €123 Bn, while that held by non-residents was down by just €39 Bn. In other words, in its government security purchases, the Bank of Italy was substituting for residents more than for non-residents. This situation is not specific to Italy and also applies to the other major Eurozone countries.

Since spring 2015, Italy has seen private capital outflows of €267 Bn

The balances of payments serve to pinpoint the causes of the deterioration in the Italian Target 2 balance. Between april 2015 and december 2016, Italy posted a current account surplus of €102 Bn, corresponding to the country's financing capacity, notably due to its balance of trade. As the Target 2 balance deteriorated by €165 Bn over the same period, that means that €267 Bn in private capital left Italy (*Table 2*)[1]. In comparison, only €39 Bn can be explained by the direct effect of ECB purchases via purchases of sovereign debt from non-residents.

The situation is similar, if less pronounced, in Spain where a current account surplus over the period of the study (+€58 Bn) coincided with a deterioration of €116 Bn in the Target 2 balance. A calculation of the balance shows that €174 Bn in private capital left Spain. As no non-residents sold any Spanish government debt securities, it is residents who would appear to have used the liquidities from the BCE purchases to buy securities abroad.

France is in the same position as that of the Member States prior to the crisis: its Target 2 balance is almost stable and at equilibrium, as its current account deficit continues to be financed by inflows of private capital. Conversely, the German current account balance shows a large surplus (+€436 Bn), but German residents are only using a part of that windfall to invest abroad (€214 Bn), hence the rise in the German Target 2 balance (up by €223 Bn between april 2015 and december 2016).

1. The Target 2 balance is in the balance of payments financial account and represents the major part of the flows of non-private capital. Thus, following the works of C. De Lucia (2012; 2015), the financial account balance for flows of private capital only is obtained by deducting the Target 2 balance from the balance of payments financial account.

Table 1 - Variation in sovereign debt by type of holder, between mid-2015 and summer 2016

	Non-residents (1)	Residents (2)	Total (3) = (1) + (2)	QE purchases of government securities by the central bank (4)	Residents excluding the central bank (5) = (2) – (4)
Italy	–39	79	40	202	–123
Spain	31	48	78	145	–97
Germany	–209	–29	–239	293	–322
France	–50	108	58	232	–124

Sources: national central banks ((1), (2), (3)), European Central Bank (4), INSEE calculations (5)

Table 2 - Balance of payments financial account, variation in the Target 2 balance and net flows of private capital

Billion euros, variation between mid-2015 and summer 2016

	Balance of payments financial account (1)	Variation in the Target 2 balance (2)	Net flows of private capital (3) = (2) – (1)
Italy	+102	–165	–267
Spain	+58	–116	–174
Germany	+436	+223	–214
France	–21	+3	+24

Sources: balance of payments (1), ECB (2), INSEE calculations (3)

Italian residents have reallocated their portfolios to boost their investments in the rest of the monetary Union, mainly in investment funds

The balance of payments data provides details as to the nature of these private capital outflows[2]. The data from the Bank of Italy indicate, for example, that of the €267 Bn of private capital outflows between april 2015 and december 2016, €133 Bn were used for portfolio purchases abroad, of which €85 Bn in shares in investment funds and €44 Bn in debt securities. At the same time, debt securities held by foreigners in Italy fell back by €125 Bn. In its November 2016 report on financial stability, the Bank of Italy confirmed that residents have considerably reallocated their portfolios to the detriment of Italian securities. Nevertheless, while these movements may seem massive, they concern only portfolio securities: deposits and investments in passbook accounts, which represent one-third of the financial assets of households, have barely fallen at all since mid-2015.

In Spain, the private capital outflows (€174 Bn) are slightly different in nature, being driven first and foremost by considerable portfolio purchases abroad (€81 Bn). They have also been driven by an upturn in foreign direct investments from Spain (€91 Bn), which were only partly offset by foreign direct investments in the other direction (€45 Bn).

Ultimately, the widening imbalances in the Eurosystem since spring 2015 can only partly be explained by the direct effects of QE. There has also been the specific behaviour of Italian and Spanish investors who have reallocated their portfolios to increase their investments abroad. ■

2. The balance of payments financial account tracks all the financial flows between a country and abroad, or more precisely between residents and non-residents. These financial flows include: direct investments, portfolio investments, "other investments" in the form of current loans and borrowings (the category in which the Target 2 balances of the central banks are posted), flows linked to derivatives, and acquisitions or disposals of reserve assets. These flows taken together balance in equilibrium with the current account balance ("errors or omissions" excepted).

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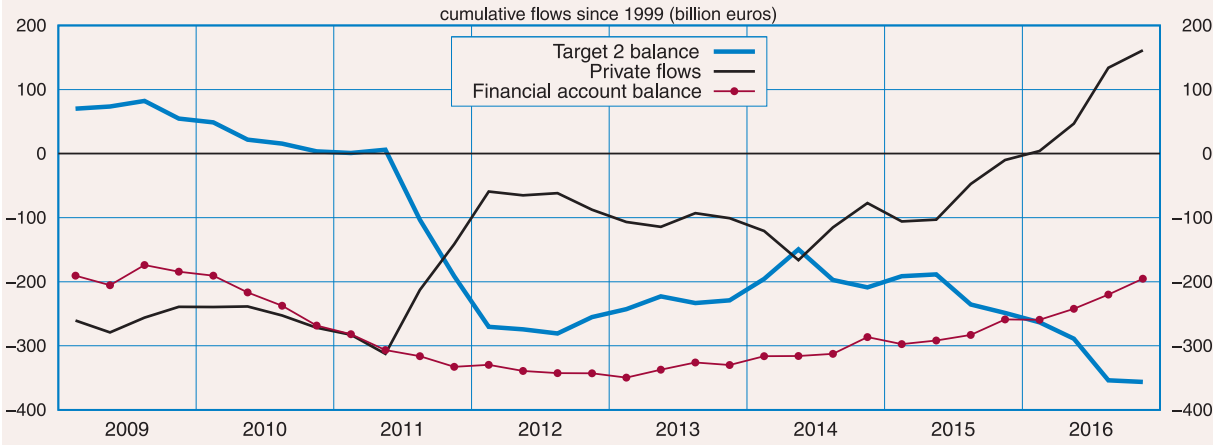
Dor É. (2016), *Explaining the surge of TARGET2 liabilities in Italy: Less simple than the ECB's narrative*, IESEG School of Management, October. ■

2 - Italian capital flows



Sources: ECB, Bank of Italy, INSEE calculations

Eurozone

Growth rises tentatively

In Q1 2017, Eurozone gross domestic product (GDP) increased by 0.6% (after +0.5%). Growth was slightly stronger than expected in Germany (+0.6%), Spain (+0.8%), Italy (+0.4%) and France (+0.4%). Activity should rise almost as strongly throughout the remainder of 2017 (+0.5% per quarter), despite the effects of the upturn in inflation. All in all over the year, Eurozone GDP is expected to rise slightly more than in 2016 (+1.8% after +1.6%). Investment in construction should sustain activity, gathering pace in France and Spain particularly. Private consumption is set to hold firm despite the acceleration in prices at the start of the year, with households slightly reducing their precautionary savings, especially in Spain and Italy thanks to a new drop in unemployment. Foreign trade should no longer hamper growth in the Zone (after –0.2 points in 2016).

The economic situation in the Eurozone continues to improve

In Q1 2017, activity in the Eurozone grew by 0.6% (*Table*). It was buoyant in Germany (+0.6% after +0.4%) and in Spain (+0.8% after +0.7%) while increasing more moderately in France (+0.4% after +0.5%) and Italy (+0.4% after +0.2%). In the spring of 2017, in spite of the ongoing political uncertainties, the business climate remains positive with a significant improvement observed in industry (*Graph 1*). Throughout 2017, the fiscal stimulus is likely to be neutral on the whole for the third consecutive year. Growth should remain steady until the end of the year (+0.5% per quarter), accompanied by a greater number of job creations. As a result, the unemployment rate is expected to drop by 0.2 points per quarter, maintaining the same rate observed since the end of 2015. It should stand at 8.8% by the end of the year, against 9.7% at end 2016 and 10.5% at end 2015.

Consumption is expected to withstand the rise in inflation with more buoyant wages and a drop in precautionary savings

In 2017, private consumption is set to increase at a virtually stable pace, as in H2 2016: +0.4% per quarter, *Graph 2*). Nominal income remains boosted by the rise in employment and buoyant wages, especially in Germany and Spain. However, driven by energy prices, inflation rose sharply in early 2017, to +1.8% over one year in Q1 2017 against +0.7% in late 2016. It should barely weaken through to the end of 2017 (+1.4%; *Graph 3*), particularly as core inflation is expected to rise slightly. Confronted with this rise in prices which is undermining their purchasing power, and reassured by the drop in unemployment, households are expected to save a little less in order to maintain their consumption, especially in Spain and Italy. In this way, on average over the year, household consumption is set to slow down (+1.6% after +2.0%) but far less sharply than household purchasing power (+1.2% after +1.9%).

Gross domestic product and main aggregates of Eurozone economies

quarter-on-quarter and year-on-year changes in %

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Eurozone*	**0.4**	**0.4**	**0.3**	**0.4**	**0.6**	**0.3**	**0.4**	**0.5**	**0.6**	**0.5**	**0.5**	**0.5**	**1.5**	**1.6**	**1.8**
Germany	*0.2*	*0.5*	*0.2*	*0.4*	*0.7*	*0.5*	*0.2*	*0.4*	*0.6*	*0.5*	*0.5*	*0.5*	*1.5*	*1.8*	*1.9*
France	*0.4*	*0.0*	*0.4*	*0.2*	*0.6*	*–0.1*	*0.2*	*0.5*	*0.4*	*0.5*	*0.5*	*0.4*	*1.0*	*1.1*	*1.6*
Spain	*1.0*	*0.8*	*0.9*	*0.8*	*0.8*	*0.8*	*0.7*	*0.7*	*0.8*	*0.8*	*0.7*	*0.6*	*3.2*	*3.2*	*3.0*
Italy	*0.3*	*0.4*	*0.1*	*0.2*	*0.4*	*0.1*	*0.3*	*0.3*	*0.4*	*0.3*	*0.3*	*0.3*	*0.7*	*1.0*	*1.3*
Household purchasing power in the Eurozone (year-on-year changes)	–0.3	0.2	0.1	0.2	0.1	–0.1	0.3	0.7	1.8	1.5	1.5	1.4	0.0	0.2	1.6
ILO unemployment rate in the Eurozone	11.2	11.1	10.7	10.5	10.3	10.2	9.9	9.7	9.4	9.2	9.0	8.8	10.9	10.0	9.1

Forecast

* Eurozone excluding Ireland, as this country's accounts present a break in series in Q1 2015

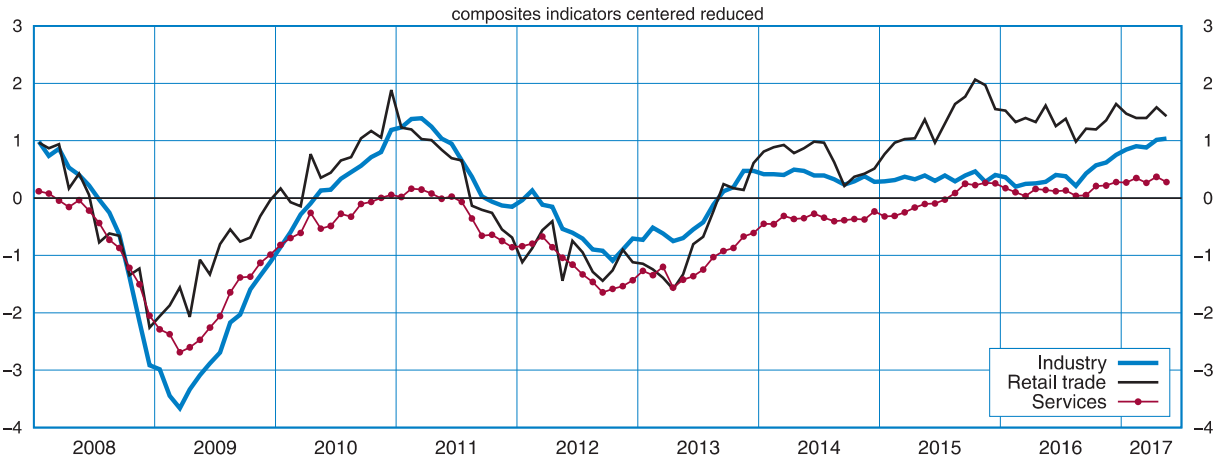
Sources: Eurostat, national statistical institutes, INSEE forecast

Construction investment is likely to bounce back after an expected backlash in Q2

Construction investment rose strongly in Q1 2017, benefiting from the mild weather in February and March. In reaction, it is likely to slow in Q2 (+0.1%), particularly in Germany, before bouncing back in H2 (+0.7% and then +0.8% per quarter). On average over the year, it should gather pace again in 2017 (+2.9% after +1.9%), particularly in France (+1.9% after +0.2%) and Spain (+4.2% after +1.9%).

