CONJONCTURE IN FRANCE

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Between trade risks and fiscal stimuli

In early 2019, uncertainties over the economic situation have had a tendency to increase, both internationally and in France. First, uncertainties as to the economic "rules of the game" and then as to the reactions of the various economic actors to any changes there might be to these rules.

Internationally, the prospect of Brexit and the trade war between China and the United States took centre stage, bringing fears of sharp rises in customs duties. Businesses have adapted their preparations accordingly: British imports accelerated sharply in Q1 2019, for example, before what was expected to be the date of Brexit. As a general rule, global value chains continue to be characterised by a very high level of interdependence between countries, although we are already seeing some trade flows being redirected.

In France, the emergency economic and social measures announced last December have resulted in quite a sharp progression in purchasing power at an aggregate level. The acceleration in household consumption has not been as pronounced, however, perhaps reflecting a climate tinged by a wait-and-see attitude in the shadow cast by the yellow vests crisis.

The rest of the year looks likely to be somewhat similar. The international context appears to be slightly less buoyant than last year and world trade is likely to continue slowing down: the outcome of the different trade negotiations underway is constantly being postponed and at this stage it is impossible to rule out the prospect of a "hard" Brexit or an escalation in US protectionism.

The central banks and different governments have nonetheless noted the risk of a slowdown and are adjusting their economic policy. The Federal Reserve, for instance, has suspended the rise in its base rates faced with doubts over inflation and wages. The Chinese economy, meanwhile, should hold up thanks to fiscal stimulus measures and an accommodating monetary policy.

At the start of 2019, the main Eurozone countries have also all introduced fiscal stimulus measures (in one way or another), aiming notably to boost household purchasing power. Despite this, although Eurozone growth was reassuring in Q1 (+0.4%), consumption did not completely keep pace with gains in purchasing power: France is not the only country where the savings ratio climbed.

Navigating between adverse world trade winds and the support expected from the breeze in the sails of income, the Eurozone is likely to see moderate growth through to the end of the year, at around +0.3% per quarter and +1.2% on an annual average basis.

In France, the business climate and household confidence showed an upturn at the beginning of 2019, after hitting a low point in December 2018 in the midst of the social crisis. The growth profile is likely to be smoother, however, as it has been over the last year and a half: the French economy should maintain a growth rate of 0.3% per quarter through to the end of 2019. On an annual average basis, the slowdown in activity is likely to continue (+1.3% in 2019 after +1.7% in 2018 and +2.4% in 2017). But while 2018 was driven by foreign trade in accounting terms, it is domestic demand that is set to be more of a driver in 2019: although the savings ratio is likely to fall only gradually, household consumption should become stronger, driven by dynamic income and contained inflation (forecast to be +1.4% in December 2019); corporate investment should remain dynamic, although decelerating a little. Foreign trade, meanwhile, should weigh down slightly on French growth, unlike last year.

This growth rate should be sufficient to make job creations slightly more dynamic (241,000 net creations forecast in 2019, after 182,000 in 2018). Against the backdrop of a trend towards a slowdown in the labour force, the unemployment rate should continue to fall by around 0.1 points per quarter to stand at 8.3% at the end of the year. ■

General outlook

Protectionist tensions rising while world trade has already slowed

World trade slowing down

After expanding at a rate in excess of 1.0% per quarter in 2017, world trade slowed in 2018. While Chinese imports rebounded over the winter, purchases in the Eurozone and US decelerated.

European growth recovered slightly in Q1 2019 while US domestic demand ran out of steam

After a difficult end to 2018 (+0.1% in the summer and then +0.2% in the autumn), Eurozone activity became more buoyant again at the beginning of 2019 (+0.4%). In Germany, the catch-up in consumption brought a return to growth in activity (+0.4%) after a sluggish last two quarters in 2018 (–0.2% then 0.0%). Italian activity stopped falling (+0.1% in Q1 2019 after –0.1%), although domestic demand remained slow. The Spanish economy remained buoyant (+0.7% in Q1 2019). French growth (+0.3%) carried on at the same pace as at the end of 2018, despite weak exports. Across the Atlantic, US growth was relatively lively at the start of the year (+0.8%), driven above all by foreign trade and stocking, offsetting the weaker contribution of domestic demand to activity over the past year and a half (+0.4 points).

The slowdown in world trade affecting China and certain emerging countries

In China, although the published growth rate is holding up at around 1.5% per quarter, some short-term indicators are looking less positive (retail sales, industrial production) and may be a sign of the ongoing trade tensions and the effect of the global economic slowdown. In the other emerging countries, activity is still dynamic in India, but Turkey and Argentina are continuing to feel the effects of the crises that started in 2018, while Brazil, Russia and the Eastern European countries are seeing their activity slow down somewhat.

In Q1, French activity grew by 0.3%

Since the beginning of 2018, activity in France has grown by an average of 0.3% per quarter. Driven by gains in purchasing power, household consumption (+0.4%) was the main driver of growth in GDP in Q1 (+0.3%). As imports grew more quickly than exports over the winter (+1.4 against +0.4%), foreign trade weighed down on growth in French gross domestic production by 0.3 points. In contrast with their dynamism over the past year and a half (over 1.0% per quarter), corporate investments in services were at a standstill at the start of the year (–0.1%). The rebound in investment in manufactured goods (+2.0% in Q1 2019) buoyed growth in corporate investment (+0.7%), however, although at a less dynamic rate than the average in 2017 and 2018. Finally, French household consumption stagnated (after –0.3% at the end of 2018).

The Euro exchange rate and European sovereign rates fell slightly again

The central banks have taken note of the global economic slowdown

After a rise at the end of 2018, the Federal Reserve (Fed) is watching the economic trends before going any further in moving its base rates. It has also announced that it is putting a halt to the reductions in its balance sheet from next September. The European Central Bank (ECB) is carrying on with its highly accommodating monetary policy: its base rates are staying at their lowest and it will be starting a new refinancing programme (TLTRO) as of September 2019 in the face of the current economic slowdown. These particularly low interest rates have enabled a slight fall in Eurozone sovereign rates and maintained rapid growth (over 5% per year) in outstanding loans to French and German companies and to French households.

From $1.15 to the euro in January, the exchange rate of the euro against the dollar continued to fall slightly to about $1.12 in May.

The price per barrel of oil rebounded in early 2019, before falling again at the end of May

The price per barrel of Brent rose from $55 in January 2019 to over $70 in April, before falling back below $65 at the end of May, the level we have taken as our assumption for our forecasts through to the end of 2019. The various geopolitical tensions in the Middle East and production objectives of the OPEC countries are all uncertainties that may have an effect on these rates in a context of high American stocks.

World trade to continue slowing progressively

The effects of the trade war should become visible from the spring onwards

After several reciprocal hikes in customs duties between the United States and China in 2018, world trade saw a slight improvement during the negotiations in early 2019 between the two countries. This pause in the escalation in customs barriers came to an end in May, however, with the increase in duties from 10% to 25% on $200 billion of American imports from China and the Chinese reprisals that followed. This recent upswing in protectionist measures should weigh down more particularly on the purchases and sales of the two countries from Q2 onwards.

American activity to slow down over the year

In these conditions, after strongly supporting US growth in Q1 2019 (contribution of +0.2 points of GDP), foreign trade should weigh down on it again through to the end of the year. Although US growth was dynamic (+0.8% in Q1 2019, with the effect of the shutdown being weaker than expected), domestic demand contributed only +0.4 points of GDP. After a slight acceleration in the spring, the contribution of domestic demand should remain at around +0.5 points of GDP per quarter through to the end of the year: household consumption and private investment are likely to grow only by around 0.5% per quarter in H2 2019.

If an agreement is found on Brexit between the UK and EU, UK growth should stall in the spring before recovering in the summer (+0.4%) and then slowing again at the end of the year (+0.1%).

Japanese activity to be marked by the rise in consumption tax

In Japan, after growth of 0.6% in Q1 2019, driven by foreign trade, activity is set to slow down in the spring despite the support provided by the tax incentives for companies in the wage negotiations. Household consumption should then be more buoyant over the summer, in anticipation of the two-point rise in consumption tax scheduled for October. As with the previous rise in this tax in 2014, consumption should fall back significantly in the autumn, dragging GDP downwards.

The Chinese slowdown likely to be contained by public policies in favour of demand

Chinese activity should hold up despite the consequences of the trade war with the United States. Recent public measures should contribute to limiting the slowdown by supporting domestic demand (cut in value added tax, tax incentives for purchases of hybrid vehicles, support for real estate investment, for example).

Moderate Eurozone growth after a dip at the end of 2018

The European economic climate has been darkening for several quarters

Since the start of 2018, business climates have been falling back in all the major Eurozone countries, more significantly in industry than in services. The few one-off rebounds observed recently would seem to suggest that this trend is likely to level out, at best. In addition to production issues at the end of 2018 in the automotive and chemicals sectors in Germany, the international context may have weighed down on the morale of entrepreneurs.

General outlook

Gains in purchasing power should be significant in the main Eurozone countries

A large number of measures have been introduced since the beginning of 2019 to boost household income (*Graph 1*): raises in civil service wages and family allowances and cuts in taxes and social contributions in Germany; citizens' income and lowering of the retirement age in Italy; increase of more than 20% in the minimum wage in Spain; emergency economic and social measures in France. They should result in an acceleration of gains in purchasing power for European households with +2.2% in 2019, after +1.8% in 2018 and +1.5% in 2017. This income is unlikely to be spent in full in the short term and consumption should progress more slowly, as at the start of the year (+0.5% in Q1 against +1.2% in purchasing power). Consumption is nevertheless likely to constitute a major driver for activity, which should only be partly offset by a negative contribution of foreign trade (contribution of –0.2 points to growth in GDP in 2019 after +0.1 points in 2018).

Spain to remain dynamic and Italy bleak

Eurozone activity should therefore grow by around 0.3% per quarter through to the end of 2019. As over the past year, growth should be relatively dynamic in Spain (+0.6% per quarter) and less so in France (+0.3%) and Germany (+0.2%), while the activity outlook in Italy is likely to remain bleak (+0.2% then +0.1% per quarter through to the end of the year).

On an annual average basis, French exports to continue slowing in the wake of world trade

After an expected fall in the spring, French manufacturing deliveries may accelerate through to the end of 2019

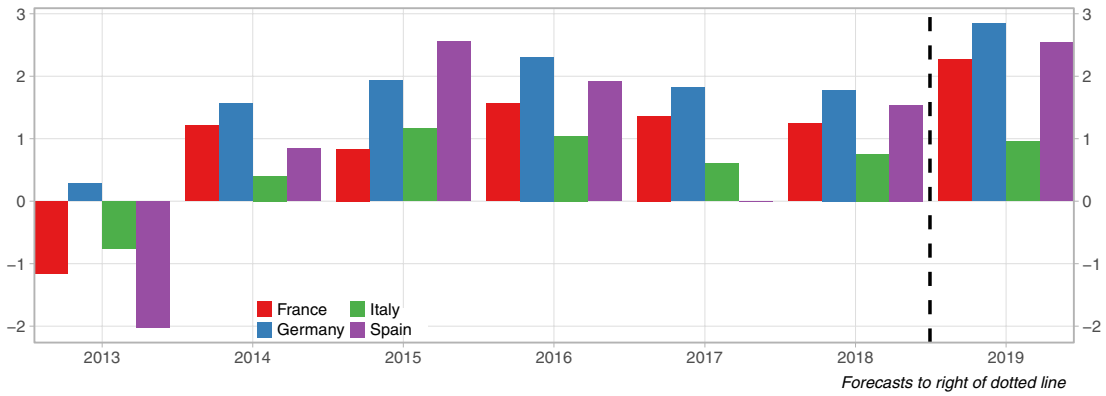
French exports slowed in Q1 (+0.4%) after a dynamic end to 2018. They should fall back in Q2 (–0.7%), notably due to the absence of any deliveries of cruise ships after two successive quarters when such exceptional sales contributed almost one percentage point to quarterly manufacturing exports. After expanding over the summer (+0.7%), more in line with world demand, exports are likely to accelerate at the end of the year (+1.4%), driven by the acceleration in aeronautics sales. On average in 2019, exports should continue the slowdown that has been underway for the past two years (+2.5% after +3.5% in 2018 and +4.0% in 2017).

The contribution of foreign trade to growth set to be slightly negative in 2019

Imports should stall in the spring (–0.3% after +1.4% over the winter), before growing again at a rate close to 1.0% per quarter during the second half of the year to serve domestic demand. In 2019, they should increase by 2.8%, after +1.2% in 2018. The contribution of foreign trade to growth should become slightly negative again in 2019 (–0.1 points) after providing strong support in 2018 (+0.7 points).

1 - Household purchasing power in the major Eurozone countries to accelerate significantly in 2019

annual changes in purchasing power of household gross disposable income, in %



Source: Eurostat, INSEE previsions

French growth likely to be comparable to that in the Eurozone

Since early 2019, the business climate has shown an upturn in industry and services alike

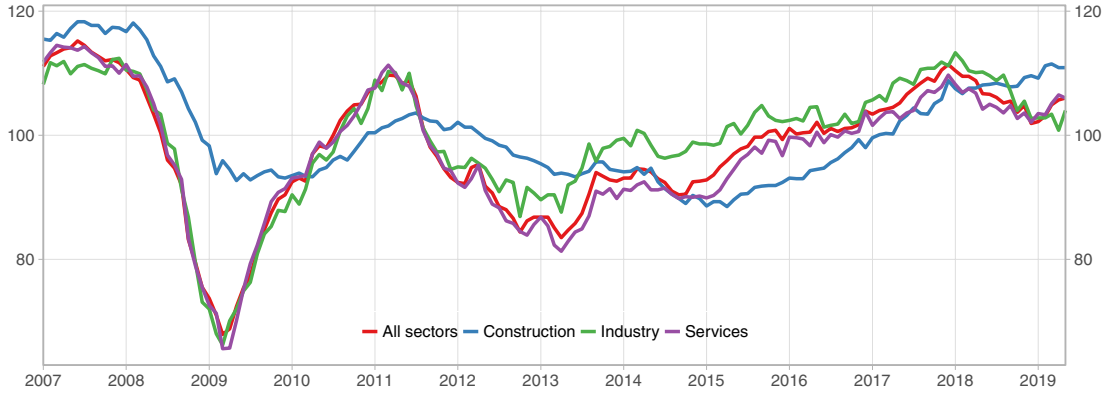
After losing almost 10 points between the end of 2017 and the end of 2018, the business climate in France has recovered slightly since the start of 2019 (*Graph 2*). It stood at 106 in May, above its long-term average. Climates in the services and industrial sectors followed almost the same trend, reaching 106 and 104 in May.

French economic activity to keep up growth of 0.3% per quarter through to the end of 2019

In this context, the French economy should remain at a growth rate of around 0.3% per quarter through to the end of the year. Household consumption (about +0.4% per quarter) should be its main driver. In 2019, households are likely to increase their consumption by 1.3%, after +0.9% in 2018; corporate investment, meanwhile, should grow by only 3.3% in 2019, a rate that may be dynamic but is less than in 2018 (+3.9%) and even more so than in 2017 (+5.0%). As regards the branches, the growth in added value should be driven much more by market-sector services (around +0.4% per quarter through to the end of the year) than by industry or construction. After the economic slowdown in 2018, this continued growth at a quarterly rate close to that observed since the beginning of 2018 should lead to a deceleration in GDP on an annual average basis, at +1.3% in 2019, after +1.7% in 2018 and +2.4% in 2017 (*Graph 3*).

2 - The business climate in France is recovering in early 2019 after falling significantly throughout 2018

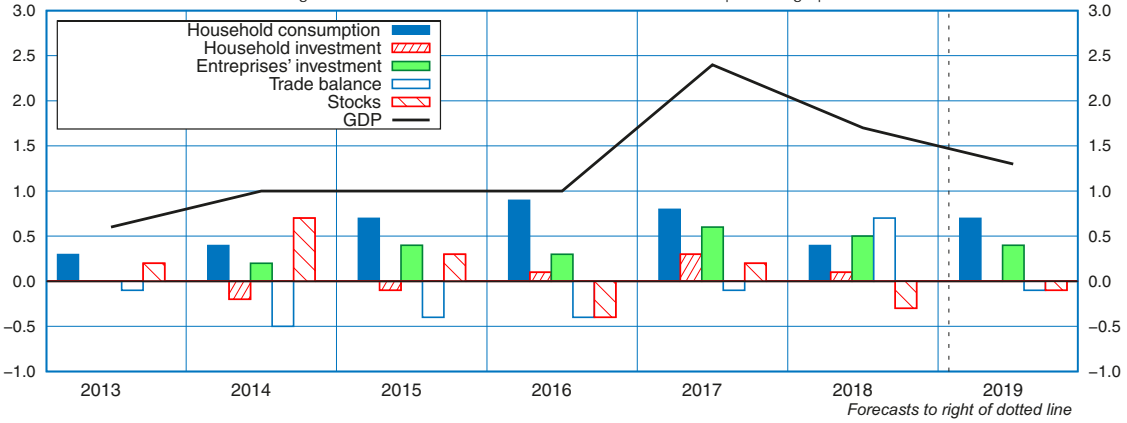
summary indicators in points



Source: INSEE, business surveys

3 - Domestic demand to be the main driver of growth in 2019, while the contribution of foreign trade should become slightly negative again

changes in GDP in % and main contributions of demand in percentage points



Source: INSEE

General outlook

Although moderate, growth in economic activity is likely to be enough for the fall in the unemployment rate to continue

The rate of market-sector job creations to remain sustained in 2019

In Q1 2019, market-sector employment (+92,000) grew sharply. Temporary employment contributed to this (+8,000), after falling back for a year. Industrial employment confirmed its recent upward trend, for instance, while job creations in construction remained dynamic. Through to the end of the year, market-sector job creations should continue at a rate of 40,000 per quarter, comparable to that observed in 2018. All in all, non-farm market payoll employment is likely to grow by 213,000, after 167,000 in 2018 and 323,000 in 2017.

After a fall in 2018, the number of beneficiaries of subsidised employment should be almost stable in 2019. Non-market-sector employment should therefore grow slightly, with the result that total employment should increase by 241,000 in 2019, after +182,000 last year.

The unemployment rate to fall at a rate of 0.1 points per quarter

In a context of a gradual slowdown in the labour force, these job creations should enable the fall in the unemployment rate to continue, by about 0.1 points per quarter. It should therefore stand at 8.3% next autumn, after 8.7% last winter.

Household purchasing power to progress sharply in 2019

Inflation to remain at between +1% and +1.5% through to the end of 2019

Inflation dropped below 1.5% at the start of 2019. The rise in the below-cost selling threshold last February and rules on promotions in the Agriculture and Food Law would appear to have had only a limited effect on the consumer price index (Focus in the Consumer Prices sheet). Through to the end of the year, headline inflation is likely to fluctuate between +1% and +1.5%, despite the expected rises in the regulated prices of electricity in June and of tobacco in November. Core inflation should remain below 1% during the same period.

Wages surged in Q1 2019 with the tax and social contribution-exempt exceptional bonus

The exceptional bonus proposed as part of the emergency economic and social measures stimulated growth in the nominal average wage per capita in the non-agricultural market sector to +1.0% in Q1 2019. Over €2 billion was paid out by companies between the end of December and March. However, part of this amount may have been paid in place of the bonuses that are subject to tax and social contributions that are usually paid out to employees at this time of year. The return to more usual earned income in Q2 should cause the average wage per capita to fall back (–0.4%), before returning to growth of 0.5% per quarter through to the end of the year. All in all, the nominal average wage per capita should grow by 1.9% in 2019 (+0.8% in real terms), after +1.7% in 2018 as in 2017 (+0.2% and +0.8% respectively in real terms).

Household purchasing power to accelerate in 2019

In Q1 2019, buoyant earned income went hand in hand with the rise in the activity bonus and the broadening of its eligibility terms, the reduction in the rate of the General Social Contribution (CSG) for certain categories of income, and the exemption from taxes and social contributions on overtime. The rise in household income thus came to 1.0% in Q1. As the exceptional bonus will not be paid out again in the following quarter, payroll received by households and their gross disposable income should progress only weakly. This income should pick up in the summer (+0.5%) then accelerate in the autumn (+1.0%) due to the ongoing reduction in housing tax. On average in 2019, household gross disposable income should grow by 3.4%, after 2.7% the previous year. Gains in the purchasing power of gross disposable income should

be 2.3% (or 1.8% per consumption unit) after +1.2% in 2018 (or +0.7% per consumption unit, *Graph 4*).

Household consumption and savings to benefit from these gains in purchasing power

Profiting from the sharp rises in real income at the end of 2018 and start of 2019 and the return of household confidence to its long-term average level, household consumption is likely to increase at a rate of around 0.4% per quarter through to the end of the year (Special Analysis on What is the link between household purchasing power and consumption in France today?). Households are therefore likely to continue smoothing out the effects on their consumption of the quarterly fluctuations in their income. After a peak at 15.3% at the start of the year, the savings ratio should therefore drop back to between 14.7% and 15.0% in H2 2019. On an annual average basis, household consumption expenditure should grow by 1.3% in 2019, after +0.9% in 2018 and +1.6% in 2017.

Corporate investment to buoy up growth, but more moderately

Supply-side difficulties remain significant but are easing slightly

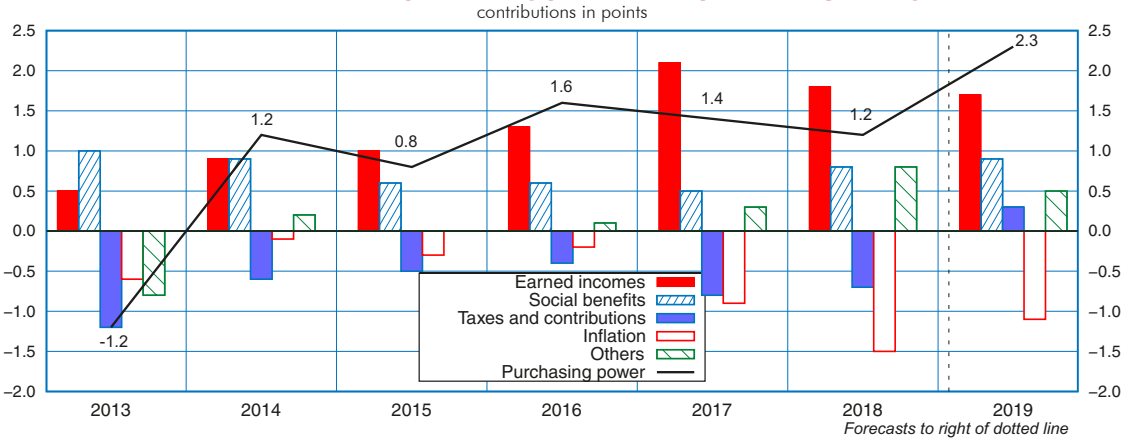
Production capacity and equipment tensions reached high levels at the end of 2018, but have eased slightly in early 2019. Symmetrically, demand-driven restrictions on corporate activity have increased slightly (*Graph 5*). This shift could lead companies to revise their investment perspectives downwards slightly, although they remain buoyant, supported by favourable financing terms and, on a one-off basis, by the transformation of the tax credit for encouraging competitiveness and jobs (CICE) into a permanent reduction in employers' social contributions. Investment in services should therefore slow down in 2019 (+4.2% after +5.5% in 2018). Investment in manufactured goods is likely to decelerate in H2 after a dynamic start to the year. It should grow by 3.7% in 2019, after +2.0% in 2018.

In this year leading up to the municipal elections, general government investment should also remain brisk: it is likely to progress by 2.9% (after +2.4% in 2018), buoyed notably by public construction.

The fall in household investment set to continue

Household investment should continue to fall back (by about –0.1% to –0.3% per quarter) through to the end of 2019. The downward trend in housing starts is still weighing down on investment in building and is not being offset by the modest growth in maintenance and home improvement activity. The volume of transactions for existing homes remains high but is no longer increasing, with the result that the level of household investment in services is stagnating. Year on year, the slowdown in household investment in 2019 should lead to a fall of 0.3%, after +2.0% in 2018 and +6.6% in 2017.

4 - Growth in household purchasing power to be particularly strong in 2019



Source: INSEE

The outcome of trade negotiations a threat to global activity

The effects of the protectionist escalation may be greater in 2019 than last year

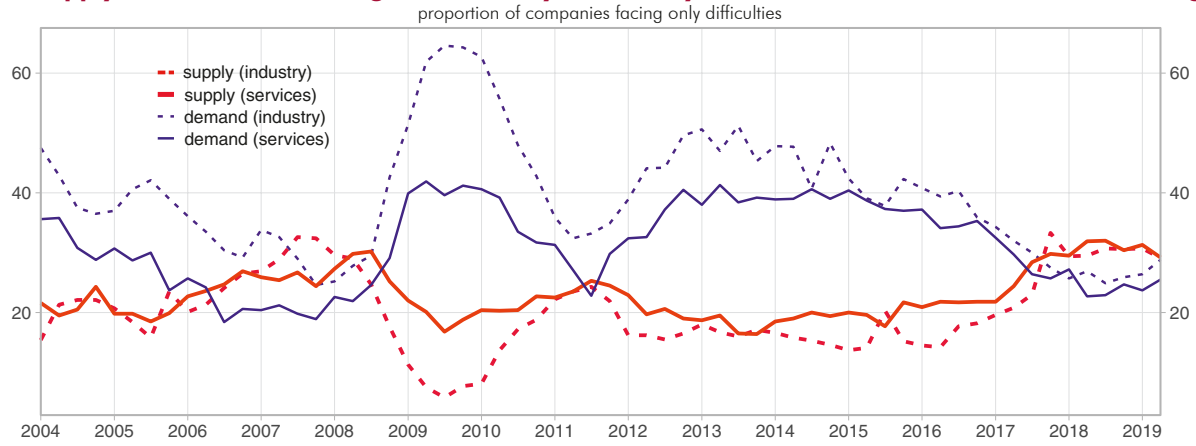
Although the effects of the various waves of protectionist measures taken in 2018 have not yet materialised, further hikes in duties have been announced by the United States. Their impacts and those of any reprisals could be all the greater and take longer to occur in that they may be accompanied by unilateral measures in addition to hikes in customs duties. The trade war that is currently centred on China and the US could also have a direct effect on Europe and its mass exports, such as automobiles.