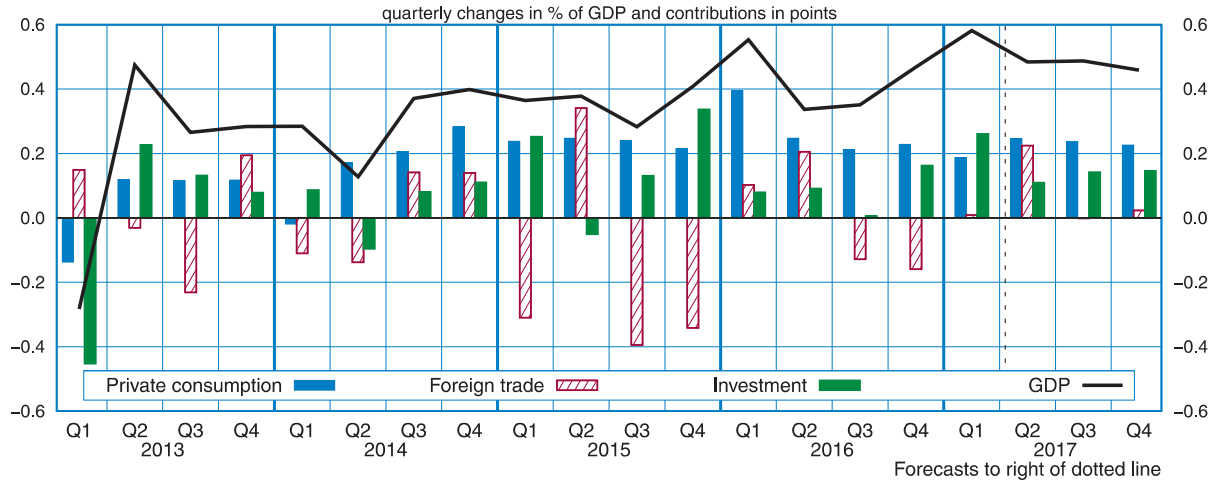
Equipment investment rebounded moderately in Q1 2017 (+0.4% after –0.4%). It should then increase at a brisk pace (+0.8% per quarter), as suggested by the healthy state of order books in industry and buoyed by the still very favourable financing terms.

1 - Business climate in the Eurozone, by sector



Source: European Commission (DG ECFIN)

2 – Gross domestic product and contributions to GDP growth in the Eurozone



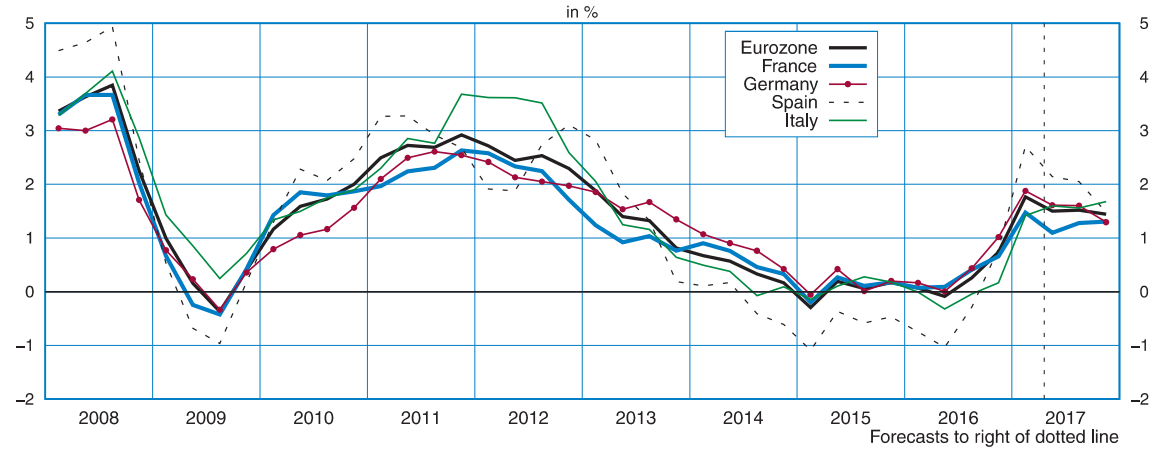
Sources: Eurostat, INSEE calculations

Foreign trade should no longer hamper growth in 2017

In Q1 2017, exports from the Eurozone remained buoyant (+1.2% after +1.4%). Vigorous demand from the USA and the emerging countries should continue to boost sales abroad through to the end of 2017. As imports had risen at almost the same rate as exports in Q1 (+1.3% after +1.9%), foreign trade made a neutral contribution to growth at the start of 2017 and this is expected to continue throughout the year on average (after –0.2 points in 2016).

All in all, growth in the Eurozone should continue to rise tentatively in 2017 (+1.8% after +1.6% in 2016 and +1.4% in 2015), withstanding the rise in inflation (+1.5% as an annual average after +0.2%). It should remain stronger in Spain (+3.0%) than in Germany (+1.9%), France (+1.6%) and Italy (+1.3%). ■

3 - Inflation in the Eurozone



Sources: Eurostat, INSEE forecast

Germany

German consumers remain confident and drive growth

In Germany, activity gathered pace in Q1 2017 (+0.6% after +0.4% in late 2016), buoyed by more dynamic construction investment in particular. Activity should slow very slightly in Q2 (+0.5%). In H2, household purchasing power should remain robust and activity should remain vigorous (+0.5% per quarter), driven once again by domestic demand. On average over the year, growth is expected to remain steady in 2017 (+1.9%, after +1.8% in 2016).

Construction investment boosted growth in Q1

Activity in Germany gathered pace in Q1 2017 (+0.6% after +0.4%). Aided by mild temperatures in February and March, construction investment gained momentum (+2.3% after +0.8%). In reaction, it is expected to slip back in Q2 (–0.5%) and activity is likely to slow a little (+0.5%). It should then increase steadily in H2 (+0.6% per quarter), in line with the sharp rise in building permits issued recently. On average over the year, this investment is expected to remain sustained (+2.6% after +2.5%). As the business climate is very positive in industry, investment in capital goods is likely to pick up in 2017 (+1.9% as an annual average, after +0.9%).

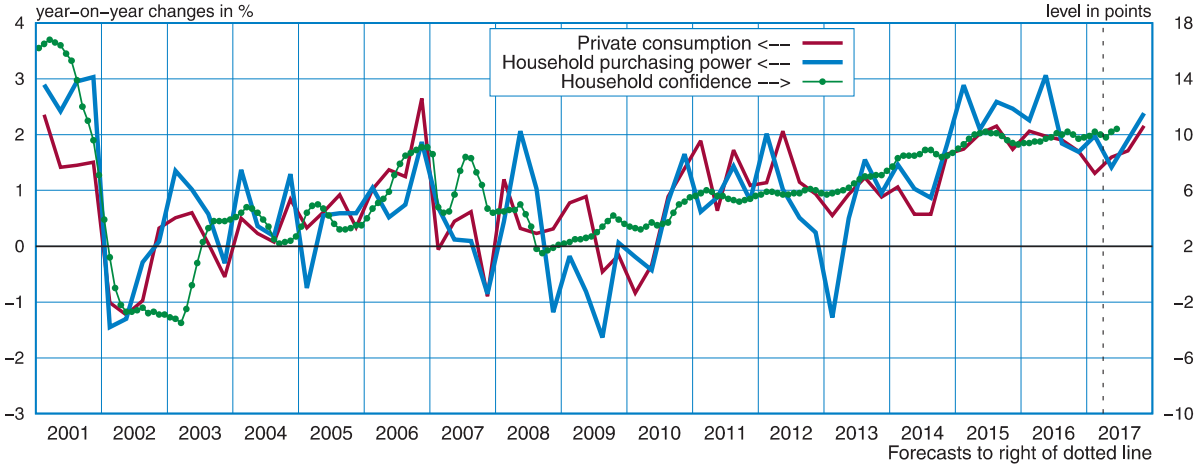
Private consumption should provide solid support for growth

In Q1 2017 German household expenditure rose only very slightly (+0.3% after +0.2%). Employment is set to remain dynamic in 2017 (+1.6% as an annual average, after +1.2%), which should allow the job market integration of refugees. Consequently, the unemployment rate should level out at a very low level in 2017 (around 3.7%). With the rise in the minimum wage on 1st January 2017 and a very low unemployment rate, wages are expected to increase a little faster in 2017 than in 2016 (+2.6% after +2.5%). As a result, German household purchasing power in 2017 should decline less (+1.9% after +2.2%) than elsewhere in Europe. Given the high level of household confidence, household consumption is likely to rise through to the end of the year (+0.6% per quarter, *Graph*), showing resilience on average over the year (+1.7% after +1.9%). Government consumption should continue to rise steadily through to the end of the year (+0.5% per quarter). All in all, thanks to robust domestic demand, GDP is expected to rise by 0.5% per quarter in H2. As an annual average, it is expected to grow by 1.9% in 2017, after +1.8% in 2016.

Foreign trade is set to make a neutral contribution to growth in 2017

In Q1, exports were buoyant once again (+1.3% after +1.7%) whereas imports slowed significantly, taking the contribution of foreign trade to growth up to +0.4 points (after –0.2 points). In Q2, exports are expected to return to a pace more in line with world demand for German products (+0.8%) and foreign trade should again hold back growth until the end of 2017. As an annual average, foreign trade should make a neutral contribution to growth in 2017 (after –0.3 points in 2016). ■

Consumption is set to remain robust, in step with purchasing power



Sources: Destatis, GfK, INSEE forecast

Italy

Reduced household savings act as a cushion

In Q1 2017 Italian activity picked up (+0.4% after +0.3%), driven by private consumption. It should subsequently settle at +0.3% per quarter through to the end of 2017, thanks to buoyant exports and corporate investment. In addition, despite the slowdown in their purchasing power, Italian households should continue to consume in 2017 by reducing their savings. As an annual average, activity is set to accelerate slightly: +1.3% after +1.0%.

Household consumption should hold firm despite the upturn in inflation

In Q1 2017 household consumption picked up (+0.5% after +0.1%) and should subsequently weaken slightly through to the end of the year (+0.2% per quarter on average). Consumer confidence remains high, despite waning considerably since the start of 2016. Due to the upturn in inflation (+1.5% over 12 months in May 2017 against –0.1% in October), household purchasing power should decline in 2017 (+0.5% after +1.5% in 2016). Nevertheless, payroll employment is expected to remain buoyant (+1.4% in 2017), which should be sufficient to trigger a new drop in unemployment, by 0.8 points to 10.9% in late 2017. Consequently, precautionary savings are likely to fall; although household consumption is expected to slow in 2017 (+1.1% as an annual average, after +1.3%) it should do so at a much slower pace than household purchasing power (*Graph*).

Investment should remain buoyant in 2017

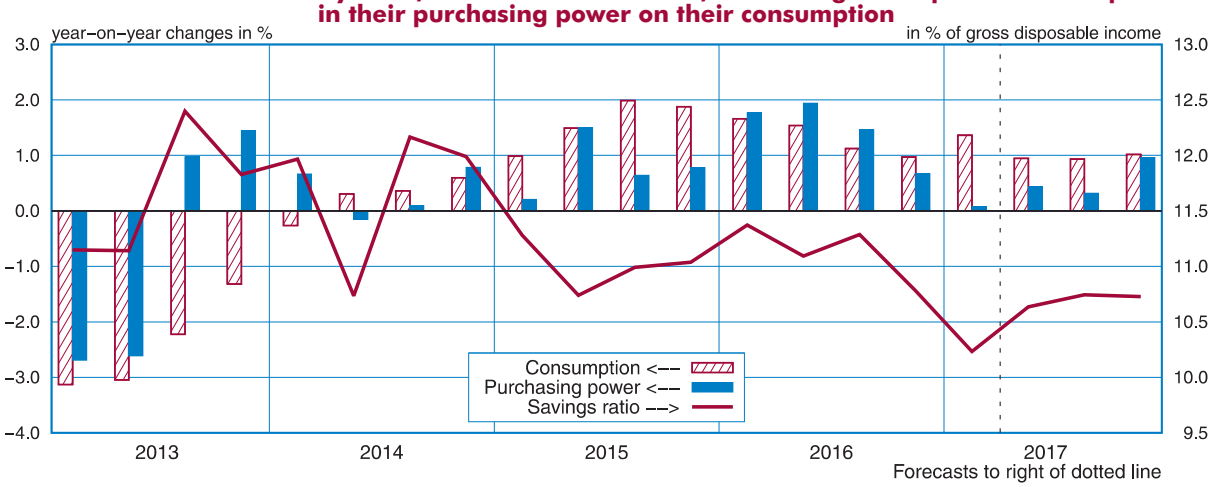
Over 2016 as a whole, construction investment returned to growth (+1.4%) for the first time since 2006. It gathered momentum at the start of 2017 (+0.6%, after +0.4%), and should grow steadily throughout the remainder of the year (+1.8% on average).