In addition to this, the Brexit negotiations have still not been completed and continue to bring uncertainties on both sides of the Channel (Focus in the United Kingdom sheet).

What proportion of the fiscal stimulus for household income in the Eurozone will be passed on to consumption?

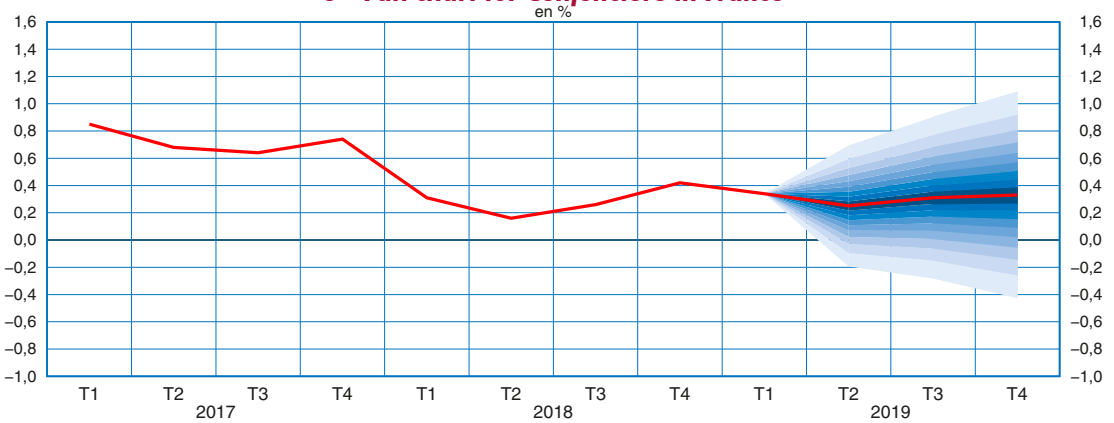
In the Eurozone, the reactions of economic agents to fiscal stimulus measures remain uncertain. These measures, notably to buoy household consumption, should make a positive contribution to growth through to the end of the year, but the extent of their impact will depend on the choices households make between consumption and saving. Finally, in France, it is not impossible that the recent rebound in the business climate and household confidence might lead to more dynamic activity than forecast. ■

5 - supply difficulties are easing somewhat; symmetrically, those related to demand are resurfacing



Source: INSEE, business surveys

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 2019 has a 50% chance of being between +0.1% and +0.4% ; for Q3 2019, up to a 90% probability the estimate will be between –0.3% and +0.9%.

Source: INSEE

Key figures: France and its international environment

	2017				2018				2019				2017	2018	2019 acquis
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
International environment															
Advanced economy GDP	0.6	0.7	0.7	0.5	0.5	0.7	0.4	0.4	0.5	0.3	0.4	0.3	2.4	2.2	1.8
Eurozone GDP	0.7	0.7	0.7	0.7	0.4	0.4	0.1	0.2	0.4	0.3	0.3	0.3	2.5	1.9	1.2
Barrel of Brent oil (in dollars)	54.7	50.9	52.2	61.5	66.8	74.4	75.2	67.4	63.2	69	65	65	54.8	71	65.5
Euro–dollar exchange rate	1.06	1.1	1.17	1.18	1.23	1.19	1.16	1.14	1.14	1.13	1.13	1.13	1.13	1.18	1.13
World demand for French products	1.6	1.5	1	1.9	0.6	0.7	0.7	0.3	1.1	0.4	0.7	0.6	5.5	3.9	2.7
France - supply and uses															
GDP	**0.9**	**0.7**	**0.6**	**0.7**	**0.3**	**0.2**	**0.3**	**0.4**	**0.3**	**0.3**	**0.3**	**0.3**	**2.4**	**1.7**	**1.3**
Imports	2.0	–0.1	1.4	0.6	–0.7	0.8	–0.2	1.1	1.4	–0.3	0.9	1.1	4.1	1.2	2.8
Household consumption	0.3	0.3	0.6	0.2	0.3	–0.3	0.4	0.3	0.4	0.3	0.5	0.4	1.6	0.9	1.3
GG and NPISHs consumption	0.2	0.4	0.6	0.2	0.0	0.1	0.1	0.4	0.2	0.3	0.3	0.3	1.5	0.8	1.0
Total GFCF	2.4	1.1	1.2	0.9	–0.1	1.0	0.8	0.6	0.5	0.5	0.4	0.4	5.0	2.8	2.3
of which: NFEs	*3.0*	*0.7*	*1.5*	*1.4*	*–0.1*	*1.3*	*1.3*	*0.8*	*0.7*	*0.8*	*0.5*	*0.4*	*5.0*	*3.9*	*3.3*
Households	*2.2*	*2.2*	*0.8*	*0.5*	*0.1*	*0.7*	*0.3*	*–0.3*	*0.0*	*–0.3*	*–0.2*	*–0.1*	*6.6*	*2.0*	*–0.3*
Exports	–0.2	2.5	0.7	2.1	–0.4	0.7	0.5	2.0	0.4	–0.7	0.7	1.4	4.0	3.5	2.5
Contributions (in point)															
Domestic demand excluding changes in inventories [1]	0.7	0.5	0.7	0.4	0.1	0.1	0.4	0.4	0.4	0.3	0.4	0.4	2.3	1.3	1.4
Changes in inventories[1]	0.8	–0.6	0.2	–0.1	0.1	0.1	–0.4	–0.2	0.3	0.0	–0.1	–0.1	0.2	–0.3	–0.1
Net foreign trade	–0.7	0.8	–0.2	0.4	0.1	0.0	0.2	0.3	–0.3	–0.1	0.0	0.1	–0.1	0.7	–0.1
France situation of households															
Total employment (variation en fin de trimestre)	96	96	52	99	46	23	39	74	98	47	49	48	343	182	241
Non-farm market sector employment	77	85	52	108	39	31	34	63	92	41	40	40	323	167	213
ILO unemployment rate France[2] (excluding Mayotte)	9.6	9.5	9.6	8.9	9.2	9.1	9.1	8.8	8.7	8.5	8.4	8.3	8.9	8.8	8.3
Consumer price index[3]	1.1	0.7	1	1.2	1.6	2	2.2	1.6	1.1	1.3	1	1.4	1	1.9	1.2
Core inflation[3]	0.4	0.4	0.5	0.6	0.9	0.8	0.7	0.7	0.5	0.8	0.9	1	0.5	0.8	0.8
Household purchasing power	0.2	0.6	0.5	0.6	–0.7	0.9	0.3	1.1	0.9	–0.2	0.2	0.8	1.4	1.2	2.3

Forecast
1. Changes in inventories include acquisitions net of sales of valuable
2. For annual data, unemployment rate is that of the last quarter of the year
3. Year-o-year on the last month of the quarter and annual averages

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 %.
GDP: gross domestic product
GFCF: gross fixed capital formation
GC: general government
NFEs: non-financial enterprisest
NPISHs: non-profit institutions serving households
ILO unemployment: unempoyment as defined by the International Labour Organisation
Source: INSEE

Special Analysis

How are purchasing power and household consumption linked in France in 2019?

An analysis of the different categories of households and forms of consumption

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In 2018 the purchasing power of households' gross disposable income (GDI) fluctuated greatly from one quarter to the next, falling at the start of the year and growing toward the end, particularly as a result of the fiscal calendar. At the same time, household consumption was relatively resilient in Q1 2018 but did not keep pace with the increase in income in Q4. The sub-annual trajectory of the savings ratio of households, i.e. that portion of their income which is not spent on consumption, fluctuated significantly as a result. In order to comprehend these variations, this Special Analysis proposes to examine the links between income and consumption, with reference to the standard of living of households and the nature of their expenditure.

Over the long term, the structure of both income and consumption has changed. Firstly, the socio-fiscal system appears to have become increasingly committed to the principle of redistribution, increasing the proportion of income which comes from social benefits but also, in return, ramping up the scale of compulsory contributions. As such, quarterly fluctuations in income are now more sensitive to variations in taxes and social contributions. The structure of consumption has also evolved, in favour of forms of expenditure which are less sensitive to short-term variations in income, particularly expenditure defined as "pre-committed" (compulsory expenditure, such as housing costs).

The analysis can be refined down to the different categories of households, specifically their standard of living. The 20% of households with the lowest income are more dependent on social transfers for their income, and a large share of their consumption is devoted to expenses which cannot easily be avoided. At the other end of the scale, the 20% of wealthiest households live primarily on earned income and property income; a greater share of their consumption goes on "discretionary" expenditure (leisure activities, accommodation and restaurants, capital goods etc.).

This Special Analysis applies a dual analytical framework (household category and type of consumption) to the links between income and consumption. We thus constructed various error correction models, arriving at a model based on types of consumption, then broad categories of expenditure depending on their sensitivity to income level (pre-committed, non-discretionary and discretionary spending). Aggregating these forecasts for each type of consumption appears to be more effective than using a traditional equation designed to study total consumption.

The results confirm the importance of forms of expenditure which are sensitive to variations in purchasing power and exogenous factors affecting household expenditure when it comes to understanding the short-term fluctuations of aggregated consumption. In 2018, discounting exceptional short-term factors, the relative sluggishness of consumption growth could be explained by the time it takes for household consumption to adapt, on account of the nature of their expenditure and the delayed effects on purchasing power. ■

How are purchasing power and household consumption linked in France in 2019 ?

Purchasing power has seen sizeable quarter-to-quarter fluctuations since 2018

In 2018 the variation in household purchasing power, i.e. households' gross disposable income corrected for consumer price variations, fluctuated sharply from one quarter to the next, falling early on in the year and accelerating considerably towards the end. These jolts were largely caused by measures modifying (in both directions) consumer prices and the rate of tax applied to household income, introduced in different quarters, as well as the rise in oil prices. In 2019, after increasing rapidly in Q1 as a result of the "economic and social emergency measures," purchasing power should return to a rate of growth more in line with the long-term trend.

The savings ratio displayed major fluctuations, indicating that the increases and decreases in purchasing power were not immediately passed on to consumption.

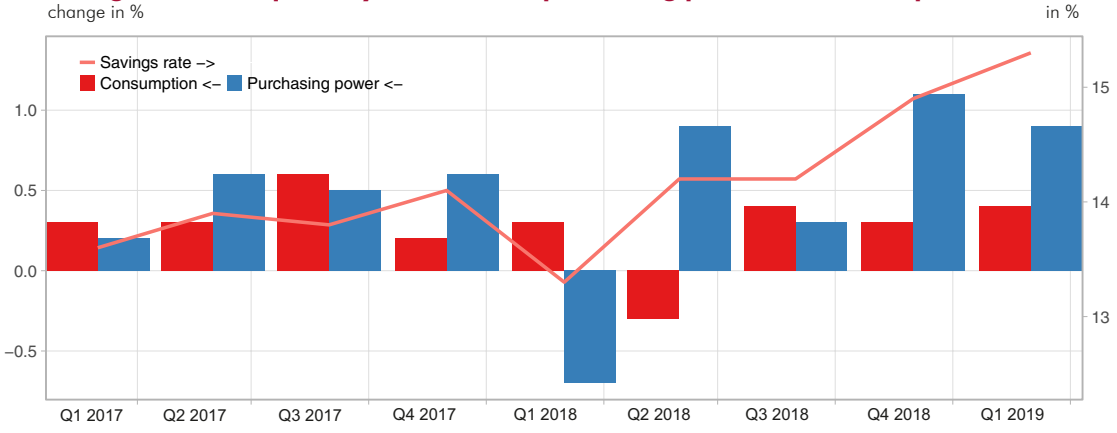
The savings ratio (respectively, the average propensity to consume) corresponds to the share of income flows allotted to savings (respectively, to consumption). Since early 2018, the savings ratio has also witnessed severe jolts which reflect the fact that, in the immediate short term, household consumption has not mirrored fluctuations in income (*Figure 1*). In Q1 2018 purchasing power fell by 0.7%, the most severe quarterly fall since the recession-hit quarters of 2008 and 2012. In the meantime, consumption nevertheless increased by 0.3%, causing the savings ratio to fall from 14.1% to 13.3%. Towards the end of the year, the savings ratio jumped to 14.9% as consumption slightly increased by 0.3%, even though purchasing power saw its biggest quarterly increase in 12 years. In Q1 2019 the savings ratio hit 15.3%, as purchasing power again grew more rapidly than consumption.