In reaction to a sharp rise in H2 2016 (+6.1%), driven by transport equipment purchases in particular, equipment investment fell during the winter (–3.0%). The self-financing ratio is at its highest level and the additional depreciation allowance scheme has been ramped up since January 2017 for investments relating to new technologies. The business climate is at a ten-year high. As a result, investment in capital goods is expected to regain momentum: +0.8% in Q2 2017, followed by +0.7% per quarter in H2. As an annual average, it should rise again but less strongly than in 2016 (+1.9% in 2017 after +7.5%).

Exports are expected to gather pace significantly in 2017

Exports are expected to accelerate significantly in 2017 (+4.4% after +2.6% in 2016), in response to world demand for Italian products. Imports are also set to rise more quickly (+5.6% after +3.1%) so that foreign trade should hold back growth slightly (0.2 points after –0.1 points in 2016). All in all, growth should almost maintain this pace through to the rest of the year, at +0.3% per quarter. On average over 2017, GDP is expected to rise more quickly than in 2016 (+1.3% after +1.0%), once again slightly below the growth rates of the other main Eurozone partners (see *Special Analysis* p. 37).■

In late 2016 and early 2017, households saved less, cushioning the impact of the drop in their purchasing power on their consumption



Sources: Istat, INSEE forecast

Spain

Slowdown postponed

In Spain, activity grew robustly again in Q1 2017 (+0.8% after +0.7%), driven mainly by a rebound in investment in capital goods. Growth should remain just as high in Q2. However, the upturn in inflation should hold back consumption in H2, and with it, activity. On average in 2017, gross domestic product (GDP) should slow, but only slightly (+3.0% after +3.2%).

The business climate remains positive

In Q1 2017, Spanish activity accelerated slightly (+0.8% after +0.7%). In Q2 the business climate remains favourable in both services and industry, and is picking up in construction; growth should therefore remain high (+0.8%). However, the sharp upturn in inflation since the end of 2016 is eating into purchasing power gains, and household consumption is likely to weaken slightly in the second half of the year. As a result, GDP should slow down slightly in H2: +0.7% in Q3 followed by +0.6% in Q4. As an annual average, it should slow only very slightly in 2017: +3.0% after +3.2% in 2016 and in 2015.

Consumption is expected to suffer slightly due to the rise in inflation

Household consumption slowed in Q1 2017 (+0.4% after +0.8%). It is expected to be more dynamic in Q2 (+0.6%) before slowing down slightly, although to a lesser extent than suggested by the slowdown in purchasing power, with gains being whittled away by inflation (*Graph*). Indeed, inflation rose to +2.0% over the year to May, against +0.5% in October 2016, and is not expected to drop below +1.5% by the end of 2017. In addition, employment should decelerate slightly: its previous momentum was partly generated by the tourism sector which is expected to create fewer jobs in 2017, with Spain's attractiveness having already increased significantly in 2016. On average over the year, private consumption is likely to slow (+2.3% after +3.2%).

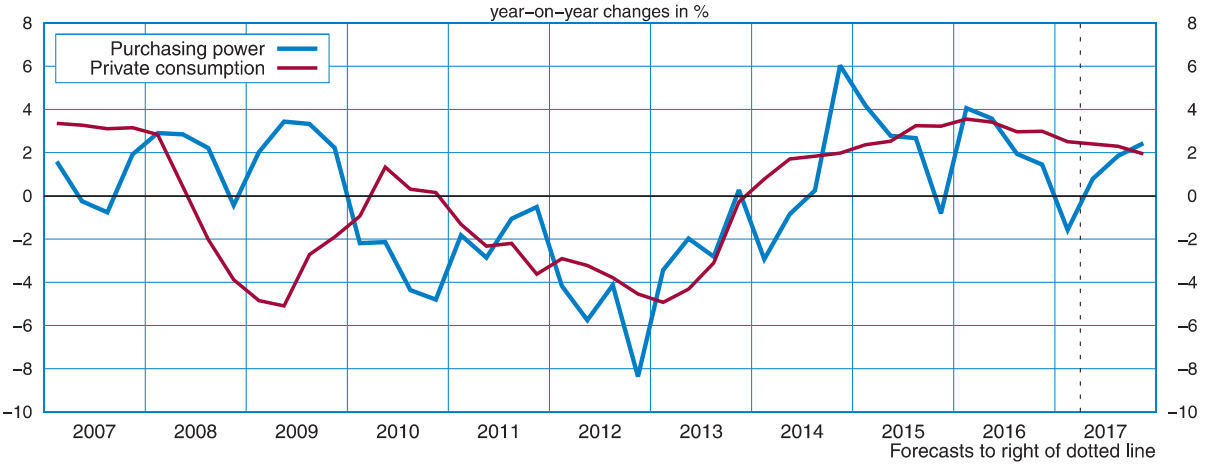
Investment in construction should pick up significantly

Investment in capital goods bounced back strongly in early 2017 (+3.1% after –0.1%) but should subsequently slow down slightly: with the investment rate nearing its 2008 level, the catch-up effect is likely to run out of steam. Moreover, the financial situation of enterprises is expected to deteriorate slightly due to the rises in wages, energy prices and taxation. Conversely, investment in construction should become more vigorous (+4.2% on average over the year after +1.9%), as suggested by the significant recovery in the number of residential building permits, the rise in purchasing intentions and households' intentions to carry out building work, as well as the recent improvement in the business climate in the construction sector.

Foreign trade should continue to foster growth

Thanks to the acceleration in global demand and gains in market shares, and despite buoyant domestic demand, foreign trade should continue to foster growth in 2017, contributing +0.5 points on average over the year, as last year. ■

Household consumption is expected to slow more moderately than household purchasing power



Sources: INE, Eurostat, INSEE forecast

United Kingdom

Consumption finally slows

In Q1 2017, UK activity slowed significantly (+0.2% after +0.7%), as households began to adjust their consumption to their past loss of purchasing power. Growth should remain slow through the rest of the year (+0.3% per quarter) as household consumption remains weak. Companies are also likely to restrict their investment in H2, as they adopt a wait-and-see attitude amid uncertainty as to the terms of the country's exit from the European Union. On an annual average basis, growth should decrease a little (+1.5%, after +1.8%). Year on year, the slowdown should be more pronounced: +1.1% year on year expected at the end of 2017, against +1.9% one year earlier.

Households end up adjusting their consumption to their past fall in purchasing power

In Q1 2017, UK activity slowed significantly (+0.2% after +0.7%) in the wake of consumption (+0.3% after +0.7%; *Graph*). British households had overconsumed in H2 2016, anticipating the upturn in inflation due to the fall in sterling and linked to the Brexit vote at the end of June 2016 (see Focus in *Conjoncture in France*, December 2016, p. 121-123). At the beginning of 2017, they began to adjust their consumption to their purchasing power. After falling to an all-time low at the end of 2016 (3.3%), their savings ratio would even appear to have started rising in early 2017.

Through to the end of 2017, purchasing power should rise again modestly: inflation should ease slightly and nominal wages are expected to benefit from the 4% increase in the minimum wage on 1st April 2017. However, consumption is likely to continue adjusting to the past fall in purchasing power, and it is also being affected temporarily by an increase in the tax on purchases of new cars on 1st April. It should therefore fall in Q2 (–0.2%) and then rise again a little in H2 2017 (+0.2% per quarter). On an annual average basis, it should slip significantly in 2017: +1.4% after +2.8%.

A temporary rebound is expected in investment in a wait-and-see climate

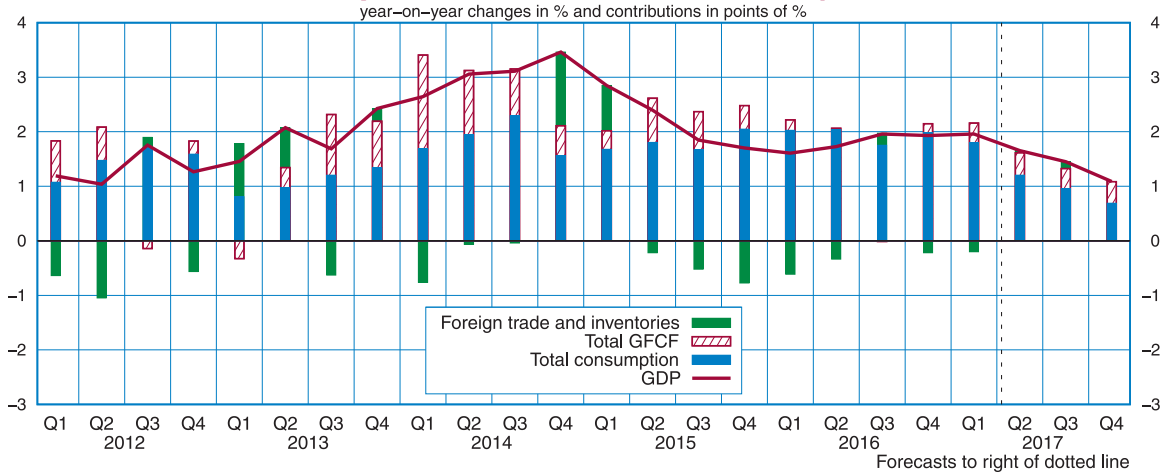
In H1, corporate investment is likely to pick up (+0.6% then +0.8%, after –0.9% at the end of 2016), as suggested by the recent improvement in order books and in investment intentions. It should slow down significantly in H2, however (+0.3% per quarter), as companies adopt a wait-and-see attitude as to the terms of the UK's exit from the European Union. All in all, corporate investment should grow by 1.1% in 2017, after falling back by 1.5% in 2016.

Exports are likely to profit from the recovery in world trade

At the beginning of 2017, exports fell (–1.6%) in reaction to the sharp rise at the end of 2016 (+4.6%), while imports rebounded (+2.7% after –1.0%). In Q2, exports should pick up again (+1.6%), in line with world demand, then slow down through to the end of the year as the favourable effect of the past fall in sterling fades out. Imports should increase slowly, following domestic demand. On average in 2017, the contribution of foreign trade to growth should be negative (–0.3 points, as in 2016). ■

Activity to decelerate in the wake of consumption

year–on–year changes in % and contributions in points of %



Sources: NSO, INSEE forecast

United States

Investment and imports on the rise

American activity stalled in Q1 (+0.3%), hampered by low private consumption and government spending, but is set to gather pace in the spring (+0.7%). It should then grow by 0.5% per quarter until the end of 2017. On average, growth is expected to rise in 2017 (+2.1% after +1.6%), buoyed by a rebound in corporate investment that began at the start of the year.

After stalling, consumption is set to rise again in the spring

Household consumption slowed significantly in Q1 2017 (+0.2% after +0.9%), particularly consumption of energy– because of the mild winter – and automobiles. Consequently, it held back activity as a whole (+0.3% after +0.5%). However, household confidence has reached its highest level since 2005. Household purchasing power should benefit from an easing of inflation (down from +2.6% year-on-year to the start of 2017 to +1.9% at the end of the year) and a promising job market, with the unemployment rate at its lowest level since 2005 (4.3% in May). In late 2017, households should also start to benefit from the tax cuts announced by the new government. Their consumption is thus expected to gather pace in the spring (+0.7%) and then grow steadily in H2 (+0.5% per quarter). It should remain dynamic on average over the year (+2.4% after +2.7%). Public spending is likely to bounce back after an unexpected drop at the start of the year, especially on defence.