In order to comprehend these sizeable variations in the savings ratio, it is necessary to analyse the two aggregates from which it is derived: gross disposable income (GDI) and the final consumption expenditure of households. On the one hand, because variations in income are not similar from one category of standard of living to the next, and because consumption habits differ over time and between categories. On the other hand, because consumption may evolve independently of short-term fluctuations in income.

The structure of income varies over time and between categories of households

Over the long term, the socio-fiscal system appears to have become increasingly geared towards redistribution. The rate of taxes and social contributions levied on gross disposable income increased from 21% in the 1950s to more than half in the period 2010 - 2016. Meanwhile, social benefits accounted for 16% of household income in the 1950s and now account for an average of around 35%. In all, the proportion of income

1 - Savings ratio and quarterly variations in purchasing power and consumption since 2017



Source: national accounts ,INSEE

which is dependent upon fiscal and social policy is greater now than in the past, which may induce significant fluctuations in purchasing power in the immediate short term, particularly when new measures are introduced.

More unearned income for the wealthiest households, more social transfers for the most modest

It is possible to break down the household account using the standard of living scale (*Box 1*). It thus becomes evident that the respective proportions of taxes and social benefits are distributed differently between the different categories of households (*Table 1*). Social benefits account for more than half of the GDI of households in the lowest quintile of the standard of living scale (the 20% of households with the lowest standard of living), and only just over a quarter for households in the top quintile (the richest 20% of households). The opposite is true of taxes and social contributions. As a result – although any measure affecting the taxation of income has a more substantial effect on purchasing power in the short term, for all households – the effect varies considerably from one category of household to the next. For example, a uniform increase in a given social benefit will have a stronger impact on the purchasing power of households at the bottom end of the scale.

Table 1 - Structure of the gross disposable income of households by category of standard of living in 2011

As a % of gross disposable incomet	**Q1**	**Q2**	**Q3**	**Q4**	**Q5**	**Household income***
Net earned income	46	56	62	67	63	61
Net wages	36	49	57	64	54	54
Net primary income of sole proprietors	10	7	4	3	9	7
Unearned income	8	11	15	18	29	20
Property income	0	0	0	2	14	6
Income from housing	8	11	15	16	16	14
Net transfers received	45	33	23	15	8	19
Social benefits	53	43	36	30	26	33
Taxes	–5	–9	–11	–14	–20	–15
Other transfers	–3	–2	–1	–1	2	0
Gross disposable income	100	100	100	100	100	100

Key: In 2011, for the 20% of households with the lowest standard of living (Q1), earned income accounts for around 46% of total income, with 36% coming from net wages and 10% from the net primary income of sole proprietors.
N.B.: (*) i.e. sharing the same primary residence, not necessary a joint budget.
Source : INSEE, national accounts

In the short term, substantial variations (positive and negative) in income are essentially caused by variations in taxes and social contributions

Analysis of the quarterly variations in purchasing power over the long term reveals significant fluctuations (*Figure 2*). Taxes and social contributions are the main contributing factors to the short-term variability of purchasing power, whereas the contribution of earned income is relatively stable in comparison. Those quarters with strong variations (both positive and negative) in purchasing power are characterised by a high contribution of income and wealth tax and social contributions. The year 2000 is a good example, with fiscal measures introduced to reduce the level of tax paid by households: cuts to the tax rate in the first two income tax bands, a cut in the rate of VAT and a reduction in local residence tax. The year 2012 provides a counter-example, with the alignment of the taxation of capital with that on earned income. Furthermore, in both 1998 and 2018, the structure of compulsory contributions changed (increase in CSG and reduction in employers' contributions)[1]. In 2018,

1. In 1998, the rate of the general social contribution (CSG) was in creased from 3.4% to 7.5% while social contributions paid by households were reduced. In 2018 the rate of the CSG was increased by 1.7 points while the social contributions paid by employees and independent workers were reduced.

Box 1: Methodology used to construct accounts for the different categories of households

General methodology

Household surveys provide a better understanding of households' income and consumption, and the disparities between different types of households by going beyond the average figures calculated in the national accounts. These surveys also serve to obtain more detailed information on their income and consumption, breaking down the different components of income and consumption for the different categories of households (Accardo et al, 2009).

Data from household consumption surveys are currently only available for the year 2011 (the 2011 Family Budget survey)[1]. However, there are annual data for the period 2011 – 2016 covering the different components of income (the Fiscal and Social Income surveys 2011-2016). The socio-demographic data required to calculate the number of households in each category are derived from the Labour Force Survey, calibrated using the number of households listed in the satellite account for each home.

The various components of disposable income and consumption expenditure are broken down by category of household, in a three-step process[2]:

• Beginning by calculating average values for each category of households (mean wages for each quintile on the standard of living scale, for example);

• Then calculating the total amounts involved, multiplying the averages by the number of households in each category;

• Finally, the different mass values obtained from this process are recalibrated with the total mass calculated in the national accounts (2014 base).

We can thus obtain, for each component of disposable income and consumption expenditure, a breakdown by category of households of the aggregate figures in the national accounts. The sum of these components gives the total disposable income total and consumption for each category; this allows us to deduce total savings and the savings ratio.

The difficulty of this exercise is to effectively treat the differences between the scopes and concepts used in the national accounts and in these surveys.

Differences of scope

The national accounts cover the whole population residing in France, while the surveys used here only cover so-called "ordinary" households and excludes those living in collective accommodation (workers' hostels, retirement homes etc.). A correction is performed on the total values from the accounts to adjust them to the field covered by the surveys.

Financial intermediation services indirectly measured (FISIM), corresponding to the margin rates applied to deposits and loans by banks, are not measured by the surveys. We have therefore excluded FISIM from disposable income and consumption as measured in the national accounting system.

Conceptual differences

Gross disposable income (GDI) as defined in the national accounting system is not measured in the same way in the surveys. The latter do not effectively cover some of its components. For example, social contributions and fraud or undeclared work are not covered by the surveys. Furthermore, GDI as defined in the national accounting system also includes "imputed" rents (rents that home-owners are deemed to pay to themselves).

In order to assign each household in the survey to a quintile on the scale of gross disposable income, we need to estimate GDI. Household GDI is initially calculated using the fiscal and social income survey (ERFS). Incomes which are not so well covered by this survey (income from financial investments) are calculated using econometric estimates recalibrated with reference to the macroeconomic data. The missing components (interest on consumer loans, fraudulent income, undeclared labour etc.) are estimated using a number of hypotheses. An explanatory equation for disposable income is then estimated econometrically in the ERFS, using variables present in the different surveys. The estimated coefficients associated with the variables in the equation are then used to deduce disposable income as per the definition used in the national accounting system in the Family Budget Survey (for 2011). This leaves a classification of households into five quintiles based on GDI which is identical for both surveys. ■

1. The first results of the 2016/207 survey have been published and should make it possible to update the accounts by household category in the near future.
2. This general approach should be slightly modified when the category considered is the quintile of gross disposable income per consumption unit (see *below*).

in light of the implementation schedule for these measures (the reduction in employers' contributions was introduced in two phases), purchasing power was certainly affected in Q1, but changed relatively little over the year as a whole.

The growing weight of social transfers within GDI, as noted above, goes some way to explaining these different contributions to the variability of purchasing power.

Over the long term, the structure of consumption has evolved in favour of forms of expenditure which are relatively unaffected by variations in income

How is household consumption affected by variations in income in the immediate short term? Or to put it differently, when income increases by 1%, how much does household consumption increase immediately and over the ensuing quarters?

In order to answer this question, we can break down consumption into broad categories based on its destination (or groups of products consumed, whether they are goods or services), and their degree of sensitivity to variations in income.

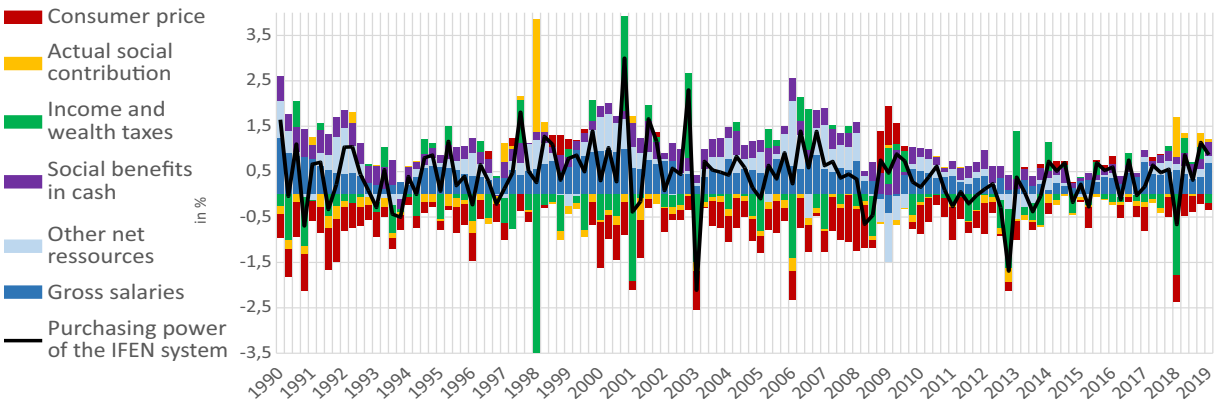
Household consumption can be broken down into three broad categories: from most sensitive to least sensitive to variations in income

The first category corresponds to pre-committed or compulsory expenditure, that is, spending governed by contracts which are very difficult to negotiate in the short term. This category essentially corresponds to housing costs and associated expenses (water, electricity and other regular charges), as well as financial services and insurance (excluding life insurance plans), school meals, TV licence fees, etc. (*Table 2*). At the macro-economic level, while these expenses may be adjusted in the long term – a permanent variation in income may lead to a change in spending on housing – they are non-negotiable or relatively inflexible in the immediate short term. A change in income will have virtually no effect on housing consumption in volume terms within the timeframe of a few quarters.

The second category corresponds to spending which can be defined as non-discretionary, which is to say forms of consumption that are difficult to modulate in the short term because they correspond to basic needs. These include food, healthcare, education, fuel and transport services [2], particularly the cost of commuting. As with pre-committed expenditure,

2. "Fuel" and "transport services" are considered non-discretionary spending because they are essential for certain categories of household (rural households for fuel, urban households for transport services; Ferret & Demoly, 2019).

2 - Contributions to variations in the purchasing power of households



Source: INSEE, national accounts

albeit to a lesser extent, a variation in income will have little short-term impact on the volume of consumption of these goods and services. However, a long-term change in household income may lead to more substantial changes.

Finally, the third category corresponds to discretionary spending, i.e. spending which can be more easily adjusted and is thus, at least in theory, more sensitive to variations in income. This category contains spending on durable goods and other products (furniture, vehicles, clothing and shoes) and more contingent expenditure (leisure activities and culture, alcohol and tobacco, hotels and restaurants, etc.).

This typology is based on the concept of pre-committed expenditure, developed and utilised by INSEE since 2007, but also on an a priori assessment of the flexibility or inflexibility of different forms of consumption. As with all classifications of this nature, it seems likely that the choices will not be as intuitive to some as to others. Nevertheless, the estimates of the sensitivity of these forms of consumption to variations in income – presented in this Special Analysis – enable us to gauge their empirical pertinence.

Table 2 -Classification of final consumption expenditure by households

Pre-commited (compulsory) expenditure	No-discretionary expenditure	Discretionary expenditure
Housing, water, gas, electricity and other fuel	Food products and non-alcoholic drinks	Clothing and shoes
Telecommunication services	Healthcare	Furniture, household items and day-to-day maintenance
Television services	Fuel and lubricants	Leisure and culture excluding television services
Canteen costs	Transport services	Hotels, cafes and restaurants excluding canteens
Insurance, not including life insurance plans	Education	Alcohol and tobacco
Financial services		Other goods and services excluding insurance (except life insurance) and financial services
		Communications excluding telecoms services

Note: the item names correspond to the INSEE classification of types of household consumption (COICOP, 2016).

More pre-committed expenditure and less discretionary spending.

Since 1960, the structure of consumption expenditure has changed. Whereas compulsory expenditure accounted for just 15% of households' final consumption expenditure in 1960, that figure stood at just over 34% in 2016 (*Figure 3*). This increase is primarily due to the growing weight of housing costs, driven both by rising rents (price effect) and the increase in the quality and quantity of homes (volume effect) (Consales et al., 2009).1 The proportion of discretionary and non-discretionary spending has shrunk as a result, and these two categories respectively accounted for 42% and 24% of final consumption expenditure in 2016, compared with 52% and 33% in 1960. Nevertheless, since the mid-1980s the weight of non-discretionary spending has remained stable as a result of the falling cost of spending on food, as the needs of the majority of the population are now saturated by the available supply. Finally, the long-term decline in the weight of spending on furniture, alcohol and tobacco and clothing and shoes has contributed to the declining weight of discretionary spending. All in all, the structure of household consumption has become skewed towards forms of spending which are less flexible, and thus less sensitive to variations in income than was previously the case.

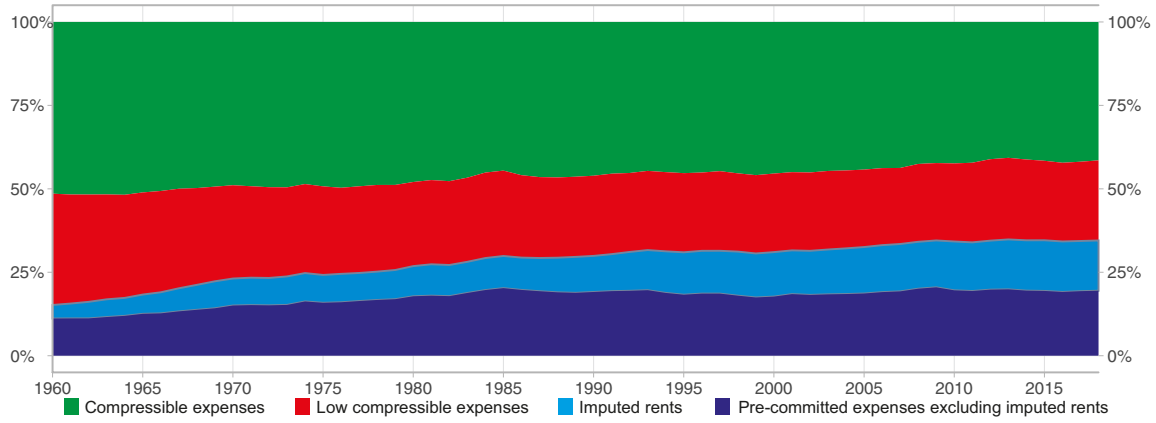
How are purchasing power and household consumption linked in France in 2019 ?

In the short term, some of the variation in household consumption can be explained by the level of compulsory spending, with exogenous shocks also a contributing factor.

In the immediate short term, major variations in consumption can be attributed to those forms of expenditure most sensitive to income levels, i.e. discretionary spending (*Figure 4*). The same applies, to a lesser extent, to non-discretionary spending. Finally, pre-committed expenditure, excluding household energy consumption, is naturally the most stable category in terms of sub-annual variation. To be precise, discretionary spending accounts for 65% of the variability in total consumption expenditure, while pre-committed expenditure excluding energy accounts for just 2.3%. Nevertheless, this share rises to 17% when household energy bills are included. Finally, non-discretionary spending accounts for 15% of the variability.

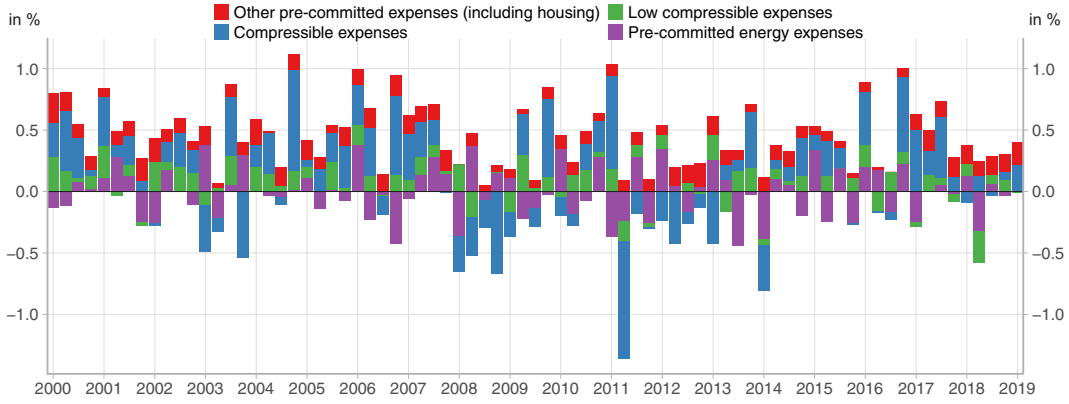
In addition to the variations which can be attributed to the sensitivity of different types of spending to jolts in income, some fluctuations may be caused by exogenous factors independent of the level of income or prices. This is particularly true of household energy bills which, in the immediate short term, are directly connected to variations in recorded temperatures in relation to the seasonal averages. For example, an unusually mild winter means there is less demand for heating, and energy consumption falls as a result. In terms of durable goods, vehicle purchases may be brought forward or pushed back in response to incentives designed to encourage people to buy or sell cars. For example, after the drop-off in the consumption of new cars in 1993, the introduction of scrappage bonuses for old vehicles in the period 1994 – 1996 provided a temporary boost to consumption of transport equipment. Similarly, much of the 1.3% fall in consumption seen in Q2 2011 was caused by the decline in consumption of transport equipment, with -0.8 points of that decline attributed to the termination of the scrappage bonus scheme. In the final quarter of 2018, some households may have postponed their plans to purchase a new vehicle in order to benefit from the scrappage bonus scheme, which was expanded at the start of 2019.

3 - Structure of households' final consumption expenditure by type of expenditure, since 1960



Source: INSEE, national accounts

4 - Contributions to variation in the final consumption expenditure of households



Source: INSEE, national accounts

The savings ratio is non-stationary in the long term, and fluctuates considerably in the short term

Above and beyond short-term variations, the savings ratio also fluctuates in the long term

Over the long term, household saving (and consumption) decisions are not constant (*Figure 5*). Over the past two decades the savings ratio has remained relatively stable compared with previous years, fluctuating around a medium-term average of between 14% and 15%. Nonetheless, the savings ratio is also liable to deviate from its long-term average. After the recession of 2008, the savings ratio hit 16% for four consecutive years. During this period, growing uncertainty over future income caused households to increase their precautionary savings (Faure et al., 2011). Although purchasing power was slowing down, savings did not loose pace and this situation led to a decline in consumption expenditure over the period (Gateaud et al., 2015).

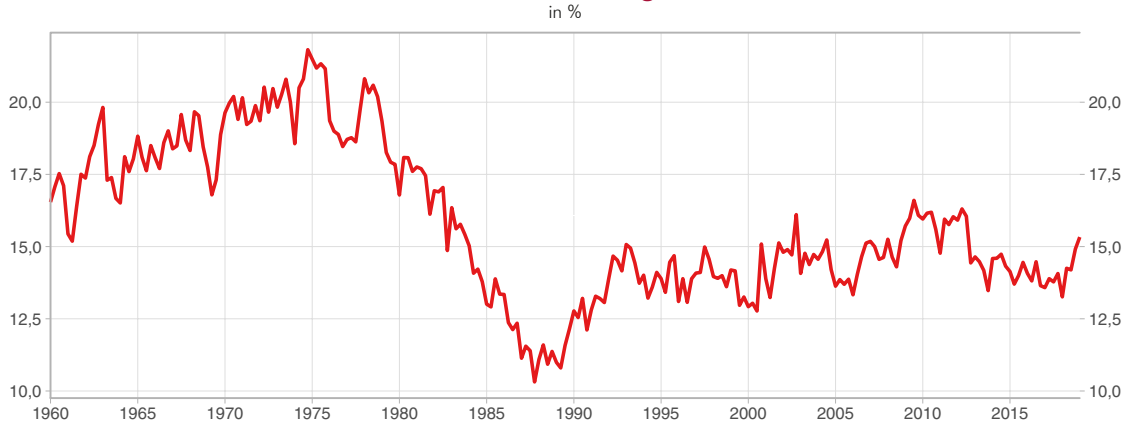
The long-term instability of the savings ratio, coupled with its persistent medium-term deviations, challenge the assumption that the savings ratio is stationary, i.e. that household consumption behaviour is regular and the average propensity to consume remains stable over time. This observation casts doubt on the unit-linking of income and consumption over the long term, as practiced in the traditional consumption equations.

The savings ratio varies substantially at different levels of the standard of living scale

Data for the different categories of households indicate that the least well-off households had a negative savings ratio in 2011 (–13.4% for households in the first quintile), meaning that their consumption exceeded their income. This reflects the fact that their consumption was probably partly covered by borrowing, or by one-off intra-family transfers. At the other end of the scale, the richest households saved almost 40% of their income (*Table 3*). This negative savings ratio illustrates the difficulties encountered by the least well-off households when it comes to smoothing their consumption in the immediate short term, i.e. maintaining a stable level of consumption despite jolts in income by adjusting their level of saving. This is made all the more difficult by the fact that the proportion of their total income which is discretionary, i.e. that income which remains after pre-committed expenditure has been covered, is lower than it is for the wealthiest households (Accardo, Billot & Buron, 2017).

If households are once again divided into different categories based on their standards of living, it can be seen that pre-committed expenditure occupies a greater share of the household consumption of lower-income households, primarily due to the cost of housing (*Figure 6*). At the aggregate level, the ability of households to decide between consuming and saving is reduced when their average outgoings are essentially composed of pre-committed and non-discretionary expenditure. In 2011, the share of consumption allotted to pre-committed expenditure was three points higher for households

5 - Household savings ratio



Source: INSEE, national accounts

whose standard of living puts them in the lowest quintile (the poorest 20%) compared with those households in the highest quintile (the wealthiest 20%). The gap actually stands at 9 points if imputed rents are excluded from pre-committed expenditure, and increases further still if living standards are segmented more accurately (Lelièvre & Rémila, 2018). Similarly, the proportion of non-discretionary spending is greater among lower-income households (31% compared with 25% for the most well-off), largely as a result of spending on food. Finally, the proportion of discretionary spending is higher among the wealthiest households: these households spend more on leisure activities, culture, and hotels and restaurants.

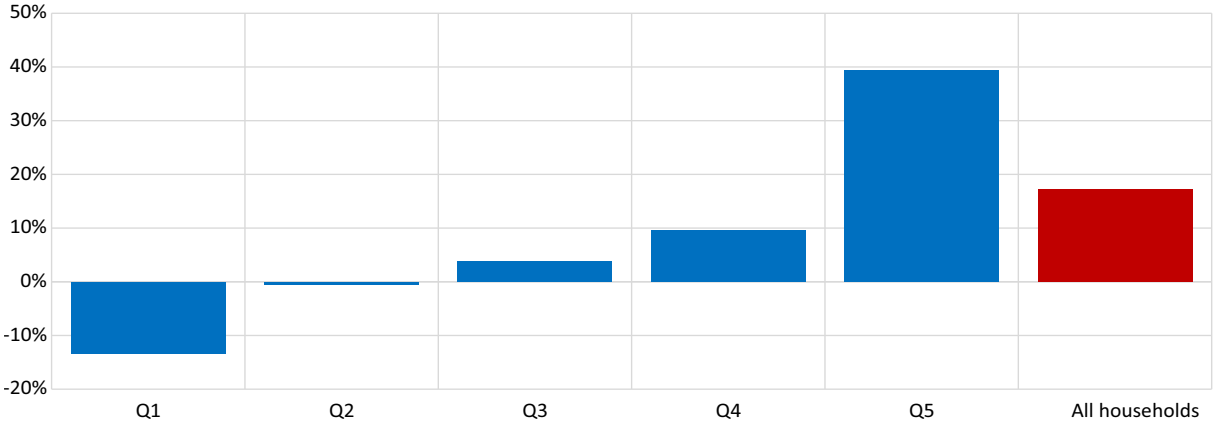
In the short term, fluctuations in the savings ratio are caused by consumption smoothing and one-off shocks.

Substantial variations in disposable income, associated with the smoothing of household consumption over time, are the primary explanation for the short-term fluctuations in the savings ratio. To put it slightly differently, shocks may have a lasting effect on purchasing power. For example, changes in the rate of the general social contribution are not instantaneously passed on to consumption. This is also true of the reduction in income tax in 2000, and the increase in both income and wealth taxes in 2012. Such shocks are therefore mechanically passed on to the savings ratio: they initially induce a variation in the savings ratio which is then gradually absorbed, since consumption takes a certain amount of time to respond (between three and seven quarters on average; see *the Annex*). However, since pre-committed expenditure is difficult to avoid in the short term, unlike discretionary spending, it is highly likely that the reaction time is longer for the former than for the latter.

Furthermore, some of the short-term fluctuations in the savings ratio are not caused by the effects of income on consumption, and tend to dissipate more rapidly. For example, a brief drop in the savings ratio may be the result of a period of "over-consumption" by households. In May and June 2018, consumption of television services saw a sharp increase ahead of the football World Cup, before shrinking again in the aftermath. In January and February 2018, tobacco consumption increased in anticipation of the tax increase scheduled for the following month. Moreover, purchasing power may occasionally vary as a result of one-off bonuses paid by businesses. This was the case in Q1 2019, leading to a backlash effect in the following quarter.

In order to study variations in the savings ratio in greater detail, particularly for the year 2018, we must find an appropriate way of quantifying the sensitivity of consumption to variations in income and consumer prices, taking into account the instability of the savings ratio caused by changes in consumption patterns in the long, medium and short terms.