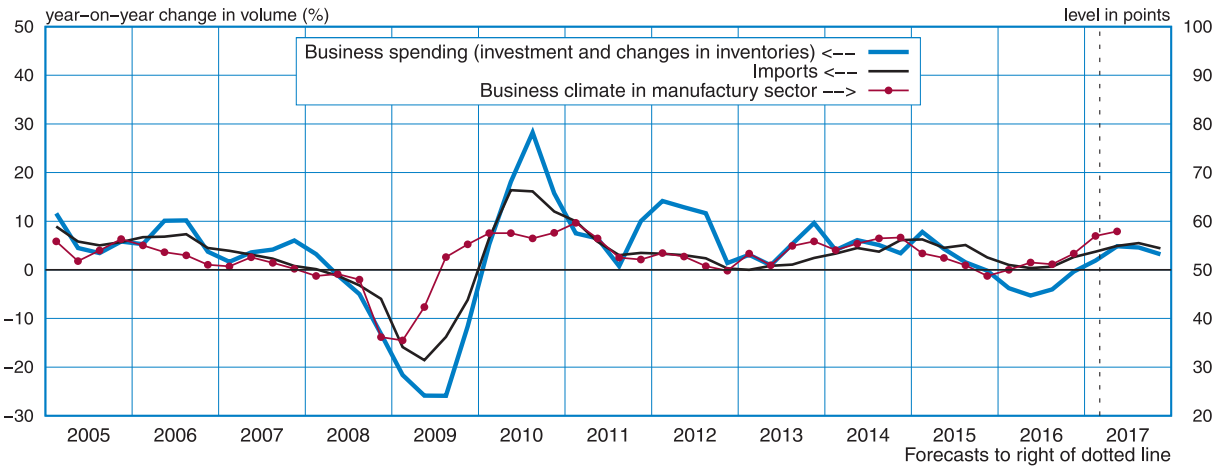
Investment is likely to bounce back significantly in 2017

The business leaders surveyed in the business tendency surveys remain optimistic, despite a decline in the short-term climate in April. Corporate investment picked up significantly in Q1 (+2.7% after +0.2% per quarter since the spring of 2016), driven by a recovery in spending in the oil sector in particular. It should subsequently slow down while continuing to increase steadily (+0.7% followed by +0.9% per quarter), and bounce back significantly on average over the year (+4.4% after –0.5%). It is likely to be one of the main factors driving the acceleration of gross domestic product (GDP): +2.1% after +1.6% in 2016.

Foreign trade is expected to hamper growth a little more in 2016.

Exports bounced back in Q1 (+1.4% after –1.1%), driven by buoyant foreign demand and the stabilisation of the dollar after several quarters of appreciation. They should slow down slightly through to the end of 2017 (+0.9% on average per quarter) but accelerate significantly on average over the year (+3.2% after +0.4%). Imports slowed in Q1 (+0.9% after +2.2%) in the wake of domestic demand, and are expected to increase at a similar rate through to the end of the year (*Graph*). Over the year as a whole, they should accelerate briskly (+4.6% after +1.1%), to such an extent that foreign trade is likely to weigh down more heavily on growth in 2017 (contribution of –0.3 points, after –0.1 points). ■

The rebound in domestic demand is driving American imports



Sources: BEA, ISM, INSEE forecast

Japan

Consumption and exports in much better shape

In Q1 2017 Japanese activity grew at the same rate as in the previous quarter (+0.3%), driven by a slight rebound in private consumption and a new sharp rise in exports. Through to the end of 2017, gross domestic product should continue to rise at a moderate pace, as suggested by the resilience of the business climate in the spring: +0.2% in Q2 followed by +0.3% in each of the last two quarters. Over the year as a whole, GDP should grow at virtually the same rate as in 2016 (+1.1% after +1.0%).

The business climate remains positive and exports are very dynamic

Since the start of 2017 the business climate has remained generally positive in Japan. The Markit indices, among others, have recovered and continue to rise after dipping in 2016 in both services and industry (*Graph*). Consequently, activity grew by 0.3% in Q1 2017, as in the previous quarter, driven by a combination of slightly higher household consumption (+0.3% after 0.0%) and exports which remained buoyant (+2.1% after +3.4%), particularly those to China.

Between now and the end of the year, exports should rise more moderately. On average in 2017, foreign trade is expected to contribute +0.4 points to total growth of +1.1%, after already contributing +0.6 points to the +1.0% rise in gross domestic product (GDP) in 2016.

Private consumption is in much better shape

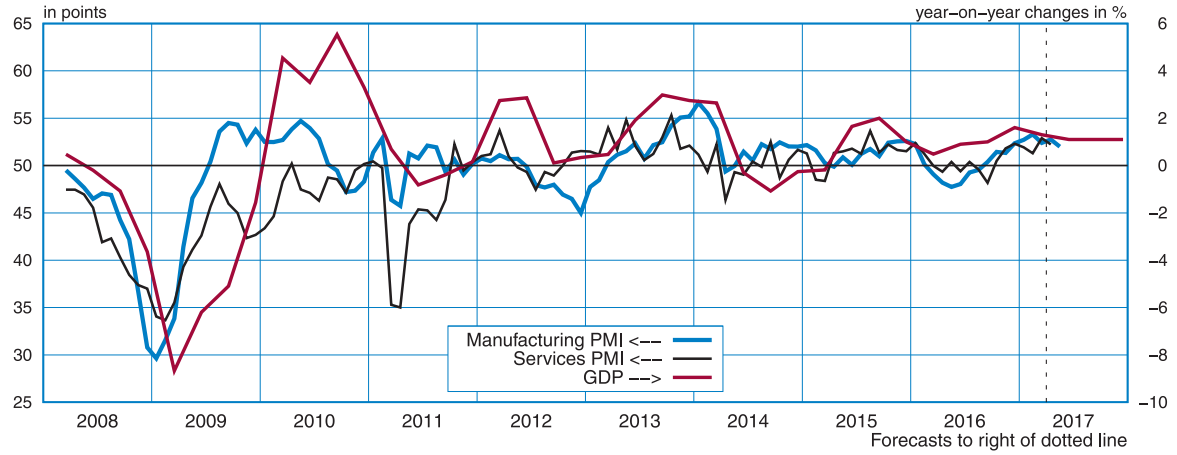
After gathering pace in Q1, household consumption expenditure should continue to grow moderately (+0.2% to +0.3% per quarter). It should be buoyed by purchasing power gains generated by slight wage rises. The unemployment rate is set to stabilise at 2.8%, its lowest level since June 1994. Through to the end of the year, inflation – fuelled by energy prices and the recent depreciation of the yen – is expected to stand at +0.3% year-on-year, which should have very little negative impact on household income. Over the year as a whole, private consumption should also pick up (+0.9% after +0.3%).

Public and private investment are set to pick up

After dropping in 2015 and 2016 in reaction to the massive stimulus plan in 2013, government investment is expected to accelerate further in 2017, after the announcement of new spending on infrastructure at the end of 2016. Boosted by the rise in demand and the high level of company profits, corporate investment should continue to rise steadily (+0.6% to +0.7% per quarter). On average over the year, it is expected to pick up significantly (+3.3% after +1.4%).

All in all, corporate investment and household consumption should be the main factors driving GDP growth in H2 (+0.3% per quarter). ■

The short-term outlook is promising



Sources: Japan Markit, Japanese Cabinet Office

Emerging economies

The recovery is confirmed

In early 2017 the business outlook for the emerging economies continued to improve, with the rebound in commodity prices and the upswing in world trade. In China, activity remains steady and imports are rising sharply, in the wake of the newly buoyant domestic demand. Activity should pick up slightly through to the end of the year due to the recovery of exports and the maintenance of powerful government support measures. As an annual average, growth in the Chinese economy is expected to stand at +6.8% in 2017, like the two previous years, but the investment slowdown should come to an end, with the result that imports should increase strongly (+13.5%) after two years of near stagnation. As a result, China is likely to be the leading contributor to the acceleration of world trade. Processing trade-related activities should also pick up.
In Brazil the business climate is improving, especially in industry, reflecting the upswing in exports. In Russia the business climate is improving rapidly with the rebound in commodity prices and the appreciation of the rouble: activity should return to growth in 2017. The Eastern European countries are expected to maintain their momentum, driven by promising demand from the Eurozone.

Chinese imports are set to pick up significantly, buoyed by domestic demand and processing trade

Activity in China slowed in Q1 2017 (+1.3% after +1.7%). It should pick up in Q2, rising to +1.8%, buoyed by domestic demand, and subsequently increase by 1.6% per quarter until the end of the year. As an annual average, it should grow by 6.8% in 2017, as in the two previous years.

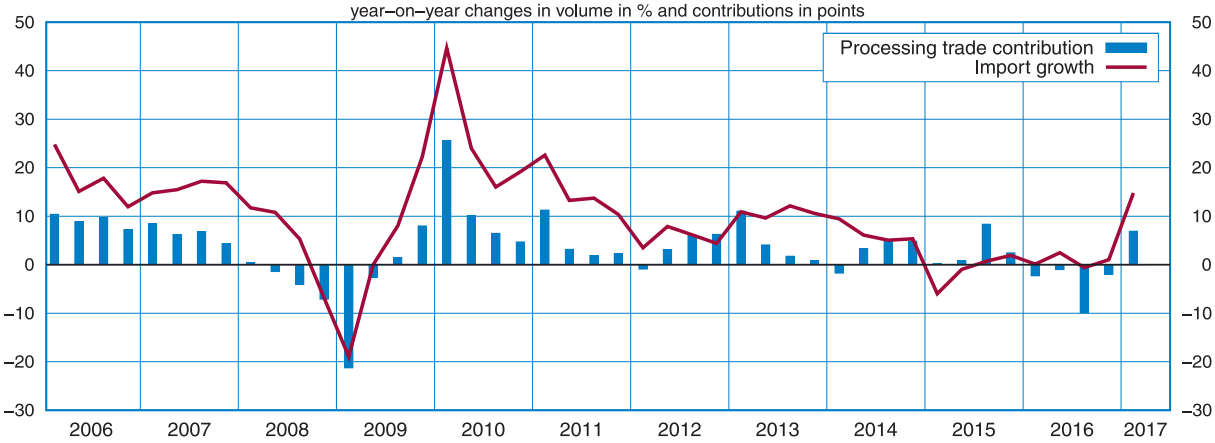
Despite a downturn since March, the business climate remains positive. Domestic demand is strengthening further. In particular, corporate investment has been gathering pace since the autumn, in both construction and manufactured goods, after two years of slowdown. This should reduce the over-production seen in the cement and steel industries in previous quarters. In addition, fiscal policy remains highly accommodating.

Consumption also remains dynamic. Household confidence has improved significantly since December. Retail sales have been gathering pace since mid-2016, all the more so since inflation has fallen. Vehicle registrations should pick up during the coming months after a sharp downturn in late 2016, hit by a restriction on purchase subsidies for the most polluting vehicles.

Exports fell significantly in Q1 2017 (–2.0%). They are expected to bounce back in Q2 (+2.6%), in the wake of sharply rising foreign demand, and then increase by 1.5% per quarter through to the end of the year. All in all in 2017, they should pick up tentatively (+0.9%), after declining in 2016 (–1.6%) for the first time since 2009.

Imports continued to gather pace markedly in Q1 2017 (+6.4%, and +13.9% over 12 months, *Graph 1*). They were again driven by processing trade, representing nearly 45% of Chinese imports, and by investment. Even though they are set slow down through to the end of the year (+1.5% in Q2 2017 followed by +1.7% per quarter), as an annual average, imports are set to soar in 2017

1 - Growth in imports and contribution of processing trade in China



Source: Chinese customs administration, INSEE calculations

(+13.5%) after two years of near stagnation (including +0.8% in 2016). As a result, China is likely to be the main contributor to the acceleration of world trade.

Russian activity perks up

Russia has seen a return to growth with the rebound in commodity prices and the appreciation of the rouble. In Q1 2017, gross domestic product (GDP) grew by 0.4% after +0.3% at the end of 2016, thanks to the rise in exports. Domestic demand has improved: retail sales and new registrations have bounced back, thanks to the rise in purchasing power linked to the continuous drop in inflation since the start of 2016. With the short-term climate remaining positive (*Graph 2*), GDP should continue to pick up gradually: annual growth is set to reach +1.2% in 2017, after –0.2% in 2016 and –2.8% in 2015.

Activity remains buoyant in the CEEC

Aggregate GDP in the Central and Eastern European Countries (CEEC) continued to increase at a brisk pace in Q1 2017 (+1.2% after +1.1%), buoyed by solid industrial production. Benefiting from demand from the Eurozone, chiefly Germany, activity in the CEEC should regain its trend momentum for the remainder of the year (+0.8% on average per quarter). As an annual average, activity should grow by 3.8% in 2017 (after +2.9% in 2016).

In India, growth remains sustained

In late 2016, India continued to enjoy sustained growth in spite of the surprise demonetisation of 500- and 1000-rupee banknotes in November. After deteriorating briefly, the business climate started to improve significantly in January and industrial production rose again in Q1 2017. Despite rising commodity prices leading to an upturn in inflation, India should maintain its dynamic growth in 2017, driven mainly by domestic demand.

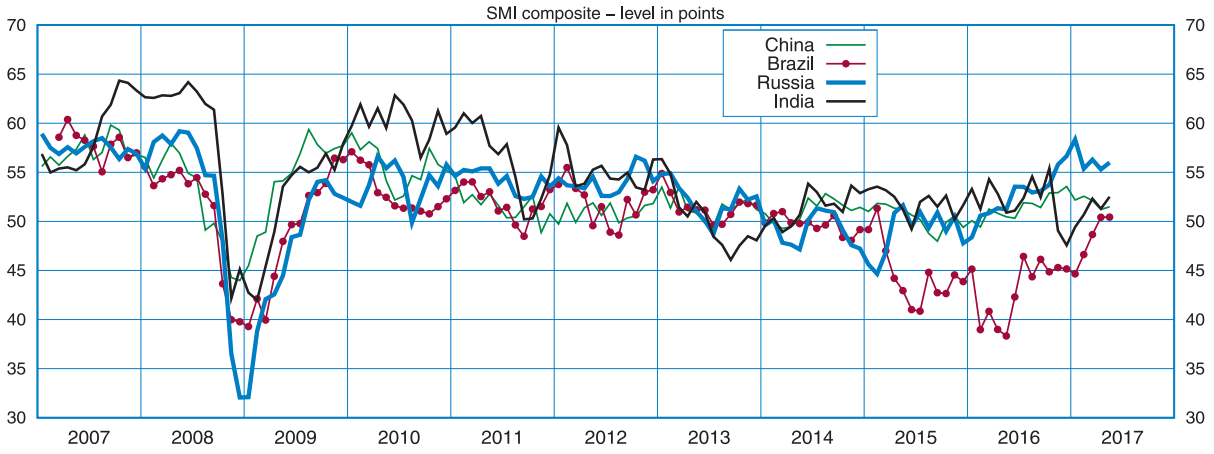
Brazil emerges from recession

Brazilian activity continued to shrink in 2016 (–3.6%) – a recession almost as harsh as that experienced in 2015 (–3.8%). However, the business climate improved significantly in industry and services at the start of 2017, and industrial production rose slightly in Q1. With the continuous drop in inflation, household purchasing power should decline more slowly. Thanks to the recovery of exports and the rise in commodity prices, GDP bounced back in Q1 2017 (+1.0% after –0.9%) and should continue to grow thereafter. As an annual average in 2017, Brazil could return to growth (+0.9%) despite the many political uncertainties.

The Turkish economy gathers pace

In Turkey, after a technical rebound in late 2016 following a summer affected by the attempted coup, activity returned to steady growth in Q1 2017 (+1.4%), thanks to powerful government stimulus measures and rising exports, boosted by the weak pound. In Q2, the business climate is improving significantly in manufacturing industry, and industrial production soared in April. As a result, Turkish growth is expected to accelerate: +4.1% on average in 2017, after +3.0% in 2016, but below the average recorded between 2000 and 2012 (+4.9%). ■

2 - The business climate remains positive in the emerging countries



Source: Markit

Statistical French Appendix

Goods and services: sources and uses at chain-linked previous year prices

billion euros and percentage changes from previous period and previous year
working-day and seasonally adjusted data

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Gross domestic product (GDP)	522.9	522.9	524.9	526.2	529.3	528.9	529.8	532.4	534.7	537.3	539.9	542.3	2097	2120	2154
% change	0.4	0.0	0.4	0.2	0.6	–0.1	0.2	0.5	0.4	0.5	0.5	0.4	1.0	1.1	1.6
Imports	166.2	166.5	169.3	173.7	174.7	172.8	177.7	178.8	181.3	181.3	182.3	183.6	675.6	704.1	728.5
% change	1.8	0.2	1.7	2.6	0.6	–1.1	2.8	0.6	1.4	0.0	0.5	0.7	5.5	4.2	3.5
Total resources	1145	1146	1152	1159	1165	1160	1168	1176	1183	1189	1195	1202	4602	4669	4769
% change	0.8	0.1	0.6	0.6	0.5	–0.4	0.7	0.7	0.6	0.5	0.6	0.5	2.1	1.4	2.2
Household consumption expenditure	277.0	277.3	279.0	279.2	282.8	283.7	283.9	285.7	285.9	287.0	287.9	289	1112	1136	1150
% change	0.4	0.1	0.6	0.1	1.3	0.3	0.1	0.6	0.1	0.4	0.3	0.3	1.3	2.1	1.2
General government consumption expenditure*	137.3	137.6	137.9	138.4	138.8	139.3	139.7	140.1	140.5	141.0	141.5	141.9	551.1	557.8	564.9
% change	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.2	1.2	1.3
General government individual consumption expenditure	83.0	83.3	83.5	83.8	84.2	84.5	84.9	85.1	85.5	85.8	86.1	86.4	333.6	338.8	343.9
% change	0.2	0.3	0.2	0.4	0.4	0.4	0.5	0.2	0.4	0.4	0.4	0.3	1.4	1.5	1.5
Collective consumption expenditure	43.6	43.6	43.7	43.8	43.8	44.0	43.9	44.1	44.2	44.3	44.4	44.5	174.7	175.8	177.4
% change	0.2	0.0	0.3	0.1	0.1	0.3	–0.1	0.5	0.2	0.2	0.3	0.3	0.5	0.7	0.9
Gross fixed capital formation (GFCF)	112.5	112.1	113.0	114.6	115.9	115.8	116.1	116.7	118.0	118.2	119.1	119.9	452.2	464.5	475.2
% change	0.4	–0.3	0.8	1.4	1.1	–0.1	0.2	0.5	1.2	0.1	0.7	0.7	0.9	2.7	2.3
of which: Non-financial enterprises (incl. unincorporated enterprises)	*62.9*	*63.3*	*63.8*	*64.9*	*66.0*	*65.8*	*65.7*	*66.2*	*67.5*	*67.4*	*67.9*	*68.4*	*254.9*	*263.6*	*271.2*
% change	*1.1*	*0.6*	*0.7*	*1.8*	*1.6*	*–0.3*	*–0.2*	*0.9*	*1.9*	*–0.2*	*0.8*	*0.7*	*2.9*	*3.4*	*2.9*
Households	*25.1*	*25.0*	*25.0*	*25.2*	*25.3*	*25.5*	*25.7*	*26.0*	*26.2*	*26.5*	*26.7*	*26.9*	*100.2*	*102.6*	*106.4*
% change	*–0.6*	*–0.4*	*0.1*	*0.7*	*0.8*	*0.7*	*0.9*	*0.9*	*1.0*	*0.9*	*0.9*	*0.8*	*–2.1*	*2.4*	*3.7*
Government	*18.6*	*18.0*	*18.4*	*18.6*	*18.5*	*18.4*	*18.4*	*18.1*	*17.9*	*18.0*	*18.0*	*18.1*	*73.6*	*73.5*	*72.0*
% change	*–0.2*	*–3.3*	*2.2*	*1.2*	*–0.5*	*–0.6*	*0.0*	*–1.5*	*–1.2*	*0.2*	*0.5*	*0.5*	*–3.1*	*–0.2*	*–2.0*
Exports	154.7	156.7	156.6	157.6	158.2	158.5	159.5	161.2	159.9	163.4	164.8	167.0	625.7	637.4	655.1
% change	1.1	1.3	–0.1	0.6	0.3	0.2	0.6	1.0	–0.8	2.2	0.9	1.3	4.0	1.9	2.8
Contributions to GDP growth: (in percentage points)															
Domestic demand excluding inventory changes**	0.3	0.1	0.6	0.4	1.0	0.2	0.1	0.5	0.4	0.3	0.4	0.4	1.2	2.0	1.5
Inventory changes**	0.3	–0.4	0.4	0.5	–0.4	–0.7	0.7	–0.2	0.7	–0.5	0.0	–0.1	0.3	–0.1	0.4
Net foreign trade	–0.3	0.3	–0.6	–0.7	–0.1	0.4	–0.7	0.1	–0.7	0.7	0.1	0.2	–0.5	–0.8	–0.3

Forecast

*Includes consumption expenditures by non-profit institutions serving households (NPISHs)

**Inventory changes include acquisitions net of sales of valuables

Manufactured goods: sources and uses at chain-linked previous year prices

percentage changes from previous period and previous year
working-day and seasonally adjusted data

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Output of the branches of activity	1.1	–0.1	0.4	0.6	0.2	–0.9	0.7	0.7	–0.2	0.8	0.7	0.5	1.9	0.8	1.5
Value added	0.1	0.2	0.4	0.6	0.5	–0.1	0.4	0.3	0.2	0.6	0.6	0.5	0.9	1.4	1.4
Intermediate consumption	1.5	–0.2	0.3	0.6	0.2	–1.2	0.9	0.8	–0.4	1.0	0.8	0.5	2.3	0.5	1.6
Imports	1.4	1.1	2.0	2.6	0.8	–0.9	2.0	0.3	3.0	–0.3	1.0	1.0	5.2	4.4	4.5
Taxes on products excluding subsidies	1.0	0.1	1.0	0.0	1.3	–0.6	0.1	0.4	0.9	0.3	0.3	0.3	2.2	1.5	1.5
Trade and transport margins	0.9	0.1	1.2	0.2	0.9	–0.3	–0.2	0.5	0.4	0.4	0.5	0.6	2.9	1.5	1.3
Total resources	1.1	0.3	1.0	1.0	0.6	–0.8	0.8	0.5	0.9	0.4	0.7	0.7	3.0	1.9	2.3
Intermediate uses	0.8	0.1	0.4	0.3	0.4	–0.5	0.3	0.8	0.5	0.7	0.6	0.5	1.7	0.8	2.2
Household consumption expenditure	0.3	0.5	1.0	–0.4	1.2	0.1	–0.2	0.6	0.3	0.4	0.3	0.4	2.0	1.7	1.2
General government individual consumption expenditure	0.2	0.2	–0.4	1.1	1.0	1.1	1.5	1.0	0.9	0.9	1.0	0.9	4.0	3.6	4.1
Gross fixed capital formation (GFCF)	0.8	–1.6	4.2	4.1	3.0	–1.1	–2.0	0.4	1.6	–1.1	0.9	0.9	3.9	6.1	0.5
Non-financial enterprises (incl. unincorporated enterprises)	1.1	0.9	1.6	3.5	3.2	–2.1	–2.6	1.1	2.7	–1.0	1.0	1.0	4.7	4.2	1.6
Other	–0.8	–16.7	23.7	8.1	1.7	5.3	1.2	–3.5	–4.2	–1.8	0.0	0.2	–1.1	18.1	–6.2
Contribution of inventory changes to manufactured production*	*0.8*	*–0.5*	*1.0*	*0.9*	*0.0*	*–1.9*	*1.1*	*–1.1*	*2.3*	*–1.5*	*0.5*	*–0.1*	*1.0*	*–0.1*	*0.6*
Exports	1.1	1.7	–0.4	1.4	–0.3	1.2	1.5	1.8	–2.0	2.8	0.5	1.3	3.9	3.0	3.1
Domestic demand excluding inventory changes*	0.6	0.1	0.9	0.4	0.9	–0.3	–0.1	0.7	0.6	0.4	0.5	0.5	2.1	1.6	1.7

Forecast

*Changes in inventories include acquisitions net of sales of valuables

Goods and services: sources and uses, chain-linked previous year prices index

percentage changes from previous period and previous year

working-day and seasonally adjusted data

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Gross domestic product (GDP)	0.4	0.1	0.3	0.3	0.0	–0.1	0.1	0.2	0.2	0.2	0.2	0.3	1.1	0.4	0.7
Imports	–0.8	1.3	–1.7	–1.6	–1.4	0.3	0.5	1.0	1.9	–0.1	0.2	0.0	–2.4	–2.5	3.0
Total resources	–0.3	0.4	–0.4	–0.3	–0.5	0.0	0.2	0.5	0.7	0.1	0.3	0.2	–0.5	–0.6	1.5
Household consumption expenditure	0.1	0.3	–0.1	0.0	–0.2	0.0	0.1	0.3	0.5	0.1	0.2	0.3	0.3	–0.1	1.0
General government consumption expenditure	0.0	0.0	–0.1	–0.1	–0.1	0.0	0.2	0.1	0.3	0.3	0.2	0.2	–0.1	0.0	0.8
Gross fixed capital formation (GFCF)	–0.2	0.0	0.0	0.3	0.0	0.2	0.3	0.3	0.3	0.4	0.3	0.3	–0.1	0.6	1.2
of which: Non-financial enterprises (incl. unincorp. enterprises)	*–0.2*	*0.2*	*0.0*	*0.4*	*0.1*	*0.1*	*0.2*	*0.2*	*0.3*	*0.4*	*0.3*	*0.3*	*0.0*	*0.6*	*1.1*
Households	*0.3*	*–0.3*	*0.0*	*0.5*	*–0.1*	*0.3*	*0.6*	*0.2*	*0.4*	*0.4*	*0.4*	*0.4*	*0.6*	*0.8*	*1.5*
Exports	0.0	0.9	–0.6	–0.5	–1.3	–0.5	0.3	1.0	1.0	0.0	0.2	0.2	0.6	–1.7	2.0
Domestic demand excluding inventory changes*	0.0	0.2	–0.1	0.0	–0.1	0.1	0.2	0.3	0.4	0.2	0.2	0.3	0.1	0.1	1.0