6 - Savings rate by household category in 2011



Scope: ordinary households
Note: Q1 (resp. Q5) corresponds to the 20% of the poorest (wealthiest) households
Source: INSEE, national accounts

Modelling consumption by type is better suited to analysis of the immediate outlook

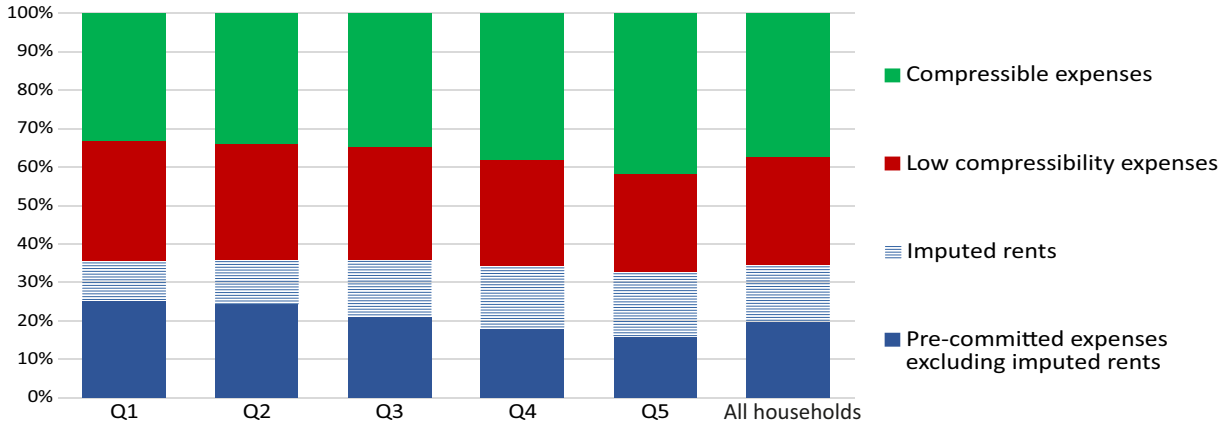
Aggregating forecasts by type of consumption is more effective than a traditional total consumption equation

These variations in the savings ratio can be quantified using error correction models estimated for the different types of consumption (a total of seventeen types of consumption, with four defined as "pre-committed expenditure", five as "non-discretionary spending" and nine as "discretionary spending;" see *Box 2*). This approach offers three key advantages. Firstly, it allows us to take into account the differences in sensitivity to income and prices between different types of consumption: spending on housing is less sensitive to changes in income than spending on alcohol and tobacco, for example. Secondly, it allows us to take into account the separate trajectories followed by the average propensity to consume each of the goods and services identified in the long term. For example, the long-term increase in the share of consumption taken up by housing costs and the decline in the share of spending on food can thus be measured, allowing for more accurate adjustment of the long-term ratios. Thirdly, it enables us to more accurately measure the level of precautionary saving, by adjusting the average propensity to consume for the different types of consumption. For example, after 2008 households reduced their spending on clothing and shoes in order to put more money aside, a choice which can be explicitly integrated into our model (Gateaud et al., 2015). Ultimately, the predictive quality of these models is greater and allows us to reduce the overall level of forecasting error for household consumption (*Figure 7*).

Once the forecasts have been made for these models, it is possible to aggregate the results to obtain a forecast for each category of expenditure. In the detailed results, it appears that fluctuations in purchasing power contribute little to very short-term variations in pre-committed expenditure (*Figure 8*).

The contribution of relative prices is substantial, but follows a fairly stable trajectory from quarter to quarter. On the other hand, the contribution of other variables, especially temperature variations which differ from the seasonal averages, explains the major sub-annual fluctuations in pre-committed expenditure. As for non-discretionary spending, the models reveal a heightened sensitivity to variations in purchasing power and relative prices (*Figure 9*). Finally, discretionary spending is the category most sensitive to variations in purchasing power and relative prices (*Figure 10*). These models thus confirm that pre-committed expenditure is less sensitive to variations in income than non-discretionary spending, which in turn is less sensitive than discretionary spending.

7 - Breakdown of consumption expenditure by type of expense and by standard of living in 2011



Scope: ordinary households
Note: Q1 (resp. Q5) corresponds to the 20% of the poorest (wealthiest) households
Source: INSEE, national accounts

Box 2: modelling household consumption

The econometrics of forecasting consumption

Traditional economic models of household consumption are based on the theories of life cycle and permanent income (Bonnet & Dubois, 1995). In particular, they require the unit-linking of consumption to income in the long-term component, which is to say that consumption is held to adjust itself perfectly to income in the long term. This ensures that the models reflect the stability of household consumption over the long term, or to put it differently, the stationary nature of the savings ratio. While the ratio is not actually entirely stationary in the long term, modelling it as such allows us to avoid any unjustified leaps in the savings ratio when forecasting.

When modelling for different types of consumption, this approach is no longer valid, because the structure of household consumption is not stable in the long term: the proportion spent on food has followed a long-term downward trend, while spending on leisure activities has gone the other way. Therefore, imposing unitary elasticity for all types of consumption in the long-term component would be equivalent to suggesting that households always allocate the same proportion of their income to expenditure in the long term. The equations we use do not retain this unit-linking of consumption to income

Modelling expenditure by type serves to explicitly take account of the particular behaviours associated with each type. For example, the spike in precautionary saving following the crisis of 2008 was counterbalanced by a reduction in discretionary spending (Gateaud et al, 2015); each type of expenditure has its own income and price elasticities; exogenous shocks with an impact on specific forms of expenditure can be measured individually: scrappage bonuses, mad cow disease, anti-smoking initiatives, etc. These models also serve to define the springback effects specific to each type of expenditure, i.e. the average time it takes to return to the long-term trend level (*Table 5*). Finally, we also tested sequential modelling. We began by estimating pre-committed expenditure and non-discretionary spending. We then calculated the "residual" household income left after these expenses have been deducted. Finally, we used that income to predict discretionary spending. The forecasts yielded by these two models proved to be fairly similar.

Comparing the models

It is possible to compare consumption as simulated by aggregating the various models described in this Special Analysis, and a more classical model of the sort proposed by Faure et al. (2011). It appears that our new model more effectively reflects the variations in household consumption. Furthermore, outside the estimation period (1990-2016 or 1995-2016 depending on the models; 1990-2016 for the old model), the average absolute error for 2017-2018 is 0.17 percentage points with the new model, compared with 0.22 when using the old model. The RMSE (root mean square error) is 10% smaller than with the old model. A similar margin is found across the whole estimation period, including error from outside the period. ■

	Type	Spring-back effect	Explanatory Variables				
			Pur-chas-sing power	Rela-tive prices	Trend	Indicative	Others
Pre-committed	Housing	–0.1	*	*	Trend increase in the share of this expenditure	Yes post-crisis 2008	No
	Water, gas, electricity and other fuels	–0.2	*	**	No	No	Temperatures
	Communications	–0.2	**	***	Since 2005, the increase in the share of communications spending has slowed down	No	No
	Financial services	–0.1	*	*	No	No	Logged endogenous
Non-discretionary	Food products and non-alcoholic beverages	–0.2	*	**	No	No	Unemployment rate
	Health	–0.1	*	*	No	No	No
	Fuels	–0.2	***	*	Since 2000. Trend increase in fuel consumption Increase in oil prices.	In 2008. Temporary drop in fuel expenses due to the economic crisis.	Logged endogenous
	Transport services	–0.3	*	**	Trend increase in transport services spending since 1960.	No	No
	Education	<–0.1	*	*	No	No	Logged endogenous
Discretionary	Alcoholic beverages, tobacco, narcotics	–0.2	**	***	No	From 2003 onwards, public health measures.	No
	Clothing and footwear	–0.6	*	***	Trend decline since 1960	Reduced household spending after the 2008 crisis	No
	Furniture, household items and routine household maintenance	–0.1	**	***	No	From 2008: crisis effect.	Logged endogenou
	Vehicle Purchase	–0.5	***	***	No	In 1995, 1996, 2004 and 2011: scrapping premiums.	Unemployment rate
	Vehicle operating expenses, excluding fuel	–0.2	*	***	No	Between 2008 and 2016: crisis effect.	Delayed endogenous, vehicle purchase expenses
	Leisure and culture	–0.3	**	*	Trend increase in the share of spending on culture and recreation: rising standard of living. Broke up in 1998. Breakdown in 2008: crisis effect.	In 2016: attacks and football Euro	Unemployment rate
	Restaurants and hotels	–0.2	*	*	No	From 2008: crisis effect.	Unemployment rate e
	Miscellaneous goods and services, excluding financial services	–0.2	**	*	Trend with disruption in 2007 related to the crisis	No	No

N.B.: The number of stars in the "purchasing power" and "relative prices" columns reflect the amplitude of the short-term elasticity of consumption following variation in one of the two variables: * not sensitive ** sensitive and *** highly sensitive. When elasticity is close to 0, the box is marked *. For elasticity of around 0.5 in absolute value terms, the score is **. Finally, when elasticity is close to 1 in absolute value terms, the score is ***.

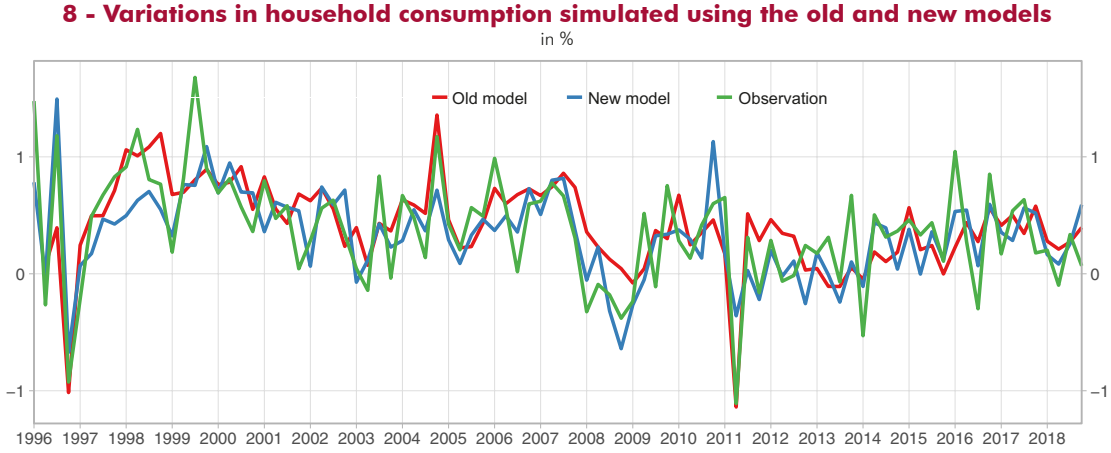
How are purchasing power and household consumption linked in France in 2019 ?

Some types of expenditure take twice as long as others to feel the effects of changes in income

Since consumption does not adjust immediately to positive or negative shocks affecting purchasing power, there must be a transmission period. One of the advantages of estimating the consumption equations for each type of expenditure is that it enables us to calculate the time that each type and broad category of expenditure takes to return to a state of equilibrium in the aftermath of such shocks. For pre-committed expenditure, it takes an average of six quarters. The period is just three quarters for discretionary spending. Finally, it takes on average five quarters for non-discretionary spending to return to equilibrium, placing it between pre-committed expenditure and discretionary spending. As such, a purchasing power shock which leads to a temporary departure of the savings ratio from its long-term level will be fully reabsorbed after four quarters, on average.

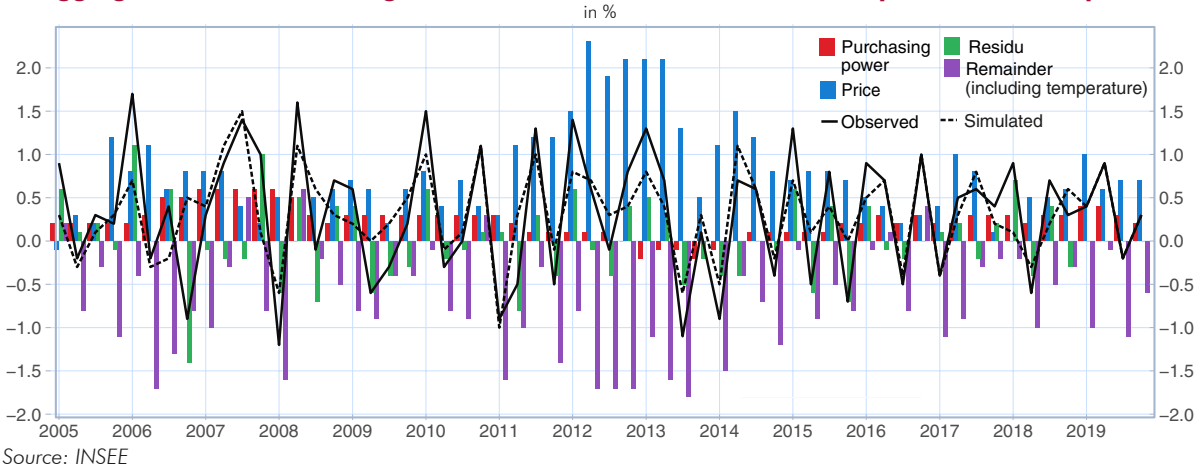
A positive purchasing power shock which affects lower-income households will lead to an increase in consumption, all the more so since their marginal propensity to consume (MPC) is greater than that of other categories of households. Nevertheless, they may take longer to adjust their consumption habits than households in the wealthier categories. This is because the former have a greater proportion of pre-committed expenditure and non-discretionary spending than the latter. As such, if the structure of consumption is presumed to remain stable, a positive and uniform purchasing power shock should be reflected in an increase in the consumption of the least well-off households which is proportionally bigger but less rapid than the corresponding increase in the consumption of those households with the highest standard of living. However, this is based on the assumption that the

8 - Variations in household consumption simulated using the old and new models



N.B.: The former model is the model historically used to forecast consumption, i.e. a classical consumption equation. The new model contains 17 consumption equations corresponding to different types of expenditure. The forecasts are made using the error correction models explained above.
Source: INSEE, calculations performed by the authors. Estimation period of the old model 1990-2016.