Forecast

*Changes in inventories include acquisitions net of sales of valuables

Manufactured goods: sources and uses, chain-linked previous year prices index

percentage changes from previous period and previous year

working-day and seasonally adjusted data

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Output of the branches of activity	–0.9	1.0	–1.0	–0.9	–1.3	–0.1	0.2	1.0	1.0	0.2	0.2	0.1	–1.5	–2.0	2.0
Value added	1.0	1.2	–0.2	–0.1	–0.8	–0.9	–0.3	1.0	–0.1	0.3	–0.3	0.1	2.9	–1.2	0.4
Intermediate consumption	–1.7	0.9	–1.4	–1.2	–1.5	0.3	0.4	1.0	1.4	0.1	0.4	0.1	–3.3	–2.3	2.7
Imports	–0.5	0.9	–1.4	–1.0	–1.6	0.1	0.5	1.1	1.2	0.2	0.1	0.0	–1.4	–2.2	2.5
Total resources	–0.7	0.8	–1.0	–0.7	–1.1	0.1	0.2	0.8	1.0	0.1	0.1	0.1	–1.3	–1.6	1.9
Intermediate uses	–1.1	0.7	–1.5	–1.2	–1.6	0.3	0.4	1.0	1.2	0.3	0.3	0.1	–2.7	–2.3	2.7
Household consumption expenditure	–0.7	0.4	–0.6	–0.2	–0.6	0.2	–0.1	0.4	0.7	–0.2	–0.1	0.2	–1.5	–0.7	0.9
General government individual consumption expenditure	–1.2	–1.1	–1.0	–0.7	–0.3	–1.0	–0.7	–0.5	–0.1	–0.8	–0.6	–0.5	–3.6	–2.8	–2.1
Gross fixed capital formation (GFCF)	0.5	0.1	–0.1	0.0	–0.1	–0.1	0.2	0.2	0.1	0.3	0.2	0.2	0.6	0.0	0.7
of which: Non-financial enterprises (incl. unincorp. enterprises)	*0.5*	*0.4*	*–0.4*	*–0.1*	*0.0*	*–0.1*	*0.3*	*0.2*	*0.1*	*0.3*	*0.2*	*0.2*	*0.7*	*0.0*	*0.8*
General government	*0.8*	*–3.1*	*4.0*	*0.9*	*–0.6*	*–0.2*	*–0.2*	*0.7*	*–0.1*	*0.2*	*0.2*	*0.2*	*1.4*	*0.8*	*0.5*
Exports	–0.1	1.5	–1.1	–0.7	–1.3	–0.5	0.2	1.0	1.3	0.1	0.1	0.0	0.8	–2.1	2.2
Domestic demand excluding inventory changes*	–0.9	0.5	–1.0	–0.7	–1.1	0.2	0.2	0.7	0.9	0.1	0.1	0.1	–2.0	–1.5	1.7

Forecast

*Changes in inventories include acquisitions net of sales of valuables

Output by sector at chain-linked previous year prices

percentage changes from previous period and previous year

working-day and seasonally adjusted data

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Agriculture	–0.7	–1.0	–1.4	–2.0	–2.5	–1.3	–0.1	1.4	2.4	1.7	1.0	0.2	–1.5	–5.6	4.9
Manufacturing	1.1	–0.1	0.4	0.6	0.2	–0.9	0.7	0.7	–0.2	0.8	0.7	0.5	1.9	0.8	1.5
Energy, water and waste	3.6	–2.2	1.2	–0.6	1.3	0.7	–2.2	2.5	–1.3	0.7	0.0	0.2	0.6	0.8	0.1
Construction	–0.1	–0.3	–0.5	0.2	0.1	–0.3	0.3	0.6	0.3	0.7	0.6	0.6	–1.5	0.1	1.8
Trade	1.0	0.5	0.8	0.2	1.0	–0.4	0.0	0.6	0.6	0.5	0.6	0.6	3.0	1.5	1.8
Market services excluding trade	0.5	0.3	0.4	0.3	0.6	–0.3	0.4	0.6	0.9	0.5	0.6	0.6	1.7	1.3	2.4
Non market services	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.9	1.0	1.0
Total	**0.6**	**0.0**	**0.3**	**0.3**	**0.4**	**–0.3**	**0.3**	**0.7**	**0.5**	**0.6**	**0.6**	**0.5**	**1.4**	**0.9**	**1.9**

Forecast

Value added by sector at chain-linked previous year prices

percentage changes from previous period and previous year
working-day and seasonally adjusted data

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Agriculture	0.0	–1.0	–2.0	–3.2	–4.1	–2.7	–1.0	0.9	2.4	3.5	1.9	0.4	0.5	–9.8	5.7
Manufacturing	0.1	0.2	0.4	0.6	0.5	–0.1	0.4	0.3	0.2	0.6	0.6	0.5	0.9	1.4	1.4
Energy, water and waste	4.5	–1.8	1.8	–0.6	1.8	0.5	–2.7	1.8	–2.0	0.7	0.0	0.2	2.4	1.3	–1.3
Construction	–0.3	–0.6	–0.3	0.3	0.0	0.0	0.0	0.3	0.2	0.5	0.5	0.4	–2.0	0.0	1.2
Trade	0.7	0.3	0.7	0.1	0.9	–0.4	–0.1	0.4	0.4	0.4	0.5	0.4	2.2	1.1	1.2
Market services excluding trade	0.2	–0.1	0.4	0.4	0.8	–0.2	0.4	0.5	0.7	0.5	0.5	0.5	0.9	1.4	1.9
Non market services	–0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.9	0.9
Total	**0.3**	**0.0**	**0.3**	**0.3**	**0.5**	**–0.1**	**0.2**	**0.4**	**0.4**	**0.5**	**0.5**	**0.4**	**0.8**	**1.0**	**1.5**

Forecast

Investment (non-financial incorporated and unincorporated enterprises) at chain-linked previous year prices

percentage changes from previous period and previous year
working-day and seasonally adjusted data

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Manufactured goods	1.1	0.9	1.6	3.5	3.2	–2.1	–2.6	1.1	2.7	–1.0	1.0	1.0	4.7	4.2	1.6
Construction	0.7	–0.2	0.6	0.8	0.3	0.9	–0.3	1.0	0.4	0.6	0.4	0.5	0.4	1.9	2.0
Other	1.3	0.9	0.1	1.0	1.1	0.5	1.9	0.6	2.2	0.0	0.8	0.7	3.0	3.7	4.4
Total	**1.1**	**0.6**	**0.7**	**1.8**	**1.6**	**–0.3**	**–0.2**	**0.9**	**1.9**	**–0.2**	**0.8**	**0.7**	**2.9**	**3.4**	**2.9**

Forecast

Imports (CIF) at chain-linked previous year prices

percentage changes from previous period and previous year
working-day and seasonally adjusted data

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Agricultural goods	–0.4	1.0	1.9	–1.2	4.6	–0.2	4.9	–0.1	–0.4	–0.5	–3.0	0.0	0.6	7.2	–0.1
Manufactured goods	1.4	1.1	2.0	2.6	0.8	–0.9	2.0	0.3	3.0	–0.3	1.0	1.0	5.2	4.4	4.5
Energy, water and waste	5.5	–11.2	0.8	9.5	–6.0	–14.7	27.4	9.5	–8.8	–0.5	–6.0	–4.0	2.0	1.2	0.6
Total goods	1.7	–0.2	1.9	3.1	0.4	–1.9	3.6	1.0	2.0	–0.3	0.5	0.7	4.8	4.2	4.2
Total services	3.8	2.2	2.0	0.6	0.8	1.1	0.6	–0.3	–0.1	0.9	0.8	0.8	12.0	3.9	1.5
Total*	**1.8**	**0.2**	**1.7**	**2.6**	**0.6**	**–1.1**	**2.8**	**0.6**	**1.4**	**0.0**	**0.5**	**0.7**	**5.5**	**4.2**	**3.5**

Forecast

*Including territorial correction

Exports (FOB) at chain-linked previous year prices

percentage changes from previous period and previous year
working-day and seasonally adjusted data

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Agricultural goods	–1.7	3.5	–1.1	–5.6	6.5	1.5	–17.0	–5.5	3.3	0.5	10.0	5.0	5.0	–6.6	–3.8
Manufactured goods	1.1	1.7	–0.4	1.4	–0.3	1.2	1.5	1.8	–2.0	2.8	0.5	1.3	3.9	3.0	3.1
Energy, water and waste	–5.0	–0.2	–4.1	–3.9	–3.6	1.2	3.7	–11.4	20.1	1.0	1.0	1.0	–9.6	–8.6	13.6
Total goods	0.9	1.7	–0.5	1.0	–0.2	1.2	0.9	1.3	–1.5	2.7	0.8	1.4	3.6	2.4	3.0
Total services	2.4	0.6	1.6	0.2	2.9	–2.2	0.3	0.3	1.0	0.8	0.8	0.8	8.5	2.6	2.0
Total*	**1.1**	**1.3**	**–0.1**	**0.6**	**0.3**	**0.2**	**0.6**	**1.0**	**–0.8**	**2.2**	**0.9**	**1.3**	**4.0**	**1.9**	**2.8**

Forecast

*Including territorial correction

Changes in inventories at chain-linked previous year prices

Contributions (in percentage points)
working-day and seasonally adjusted data

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Agricultural goods	0.0	–0.1	0.0	0.0	–0.1	0.0	0.1	0.1	0.1	0.0	–0.1	0.0	0.0	–0.1	0.2
Manufactured goods	0.3	–0.2	0.4	0.3	0.0	–0.7	0.4	–0.4	0.8	–0.5	0.2	0.0	0.4	0.0	0.2
Energy, water and waste	0.0	–0.2	0.0	0.2	–0.2	–0.1	0.2	0.2	–0.1	0.0	–0.1	–0.1	0.0	0.0	0.0
Other (construction, services)	0.0	0.0	0.0	0.0	–0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**0.3**	**–0.4**	**0.4**	**0.5**	**–0.4**	**–0.7**	**0.7**	**–0.2**	**0.7**	**–0.5**	**0.0**	**–0.1**	**0.3**	**–0.1**	**0.4**

Forecast

Household consumption expenditure at chain-linked previous year prices

working-day and seasonally adjusted data, percentage changes from previous period and previous year

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Agricultural goods	–0.6	0.9	0.1	0.3	2.7	–0.9	–0.4	–0.3	–1.8	2.0	0.2	0.2	–0.4	2.2	–0.9
Manufactured goods	0.3	0.5	1.0	–0.4	1.2	0.1	–0.2	0.6	0.3	0.4	0.3	0.4	2.0	1.7	1.2
Energy, water and waste	8.2	–5.1	2.6	–3.7	3.9	3.1	–3.1	5.0	–5.0	0.2	0.0	0.0	1.9	2.9	–2.2
Trade	0.5	1.0	0.5	0.2	1.9	0.0	0.8	0.9	0.9	0.5	0.5	0.5	2.1	3.3	2.8
Market services excluding trade	0.0	0.3	0.3	0.4	0.8	0.1	0.5	0.4	0.6	0.4	0.4	0.4	0.9	1.7	1.8
Non market services	0.0	0.2	0.1	0.3	0.6	–0.1	0.2	0.0	0.1	0.3	0.3	0.2	0.6	0.9	0.5
Territorial correction	17.6	11.2	10.3	–27.4	–42.9	–57.6	–61.3	18.6	53.7	71.6	42.7	30.6	–2.0	–78.6	40.2
Total consumption expenditure	**0.4**	**0.1**	**0.6**	**0.1**	**1.3**	**0.3**	**0.1**	**0.6**	**0.1**	**0.4**	**0.3**	**0.3**	**1.3**	**2.1**	**1.2**
Total consumption	0.3	0.2	0.5	0.2	1.1	0.3	0.2	0.5	0.1	0.4	0.3	0.3	1.4	2.0	1.2

Forecast

Household income account

working-day and seasonally adjusted data, percentage changes from previous period and previous year