9 - Aggregation of the forecasting models and contributions to variation in pre-committed expenditure



Source: INSEE

MPC of the different types of household is identical for all of the types of consumption which make up the three main categories. This hypothesis is difficult to verify, due to the absence of quarterly data for each category of households. This also makes it impossible to calculate consumption equations for each category of households. Finally, households may respond asymmetrically to an increase or decrease in their purchasing power. This asymmetry, which is certainly more significant for pre-committed expenditure, is not covered by this analysis.

It is nonetheless possible to estimate the effect of a homogeneous purchasing power shock over different time scales (for example a jump of 1.0%) on the three categories of consumption and on total consumption by all households (*Table 3*). Firstly, the springback effect and elasticity of purchasing power are weaker for pre-committed expenditure, meaning that the reaction in the immediate short term is relatively modest, and the speed at which it converges is relatively slow. On the other hand, discretionary spending converges much more rapidly due to its strong springback effect, and increases more sharply in the immediate short term. At the aggregate level, consumption would see a 0.2% increase in the quarter in which the shock occurred, and a +0.5% rise within the year, rising to +0.8% over the long term. The absence of a unitary response of consumption to income in the long term – which may be problematic from the perspective of macroeconomic theory – can be attributed to the fact that the savings ratio is non-stationary. Moreover, the ultimate goal of the approach adopted in this Special Analysis is to analyse and predict household consumption in the short term, rather than in the distant future.

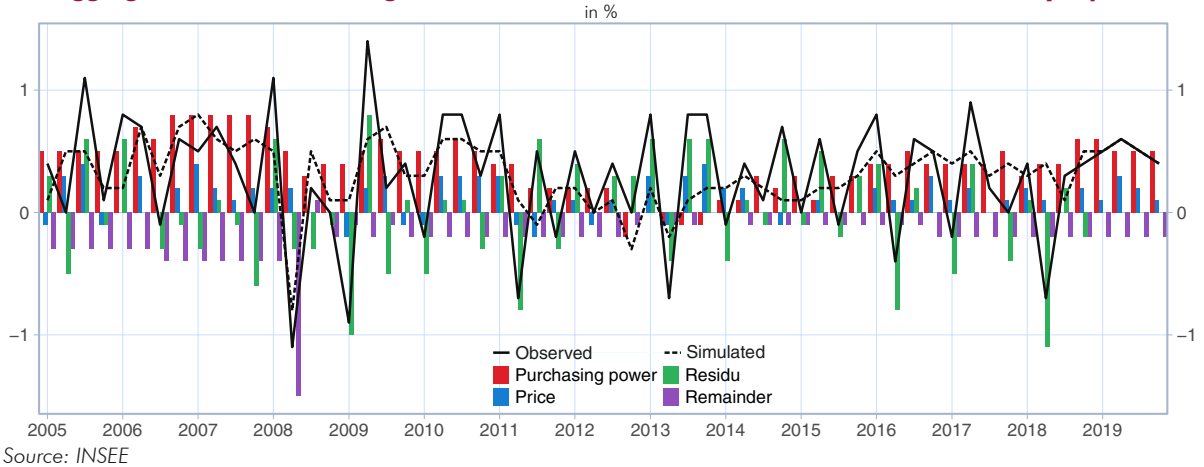
Table 3 - Estimated cumulative effect of a 1.0% increase in purchasing power on household consumption

	Q (choc)	Q+1	Q +2	Q +3	A+1	A+2	A+5	Long term
Pre-commited	0,1	0,1	0,2	0,2	0,3	0,4	0,4	0,5
Non-discretionary	0,2	0,3	0,4	0,5	0,6	0,7	0,9	0,9
Discretionary	0,3	0,4	0,5	0,5	0,6	0,7	0,8	0,8
Total	**0,2**	0,3	0,4	0,4	0,5	0,6	0,7	**0,8**

Key: a 1.0% increase in purchasing power in quarter Q leads to an 0.04% increase in pre-committed expenditure in the same quarter, rising to +0.3% a year on and +0.5% in the long term.

Can this analysis explain the unusual trajectory followed by the savings ratio recently? There are three potential causes of this unusual behaviour. Firstly, a purchasing power shock may be passed on more or less slowly to consumption depending on the type of spending in question. Secondly, exogenous factors may also affect consumption

10 - Aggregation of the forecasting models and contributions to variation in non-discretionary expenditure



Source: INSEE

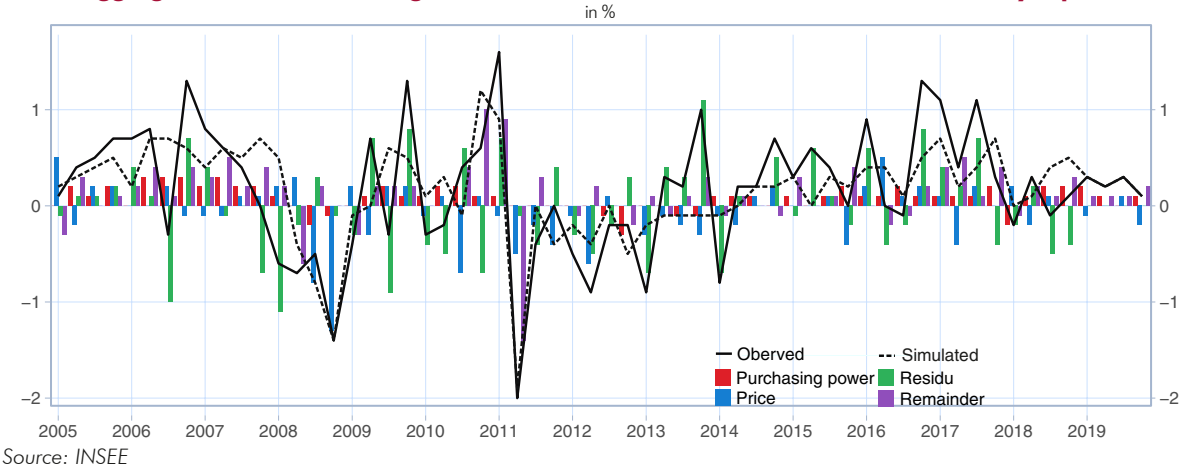
independently of variations in purchasing power. Finally, consumption responds differently depending on the distribution of variations in purchasing power between categories of households.

On the consumption side, only discretionary spending declined in Q1 2018. This explains the resilience of overall consumption (*Figure 11*), which grew by 0.3% despite the decline in purchasing power, and also the 0.8 percentage-point decrease in the savings ratio. In Q2, while discretionary spending again mirrored the fluctuations in purchasing power, one-off shocks led to a fall in household consumption: relatively mild temperatures in the spring and strikes on the public transport network led to a drop in the consumption of energy and transport services, unrelated to variations in income. Consumption grew only moderately in Q4 2018, despite the fairly robust growth of purchasing power. While pre-committed and non-discretionary expenditures again remained relatively impervious to variations in income, as they did in Q1, discretionary consumption and energy consumption both fell. This can be partly attributed to the effects of the "yellow vest" protest movement, as well as the drop-off in vehicle purchases in anticipation of the expansion of the scrappage bonus in January 2019 and the relatively mild temperatures recorded in late 2018. Once again, in 2018 the fact that pre-committed and non-discretionary expenditures are relatively impervious to variations in purchasing power in the short term (unlike discretionary spending) was reflected in the fact that aggregate consumption was more stable than purchasing power. As such, the strong positive income shock in the final quarter of the year led to an increase of around 0.7 percentage points in the savings ratio. Our analysis of fluctuations in consumption thus leads us to make two main observations: that the influence of exogenous factors must not be underestimated when studying quarter-to-quarter variation, and that pre-committed and non-discretionary expenditures are relatively stable compared to discretionary spending, which more rapidly mirrors (one-off external factors notwithstanding) the fluctuations of purchasing power.

The variations in household purchasing power for different standard of living brackets also reveals much about consumption habits in 2018.

In terms of income, the unusual quarter-to-quarter trajectory of purchasing power in 2018 is primarily a result of reforms to the system of taxes and social contributions, affecting both gross disposable income and consumer prices, with consequences which varied depending on the standard of living of households. Combined with our estimates for the short-term elasticity of different types of expenditure to purchasing power and relative prices, the MPC figures allow us to quantify the effect of a given fiscal policy on consumption behaviours. On the standard assumption that MPC will be higher for lower-income households, the

11 - Aggregation of the forecasting models and contributions to variation in discretionary expenditure



Source: INSEE

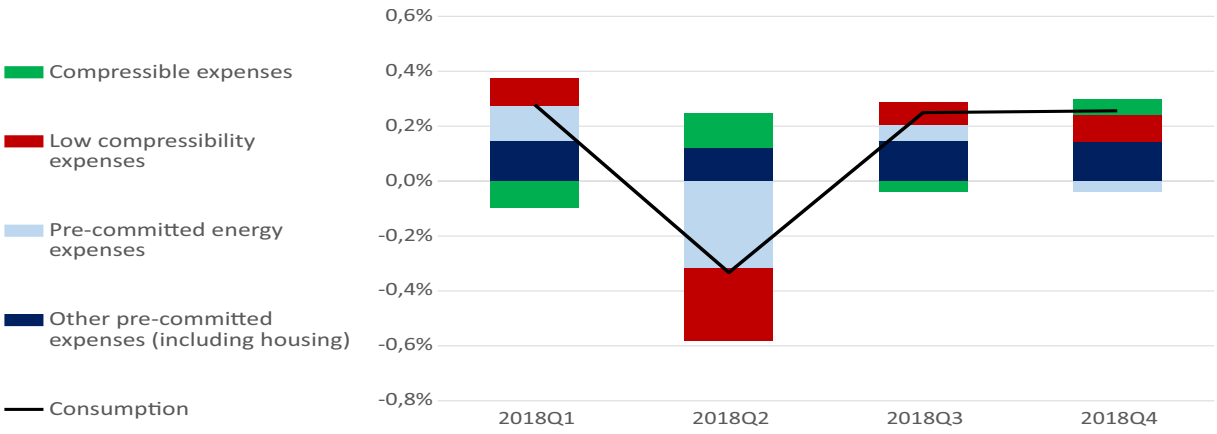
relative weakness of aggregated consumption can be explained by these disparities in the evolution of purchasing power: the combined effect of the CSG increase and rising fuel prices reduced the purchasing power of the poorest 10% of households in 2018 (Biotteau & Rioux, 2019). The measures introduced in 2018 did more to benefit households with a median standard of living, with a negative impact on households in the top income decile (with the probable exception of those at the very top of that bracket, formerly required to pay the wealth tax). On the one hand, the MPC of middle-income households is lower than that of more modest households. On the other hand, the wealthiest households have the lowest MPC so any variation in their income has a much more modest impact on consumption. As such, the decrease in discretionary spending in Q1 2018 can likely be attributed to the strong marginal propensity to consume of lower-income households and the higher proportion of discretionary spending in the total expenditure of wealthier households.

The variation in household consumption in 2019 is expected to reflect the variation in discretionary spending.

In 2019, the quarter-to-quarter variation in purchasing power should once again be relatively erratic: a major spike in Q1 followed by a fall-back in Q2, remaining virtually stable in Q3 then accelerating slightly toward the end of the year. These developments should be driven partly by the economic and social emergency measures introduced at the start of the year, but also by the further reduction in local residence tax and the slow growth of prices toward the end of the year (see *the Household income sheet*). Our model allows us to forecast consumption of items classed as pre-committed expenditure, non-discretionary spending and discretionary spending, while also taking into account their different degrees of sensitivity to variations in income. As such, pre-committed expenditure and non-discretionary spending should follow a relatively smooth trajectory in 2019, reflecting – after a time lag – the past and present fluctuations in purchasing power and prices. On the contrary, discretionary spending, which is most sensitive to variations in income, should follow a similar trajectory to purchasing power (*Figure 10*): dynamic at the start of the year, more subdued in H2. Furthermore, this spending should be partially impacted by the scheduled increases in tobacco prices in March and November 2019.

Overall, and much like the fluctuations in consumption in 2018, variations in 2019 will be primarily dictated by discretionary spending while other forms of spending should continue to cleave to their long-term trends. The variation in aggregated consumption should thus mirror the trajectory of discretionary spending. ■

12 - Contributions to variation in household consumption in 2018



Note: variation at constant volumes, excluding tourist balance.
Source: INSEE

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Methodological annex: calculating the average time taken for the savings ratio to return to equilibrium level.