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Gross operating surplus	0.7	0.1	0.6	1.0	0.5	0.1	0.4	0.3	0.3	0.6	0.5	0.6	1.8	1.9	1.6
Unincorporated enterprises	0.7	–0.7	0.8	1.4	0.7	–0.7	0.2	–0.4	0.5	0.7	0.5	0.4	1.3	1.5	1.1
Households excluding unincorporated enterprises	0.6	0.5	0.6	0.7	0.4	0.6	0.5	0.7	0.2	0.5	0.5	0.7	2.1	2.2	2.0
Gross wages and salaries	0.5	0.3	0.4	0.5	0.6	0.3	0.6	0.8	0.8	0.7	0.6	0.7	1.5	2.0	2.8
Net interests and dividends	–0.5	–0.4	–1.1	–1.1	–0.9	–0.9	–0.4	0.3	0.2	–0.2	–0.1	0.0	–2.5	–3.2	–0.2
Social benefits (in cash)	0.1	0.3	0.3	0.6	0.5	0.4	0.5	0.3	0.5	0.5	0.5	0.5	1.5	1.8	1.9
Total ressources	0.3	0.2	0.3	0.5	0.5	0.3	0.5	0.5	0.6	0.6	0.6	0.6	1.2	1.7	2.2
Income and wealth taxes	0.2	0.6	–1.1	0.8	1.1	0.0	–1.1	1.2	0.4	0.9	0.9	1.1	1.7	1.1	2.1
Households' contributions	0.5	0.4	0.7	0.2	0.7	0.5	0.6	0.7	0.9	0.5	0.5	0.5	1.6	2.2	2.7
Total charges	0.3	0.5	–0.4	0.6	1.0	0.2	–0.4	1.0	0.6	0.7	0.7	0.8	1.7	1.5	2.3
Gross disposable income	**0.4**	**0.1**	**0.5**	**0.5**	**0.4**	**0.3**	**0.7**	**0.4**	**0.6**	**0.6**	**0.5**	**0.5**	**1.1**	**1.7**	**2.2**
Consumption deflator	0.1	0.3	–0.1	0.0	–0.2	0.0	0.1	0.3	0.5	0.1	0.2	0.3	0.3	–0.1	1.0
Real gross disposable income	**0.3**	**–0.2**	**0.6**	**0.6**	**0.6**	**0.3**	**0.6**	**0.1**	**0.1**	**0.5**	**0.3**	**0.2**	**0.8**	**1.8**	**1.1**
Social benefits (in kind)	0.3	0.3	0.2	0.3	0.3	0.3	0.5	0.3	0.6	0.6	0.6	0.5	1.6	1.3	2.1
Adjusted gross disposable income	0.3	0.2	0.4	0.5	0.3	0.3	0.7	0.4	0.6	0.6	0.5	0.5	1.2	1.6	2.2

Forecast

Main ratios (households)

working-day and seasonally adjusted data, in percentage points

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Saving ratio	14.4	14.1	14.1	14.5	13.9	13.8	14.3	13.9	13.9	14.0	14.0	13.9	14.3	14.0	13.9
Financial saving ratio*	5.1	4.9	4.8	5.2	4.8	4.5	5.1	4.5	4.5	4.5	4.4	4.3	5.0	4.7	4.4
Weight of taxes and social contributions**	21.4	21.4	21.3	21.3	21.4	21.4	21.2	21.3	21.3	21.3	21.4	21.4	21.3	21.3	21.3
Gross wages and salaries/gross disposable income	62.4	62.5	62.5	62.4	62.6	62.6	62.5	62.7	62.8	62.9	63.0	63.1	62.4	62.6	63.0
Social benefits (cash)/gross disposable income	35.2	35.2	35.1	35.2	35.2	35.3	35.2	35.2	35.1	35.1	35.1	35.1	35.2	35.2	35.1

Forecast

*Savings excluding dwelling/gross disposable income
**Taxes and social contributions/gross disposable income before taxes and social contributions

Operating account of non-financial corporations and unincorporated enterprises

working-day and seasonally adjusted data, percentage changes from previous period and previous year

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Value added	0.7	–0.2	0.9	0.9	0.9	–0.5	0.3	0.8	0.4	0.7	0.7	0.8	2.2	2.0	2.2
Subsidies	24.6	0.6	–0.4	–1.3	0.2	0.1	0.5	1.6	3.7	0.7	0.3	0.2	26.4	–0.1	6.0
Total ressources	1.3	–0.1	0.9	0.9	0.9	–0.5	0.3	0.8	0.5	0.7	0.7	0.8	2.8	2.0	2.3
Compensation of employees	0.2	0.3	0.6	0.5	1.0	0.0	0.5	0.8	0.8	0.8	0.7	0.8	1.2	2.2	2.8
of which: Gross wages and salaries	0.5	0.3	0.5	0.6	0.9	0.3	0.6	0.8	0.8	0.8	0.7	0.8	1.5	2.5	2.9
Employers' social contributions	–0.9	0.1	0.9	0.0	1.1	–0.9	0.5	0.8	0.8	0.8	0.6	0.7	0.2	1.4	2.5
Taxes on production	–1.6	0.5	0.5	–0.2	–0.6	–0.2	0.3	0.7	1.2	0.9	0.7	0.4	–0.5	–0.2	3.0
Total charges	0.0	0.3	0.6	0.4	0.8	0.0	0.5	0.8	0.8	0.8	0.7	0.7	1.1	2.0	2.8
Gross operating surplus	3.5	–0.8	1.3	1.6	1.0	–1.3	0.0	0.9	–0.1	0.6	0.8	0.9	5.9	1.8	1.3
Unincorporated entreprises	0.8	–0.7	0.8	1.4	0.7	–0.7	0.3	–0.4	–0.8	1.0	0.7	0.6	1.3	1.5	0.1
Non-financial corporations	4.3	–0.9	1.5	1.7	1.1	–1.5	–0.1	1.3	0.2	0.4	0.9	1.0	7.4	2.0	1.7

Forecast

Non-financial corporations' income account

working-day and seasonally adjusted data, percentage changes from previous period and previous year

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Value added	0.8	–0.1	1.0	0.9	0.9	–0.5	0.3	0.9	0.5	0.7	0.7	0.8	2.5	2.1	2.4
Subsidies	26.8	0.3	–0.6	–1.6	0.2	0.2	0.7	1.9	4.3	0.9	0.4	0.2	27.3	–0.2	7.1
Total ressources	1.4	–0.1	0.9	0.8	0.9	–0.5	0.3	1.0	0.6	0.7	0.7	0.8	3.0	2.1	2.5
Compensation of employees	0.2	0.3	0.7	0.5	1.0	0.0	0.6	0.8	0.8	0.8	0.7	0.8	1.3	2.3	2.9
Taxes	4.0	–2.5	0.6	6.3	–3.9	1.5	0.1	0.5	–2.6	3.6	0.8	0.7	–2.2	1.6	1.4
of which: Taxes on production	–1.5	0.5	0.5	–0.2	–0.6	–0.1	0.3	0.7	1.2	0.9	0.7	0.4	–0.4	–0.2	2.9
Corporate taxes	13.8	–7.1	0.8	17.3	–8.5	4.0	–0.2	0.4	–8.3	8.0	1.0	1.0	–4.9	4.4	–0.9
Net interests and dividends	1.3	0.0	–0.6	–0.6	–1.2	–0.9	–0.5	0.8	–1.6	0.0	0.0	0.0	3.0	–2.7	–1.5
Other net charges	–0.2	–0.6	–1.1	–1.6	–2.1	–1.3	–0.5	0.4	1.3	1.1	0.8	0.6	–1.5	–5.1	2.4
Total charges	0.7	0.0	0.5	1.0	0.2	0.1	0.4	0.8	0.3	1.0	0.6	0.7	1.0	1.6	2.3
Gross disposable income	4.5	–0.1	2.7	0.3	4.1	–2.7	0.1	1.7	2.2	–0.7	1.1	1.3	12.9	4.0	3.2

Forecast

Breakdown of non-financial corporations' profit share

working-day and seasonally adjusted data, percentage changes from previous period and previous year

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Margin rate* (in %)	**31.9**	**31.7**	**31.9**	**32.1**	**32.1**	**31.8**	**31.7**	**31.8**	**31.7**	**31.6**	**31.6**	**31.7**	**31.9**	**31.9**	**31.6**
Margin rate % change	1.1	–0.3	0.2	0.2	0.0	–0.3	–0.1	0.1	–0.1	–0.1	0.0	0.0	1.5	–0.1	–0.2
Contributions to margin rate variation															
Productivity (+)	0.2	–0.2	0.1	0.0	0.3	–0.3	–0.1	0.1	0.1	0.1	0.2	0.2	0.5	0.1	0.3
Real wages (–)	–0.2	0.1	–0.3	–0.3	–0.5	0.0	–0.1	–0.1	0.1	–0.2	–0.2	–0.1	–0.6	–0.9	–0.3
Employers' social contributions rate (–)	0.2	0.0	–0.1	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1
Ratio of value added price and consumption price (+)	0.1	–0.2	0.4	0.4	0.2	–0.2	0.0	0.0	–0.4	0.1	0.0	0.0	0.7	0.6	–0.3
Other items	0.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7	0.1	0.1

Forecast

*Gross operating surplus / value added

Main ratios (non-financial corporate sector)

working-day and seasonally adjusted data, in percentage points

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Wage costs / Value added (VA)	65.6	65.8	65.6	65.4	65.4	65.7	65.9	65.8	66.0	66.0	66.0	66.0	65.6	65.7	66.0
Taxes on production / VA	5.4	5.4	5.4	5.3	5.2	5.3	5.2	5.2	5.3	5.3	5.3	5.3	5.4	5.2	5.3
Margin rate (GOS* / VA)	31.9	31.7	31.9	32.1	32.1	31.8	31.7	31.8	31.7	31.6	31.6	31.7	31.9	31.9	31.6
Investment rate (GFCF** / VA)	22.7	22.9	22.8	23.1	23.3	23.4	23.3	23.4	23.7	23.6	23.7	23.7	22.9	23.3	23.7
Saving ratio (savings / VA)	19.2	19.2	19.5	19.4	20.0	19.5	19.5	19.6	20.0	19.7	19.8	19.9	19.3	19.7	19.8
Tax pressure (Income taxes / gross disposable income before taxes)	15.3	14.4	14.1	16.2	14.5	15.3	15.3	15.1	13.8	14.8	14.8	14.7	15.0	15.0	14.5
Self–financing ratio (cash earnings)***	84.5	83.8	85.5	83.9	85.8	83.6	83.7	84.1	84.1	83.4	83.4	83.7	84.4	84.3	83.6

Forecast

*Gross operating surplus
**Gross fixed capital formation
***Savings / Gross fixed capital formation

Countries Accounts

Eurozone[1]	Quarterly change in %												Annual change in %		
	2015				2016				2017						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2015	2016	2017
Supply and use table (in real terms)															
GDP	**0.4**	**0.4**	**0.3**	**0.4**	**0.6**	**0.3**	**0.4**	**0.5**	**0.6**	**0.5**	**0.5**	**0.5**	**1.4**	**1.6**	**1.8**
Private consumption (56%)	0.4	0.4	0.4	0.4	0.7	0.4	0.4	0.4	0.3	0.5	0.4	0.4	1.7	2.0	1.6
Investment (20%)	1.3	–0.3	0.7	1.7	0.4	0.5	0.0	0.8	1.3	0.5	0.7	0.7	2.4	2.5	3.0
Public consumption (21%)	0.3	0.3	0.4	0.5	0.7	0.3	0.1	0.3	0.4	0.4	0.4	0.4	1.3	1.7	1.3
Exports (44%)	1.3	1.2	0.0	0.6	0.6	1.4	0.3	1.4	1.2	1.1	0.9	1.0	4.6	3.0	4.3
Imports (40%)	2.2	0.5	1.0	1.5	0.5	1.0	0.6	1.9	1.3	0.7	0.9	1.0	5.4	3.8	4.7
Contributions to GDP growth															
Domestic demand excluding inventories	0.6	0.3	0.5	0.7	0.6	0.4	0.2	0.5	0.5	0.4	0.5	0.4	1.7	2.0	1.8
Changes in inventories	0.1	–0.2	0.2	0.1	–0.2	–0.3	0.2	0.2	0.0	–0.2	0.0	0.0	–0.1	–0.1	0.1
Foreign trade	–0.3	0.3	–0.4	–0.3	0.1	0.2	–0.1	–0.2	0.0	0.2	0.0	0.0	–0.2	–0.2	0.0

Forecast

Consumer prices in Eurozone

changes in a % and contributions in points

	Q1 2017		Q2 2017		Q3 2017		Q4 2017		Annual averages	
CPI groups (2015 weightings)	**yoy**	**cyoy**	**yoy**	**cyoy**	**yoy**	**cyoy**	**yoy**	**cyoy**	**2016**	**2017**
All (100.0%)	**1.8**		**1.5**		**1.5**		**1.4**		**0.2**	**1.6**
Food (including Alc. and Tobacco) (19.6%)	2.0	0.4	1.5	0.3	1.8	0.3	2.0	0.4	0.9	1.8
Energy (10.6%)	8.3	0.8	5.1	0.5	4.4	0.4	1.8	0.2	–5.1	4.9
"Core" inflation (69.8%)	0.8	0.6	1.0	0.7	1.1	0.8	1.2	0.9	0.9	1.0

Forecast

France (21%)[2]	Quarterly change in %												Annual change in %		
	2015				2016				2017						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2015	2016	2017
Supply and use table (in real terms)															
GDP	**0.4**	**0.0**	**0.4**	**0.2**	**0.6**	**–0.1**	**0.2**	**0.5**	**0.4**	**0.5**	**0.5**	**0.4**	**1.0**	**1.1**	**1.6**
Private consumption (54%)	0.4	0.1	0.6	0.1	1.3	0.3	0.1	0.6	0.1	0.4	0.3	0.3	1.3	2.1	1.2
Investment (22%)	0.4	–0.3	0.8	1.4	1.1	–0.1	0.2	0.5	1.2	0.1	0.7	0.7	0.9	2.7	2.3
Public consumption (26%)	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.2	1.2	1.3
Exports (29%)	1.1	1.3	–0.1	0.6	0.3	0.2	0.6	1.0	–0.8	2.2	0.9	1.3	4.0	1.9	2.8
Imports (31%)	1.8	0.2	1.7	2.6	0.6	–1.1	2.8	0.6	1.4	0.0	0.5	0.7	5.5	4.2	3.5
Contributions to GDP growth															
Domestic demand excluding inventories	0.3	0.1	0.6	0.4	1.0	0.2	0.1	0.5	0.4	0.3	0.4	0.4	1.2	2.0	1.5
Changes in inventories	0.3	–0.4	0.4	0.5	–0.4	–0.7	0.7	–0.2	0.7	–0.5	0.0	–0.1	0.3	–0.1	0.4
Foreign trade	–0.3	0.3	–0.6	–0.7	–0.1	0.4	–0.7	0.1	–0.7	0.7	0.1	0.2	–0.5	–0.8	–0.3

Forecast

How to read it: % in brackets represent the weight in the nominal GDP in 2016.
yoy: year-on-year
cyoy: contributions year-on-year

1. Eurozone excluding Ireland, as this country's accounts present a break in series in Q1 2015
2. Share in Eurozone GDP in 2016

Sources: Eurostat, INSEE

Germany (30%)[1]	Quarterly change in %												Annual change in %		
	2015				2016				2017						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2015	2016	2017
Supply and use table (in real terms)															
GDP	**0.2**	**0.5**	**0.2**	**0.4**	**0.7**	**0.5**	**0.2**	**0.4**	**0.6**	**0.5**	**0.5**	**0.5**	**1.5**	**1.8**	**1.9**
Private consumption (52%)	0.4	0.4	0.6	0.4	0.7	0.4	0.5	0.2	0.3	0.6	0.6	0.6	1.9	1.9	1.7
Investment (20%)	0.3	0.2	0.3	1.7	1.5	–1.3	–0.1	0.4	1.7	0.3	0.7	0.7	1.1	2.0	2.4
Public consumption (21%)	0.5	0.5	1.0	1.5	1.6	0.7	0.1	0.3	0.4	0.5	0.5	0.5	2.8	4.0	1.6
Exports (46%)	1.1	1.5	0.0	–0.7	1.6	1.1	–0.3	1.7	1.3	0.8	0.8	0.8	4.6	2.5	4.0
Imports (39%)	1.6	0.3	1.2	0.5	1.5	0.2	0.6	2.5	0.4	1.5	1.2	1.2	5.0	3.7	4.7
Contributions to GDP growth															
Domestic demand excluding inventories	0.3	0.4	0.5	0.8	1.0	0.1	0.3	0.2	0.6	0.5	0.6	0.6	1.8	2.2	1.7
Changes in inventories	–0.1	–0.4	0.2	0.1	–0.4	0.0	0.3	0.4	–0.4	0.1	0.0	0.0	–0.4	–0.1	0.1
Foreign trade	–0.1	0.6	–0.5	–0.5	0.1	0.4	–0.4	–0.2	0.4	–0.2	–0.1	–0.1	0.1	–0.3	0.0

Forecast

Italy (16%)[1]	Quarterly change in %												Annual change in %		
	2015				2016				2017						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2015	2016	2017
Supply and use table (in real terms)															
GDP	**0.3**	**0.4**	**0.1**	**0.2**	**0.4**	**0.1**	**0.3**	**0.3**	**0.4**	**0.3**	**0.3**	**0.3**	**0.7**	**1.0**	**1.3**
Private consumption (60%)	0.3	0.6	0.6	0.3	0.1	0.5	0.2	0.1	0.5	0.1	0.2	0.2	1.6	1.3	1.1
Investment (17%)	0.5	0.5	0.4	0.7	0.9	0.4	1.5	1.2	–0.8	0.5	0.5	0.5	1.4	3.1	1.7
Public consumption (20%)	–0.8	–0.2	0.1	–0.1	0.8	–0.2	–0.2	0.6	0.5	0.2	0.2	0.2	–0.7	0.6	1.1
Exports (30%)	1.4	1.3	–1.2	1.6	–0.6	2.2	0.3	1.9	0.7	1.1	1.0	0.9	4.1	2.6	4.4
Imports (27%)	3.9	1.4	0.0	1.6	–1.2	2.2	1.0	2.3	1.6	0.6	0.9	1.0	6.7	3.1	5.6
Contributions to GDP growth															
Domestic demand excluding inventories	0.1	0.4	0.5	0.3	0.4	0.3	0.3	0.4	0.3	0.2	0.2	0.2	1.0	1.4	1.1
Changes in inventories	0.7	–0.1	0.0	–0.1	–0.1	–0.3	0.1	0.0	0.4	–0.1	0.0	0.0	0.2	–0.4	0.4
Foreign trade	–0.6	0.0	–0.4	0.1	0.1	0.1	–0.2	0.0	–0.2	0.2	0.1	0.0	–0.6	–0.1	–0.2

Forecast

Spain (11%)[1]	Quarterly change in %												Annual change in %		
	2015				2016				2017						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2015	2016	2017
Supply and use table (in real terms)															
GDP	**1.0**	**0.8**	**0.9**	**0.8**	**0.8**	**0.8**	**0.7**	**0.7**	**0.8**	**0.8**	**0.7**	**0.6**	**3.2**	**3.2**	**3.0**
Private consumption (57%)	0.5	0.9	1.0	0.7	0.9	0.7	0.6	0.8	0.4	0.6	0.5	0.4	2.9	3.2	2.3
Investment (20%)	2.4	2.3	0.7	0.9	0.4	1.4	–0.1	0.5	2.0	1.6	1.1	1.2	6.0	3.1	4.8
Public consumption (20%)	1.2	0.5	0.4	0.6	0.2	–0.6	0.5	–0.2	0.3	0.3	0.3	0.3	2.0	0.8	0.8
Exports (33%)	1.3	0.9	2.2	0.5	0.2	3.4	–1.2	2.0	4.0	0.0	1.0	1.0	4.9	4.4	6.6
Imports (30%)	1.3	1.7	2.3	0.6	–0.2	2.6	–2.0	1.8	3.8	0.0	0.8	0.8	5.6	3.3	5.5
Contributions to GDP growth															
Domestic demand excluding inventories	1.0	1.1	0.8	0.7	0.6	0.6	0.4	0.5	0.7	0.7	0.6	0.5	3.2	2.6	2.4
Changes in inventories	–0.1	0.0	0.1	0.1	0.0	–0.1	0.1	0.1	–0.1	0.0	0.0	0.0	0.1	0.1	0.0
Foreign trade	0.0	–0.3	0.0	0.0	0.1	0.3	0.2	0.1	0.2	0.0	0.1	0.1	–0.1	0.5	0.5

Forecast

How to read it: % in brackets represent the weight in the nominal GDP in 2016.
1. Share in Eurozone GDP in 2016

Sources: Eurostat, Destatis, Istat, INE, INSEE forecast

United States of America	Quarterly change in %												Annual change in %		
	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Supply and use table (in real terms)															
GDP	**0.5**	**0.6**	**0.5**	**0.2**	**0.2**	**0.4**	**0.9**	**0.5**	**0.3**	**0.7**	**0.5**	**0.5**	**2.6**	**1.6**	**2.1**
Private consumption (68%)	0.6	0.7	0.7	0.6	0.4	1.1	0.7	0.9	0.2	0.7	0.5	0.5	3.2	2.7	2.4
Private investment (16%)	0.9	1.1	1.4	0.0	–0.2	–0.3	0.0	0.7	2.9	0.8	0.9	0.9	4.0	0.7	4.7
Government expenditures and public investment (18%)	0.6	0.8	0.5	0.3	0.4	–0.4	0.2	0.0	–0.3	0.6	0.5	0.6	1.8	0.8	0.6
Exports (13%)	–1.5	0.7	–0.7	–0.7	–0.2	0.4	2.4	–1.1	1.4	0.8	0.9	0.9	0.1	0.4	3.2
Imports (17%)	1.4	0.7	0.3	0.2	–0.2	0.1	0.5	2.2	0.9	1.2	1.1	1.1	4.6	1.1	4.6
Contributions to GDP growth															
Domestic demand excluding inventories	0.7	0.8	0.8	0.4	0.3	0.6	0.5	0.7	0.5	0.8	0.6	0.6	3.1	2.1	2.5
Changes in inventories	0.3	–0.1	–0.1	–0.1	–0.1	–0.3	0.1	0.3	–0.3	0.0	0.0	0.0	0.2	–0.4	–0.1
Foreign trade	–0.4	0.0	–0.1	–0.1	0.0	0.0	0.2	–0.5	0.0	–0.1	–0.1	–0.1	–0.7	–0.1	–0.3

Forecast

United Kingdom	Quarterly change in %												Annual change in %		
	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Supply and use table (in real terms)															
GDP	**0.3**	**0.5**	**0.3**	**0.7**	**0.2**	**0.6**	**0.5**	**0.7**	**0.2**	**0.3**	**0.3**	**0.3**	**2.2**	**1.8**	**1.5**
Private consumption (62%)	0.7	0.5	1.1	0.4	0.7	0.8	0.8	0.7	0.3	–0.2	0.2	0.2	2.5	2.8	1.4
Investment (17%)	1.5	1.2	0.8	–0.9	0.0	0.2	0.6	0.1	1.2	0.5	0.3	0.3	3.4	0.5	2.3
Public consumption (23%)	0.5	0.9	0.2	–0.1	0.5	0.2	–0.2	0.1	0.7	0.3	0.3	0.3	1.2	0.9	1.2
Exports (30%)	3.2	–0.7	–0.6	5.9	–2.9	1.3	–2.1	4.6	–1.6	1.6	0.9	0.8	6.1	1.8	2.9
Imports (32%)	4.1	–2.3	0.6	2.1	0.4	0.3	2.3	–1.0	2.7	0.0	0.6	0.6	5.5	2.8	3.6
Contributions to GDP growth															
Domestic demand excluding inventories	0.8	0.7	0.9	0.1	0.6	0.6	0.5	0.5	0.6	0.0	0.2	0.2	2.4	2.0	1.5
Changes in inventories	–0.2	–0.7	–0.3	–0.4	0.6	–0.2	1.2	–1.4	0.8	–0.2	0.0	0.0	–0.2	0.1	0.3
Foreign trade	–0.4	0.5	–0.3	1.0	–1.0	0.3	–1.2	1.6	–1.2	0.4	0.1	0.1	0.0	–0.3	–0.3

Forecast

Japan	Quarterly change in %												Annual change in %		
	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Supply and use table (in real terms)															
GDP	**1.1**	**–0.1**	**0.2**	**–0.2**	**0.6**	**0.4**	**0.3**	**0.3**	**0.3**	**0.2**	**0.3**	**0.3**	**1.1**	**1.0**	**1.1**
Private consumption (56%)	0.5	–0.4	0.5	–0.6	0.3	0.2	0.4	0.0	0.3	0.2	0.3	0.3	–0.4	0.3	0.9
Investment (23%)	0.8	–0.5	0.3	–0.4	0.0	1.4	0.0	0.7	0.4	1.0	0.8	0.3	0.1	1.0	2.5
Public consumption (20%)	0.9	0.1	0.4	0.7	1.4	–1.2	0.2	0.0	0.0	0.3	0.3	0.3	1.7	1.3	0.2
Exports (16%)	1.5	–4.0	2.2	–0.2	0.5	–1.4	1.9	3.4	2.1	0.5	0.8	0.9	3.0	1.1	6.3
Imports (15%)	1.1	–2.7	2.5	–0.3	–2.0	–1.1	–0.2	1.3	1.4	2.0	0.8	0.8	0.7	–2.3	4.1
Contributions to GDP growth															
Domestic demand excluding inventories	0.6	–0.3	0.5	–0.3	0.5	0.2	0.2	0.2	0.3	0.4	0.4	0.3	0.2	0.7	1.1
Changes in inventories	0.4	0.5	–0.2	0.0	–0.3	0.3	–0.3	–0.2	–0.2	0.1	–0.1	0.0	0.6	–0.3	–0.4
Foreign trade	0.1	–0.2	–0.1	0.0	0.4	–0.1	0.3	0.3	0.1	–0.2	0.0	0.0	0.4	0.6	0.4

Forecast

How to read it: % in brackets represent the weight in the nominal GDP in 2016.

Sources: BEA, ONS, Japan Cabinet Office, INSEE forecast