The time taken for the savings ratio to return to its long-term level after a shock is calculated using the "half-life" (*HL*). *HL* is the time taken for the ratio to reach the halfway point in the process of returning to its long-term level (the results shown here exclude the savings ratio for the period 2009 - 2012). *HL* can be calculated as follows:

1. We begin by estimating the following equation:

$$\Delta X_t = \alpha + \beta X_{t-1} + \sum_{i=1}^{p} \beta_i \Delta X_{t-i} + \epsilon_t$$

where *x* represents the savings ratio. When the coefficient β is close to 1, the pace of convergence towards the long-term level is rapid. In this case, $\beta = 0.63$ and this value is statistically significant at the standard threshold of 5%.

2. Thereafter, based on the estimated coefficient, HL can be calculated using the following formula:

$$HL = \frac{-\ln(2)}{\ln(1+\beta)}$$

3. We can then obtain an approximate value for the time taken to return to long-term stability by multiplying the HL by two. By construction, the model assumes that shocks are reabsorbed asymptotically. Nonetheless, doubling the half-life gives a rough idea of the reabsorption time.

Finally, for these purposes the long-term level is defined as the mean value of the savings ratio over the period in question. Formula (1) allows us to work out this result empirically. The stationary state of model (1) can thus be written as $\Delta x = 0$ whatever the date. As such the stationary level of *x*, written x^*, is: $-\alpha/\beta$. In this case α is approximately –0.089. So $x^* = 0.14$, which does indeed correspond closely to the empirical mean of the savings ratio over the period.

Ultimately, the time taken for the savings ratio to return to its long-term equilibrium level is estimated to be seven quarters for the period 1990-2018. If we exclude the period 2009 to 2012, during which the savings ratio persisted at a level superior to the long-term mean due to the spike in household precautionary saving, this average time falls to three quarters. ■

How do companies form their opinions on their business prospects?

An analysis of expectation errors in business tendency surveys

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Business tendency surveys question a panel of companies about short-term changes in economic measurements such as output, employment and selling price. Companies express a qualitative opinion on expected changes ("over the next three months") in these factors, and on past changes ("over the last three months"). These responses provide a unique window of observation onto their expectation behaviour. By monitoring companies over time it is possible to analyse their short-term forecasts and identify any errors or surprises, when evolutions differ from their expectations.

These expectation errors do not happen by chance. They depend first of all on the economic variables being considered: businesses make fewer expectation errors over their selling prices and their workforce than over demand for their products or even their own output. In addition, errors have a seasonal component, which may be more or less significant depending on the nature of the economic variable. Businesses are therefore more often surprised during the April surveys when they contradict the expectations they expressed three months earlier more often than they do in the other quarters of the year. And finally, these errors appear to be procyclical: businesses are more often surprised by an increase during phases of recovery, and are more often surprised by a decrease during recessions. From one quarter to the next, expectation errors are therefore correlated with changes in activity the following quarter.

The observation of companies' expectation errors raises question about the process by which these expectations are formed. Responses to questions on expected changes in orders in industry, and turnover in services are modelled to reveal that these expectations display a certain inertia. Companies tend to expect the same changes that they have just observed in the recent past, either with an increase or a decrease. However, they take into account the global economic environment and their own mistakes, correcting their expectations when they have been surprised by an increase or a decrease. Thus they use the information available to them to shape their expectations, which appears to be compatible with the rational expectations hypothesis. When this hypothesis is formally tested, it is rarely rejected in the services sector. However, it is more difficult to test in industry, a sector where common short-term shocks at macroeconomic level can take companies by surprise. Forecasting economic turning points thus appears all the more difficult as they are not always anticipated by the companies themselves. ■

Expectation errors in the business tendency survey: additional information to balances of opinion

The business tendency surveys question business leaders on their recent activity and their short-term prospects

INSEE carries out business tendency surveys on companies in industry and the construction, trade and services sectors. These are monthly, bimonthly or quarterly surveys intended to collect early information on their recent activity and their short-term prospects. The questions asked are qualitative for the most part. They cover the company's situation (output, workforce, prices, etc.) at the time of the survey or a short time into the future, usually three months. Most questions call for a response chosen from three possibilities: "increase", "stable", or "decrease". For example, industrial companies are questioned on changes in output "in the last three months" and on probable change "in the next three months". Questions are phrased simply in order to relieve the response burden on the companies questioned and to facilitate exploitation of the data for a rapid dissemination of the results.

"Balances of opinion" summarise company responses

Individual company responses are aggregated by survey and by subsector. For the tri-modal questions in particular, "balances of opinion" are calculated: these are defined as the difference between the proportion of companies[1] declaring an increase in the variable in question and the proportion of companies declaring a decrease. The balance of opinion of business leaders in industry on their past output, for example, corresponds to the proportion of companies questioned who reported an increase in output in the course of the last three months, minus the proportion of companies declaring a decrease in their output over the same period. Balances of opinion are easy to interpret: when the balance is positive, companies report more increases than decreases for the variable in question, and conversely when it is negative. They are well correlated with the main economic aggregates and play a key role in short-term analysis (*Box 1*).

Balances of opinion calculations do not exploit the fact that surveys follow a panel of companies over time

Balances of opinion are used to extract aggregated information on expected or reported change in variables of interest based on responses provided by individual businesses. They are calculated on each survey date and are used to measure the variation over time of the aggregated opinion. However, the calculation to obtain the balances of opinion does not make use of the fact that the surveys partly question the same companies over a long period of time. In fact, the succession of samples

1. The proportions can be weighted by variables collected in the surveys or by auxiliary data. The weighting variables vary according to the questions. They may be turnover, workforce or investments.

Box 1 – Balances of opinion and short-term outlook analysis

Balances of opinion were first proposed in 1951 by the economist Oskar Anderson to exploit business surveys produced by the Institute for Economic Research in Munich (IFO). Despite their qualitative nature, they can be linked mathematically to the quantitative variable to which they refer. Assuming that businesses choose the modalities "increase", "stable" or "decrease" according to quantitative thresholds, it is possible to highlight a relationship between the aggregated change in the variable of interest and the balance of opinion (Theil, 1952; Fansten, 1976), for example between industrial output and the balance of opinion of industrialists on change in their output.

Economic analysts use the balances of opinion as a base for the short-term forecast of the main economic aggregates. Balances of opinion are used in so-called "calibration" equations which estimate past relations between balances and economic aggregates to forecast the short-term change in these aggregates (Dubois & Michaux, 2006). They are also mobilised to calculate composite indicators: business climate (Doz & Lenglart, 1995), employment climate (Dortet-Bernadet & Glotain, 2017), turning point indicator (Gregoir & Lenglart, 2000), output gap* (Guillet et al. 2018), etc.

* The output gap refers to the difference between observed gross domestic product (GDP) and a "potential" gross domestic product reflecting the structural productive capacities of the economy. Balances of opinion can be used to estimate the output gap.

How do compagnies form their opinions on their business prospects ?

in the business tendency surveys forms a relatively stable panel of companies in which the same company may be questioned many times. This follow-up makes it possible to study the response behaviour of the same company as a function of the short-term economic context and to verify consistency over time.

By interviewing the same companies on successive occasions, their expected and reported changes can be compared …

In particular, companies' responses regarding past changes can be compared with the responses they had given in the previous period on expected changes. In the survey on activity in industry, for example, companies are asked to note changes observed in output of their main products in the last three months and expected changes in the next three months. A company's response in January on a probable change in output can then be compared with its response in April on the reported change. In the outlook surveys in industry and in services, depending on the survey, this comparison can be made for questions on activity, demand, workforce, investment and selling prices (*Table 1*). For all these questions, the period under consideration is three months – in the past or in the future.

… and any expectation errors can be identified

Discrepancies between expected change in a given survey and subsequent reported change correspond to expectation errors on the part of the companies. These are "decreasing" surprises when companies who are questioned on economic data forecast stability or an increase over the next three months, but then report a decrease or stability, respectively, in these same data over the past three months in the survey carried out three months later; they are "increasing" surprises when the situation is reversed (*Table 2*). All in all, there are nine possible combinations, depending on the response modalities chosen by the company for its forecast and its subsequent observation.

1 - Questions on expected change and observed change in outlook surveys of activity in industry and in services

Survey	Periodicity	Main questionnaire	Unit for questioning
Industry	monthly	Your output	Product
	monthly	Your selling prices	
	quarterly	Total orders	
	quaterly	Foreign orders	
	monthly	Total workforce in your company	Company
Services	monthly	Turnover	Services
	quaterly	Export turnover	
	quaterly	Selling price or invoice price of your service provision	
	monthly	Total number of employees (including temporary employees)	Company
	quaterly	Operating results	
	monthly	Your opinion on your company's investments	

How to read the table: The column headed "Unit for questioning" represents the unit to which the questions relate. In both surveys, companies are asked about their activity as a whole, but also about their main products or services.

2 - Changes forecast then observed by companies: nine possible combinations

	Forecasted in Q–1		
Observed in Q	Decrease	Stability	Increase
Decrease		Decreasing surprise	
Stability			
Increase	Increasing surprise		

Aggregated surprise indicators are calculated from these errors

In 2015, so-called "surprise" indicators were defined based on the business tendency surveys (Gorin et al., 2015). They correspond to a linear combination of the proportions of the different types of forecasting error (*Table 3*). Negative surprises are allocated a negative weighting and positive surprises have a positive weighting. This weighting is greater for major surprises (increase observed when a decrease had been forecast and vice versa) than for surprises on a smaller scale (increase observed when stability forecast, stability observed when decrease forecast, etc.). Surprise indicators were constructed for the purpose of forecasting by maximising their correlation with macroeconomic series on output or investment in the quarterly accounts, employment series, etc. Thus in addition to the proportion of errors, the proportions of companies confirming an increase (or decrease) were also taken into account with a positive (or negative) weighting. Finally, the weightings selected for the surprise indicators were symmetrical. The indicators therefore cancel each other out when there are as many companies making a decreasing error as there are making an increasing error.

3 - Surprise indicators: weighting for different types of error

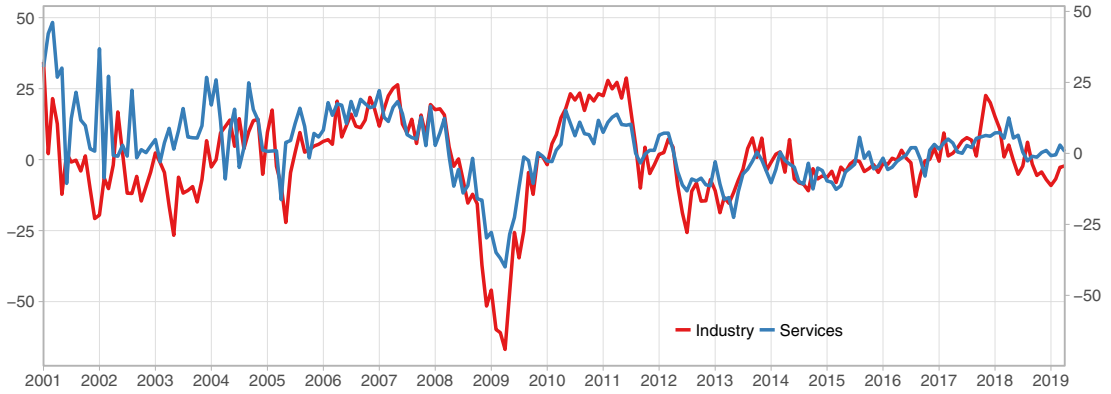
Observed in Q	Forecast in Q-1		
	Decrease	Stability	Increase
Decrease	–2	–1	–4
Stability	3	0	–3
Increase	4	1	2

In the way they are constructed, the surprise indicators are very similar to the balances of opinion, but with additional information on the errors made by companies in their expectations (*Graph 1*). As a result, they combine two pieces of information of a different nature. In this Special Analysis, we focus more specifically on expectation errors.

Expectation errors contain specific information on the way in which businesses view the future

These errors are more likely to occur when activity experiences sudden fluctuations that businesses had not anticipated. These errors therefore inform about both the process by which businesses form their expectations and about the presence of short-term shocks affecting the economy as a whole or certain sectors. In this analysis, we explore these two dimensions of the information contained in forecasting errors, by first highlighting the procyclical nature of these errors then defining in more detail the way companies decided on their expectations in the business tendency surveys.

1 - Surprise indicators in industry and services



How to read the graph: in April 2019, the surprise indicator in industry was at –2, below its long-term average (+4). It had reached a high point in November 2017 (+22).
Note: The surprise indicators for output in industry and in services have been published every month since April 2015 in INSEE's macroeconomic database at the same time as the results of the business tendency surveys.
Source: INSEE

How do compagnies form their opinions on their business prospects ?

Companies' expectation errors vary according to the economic variables and the position in the short-term outlook cycle

Change in expectation errors can be calculated over the long term

Most of the questions that can be used to identify expectation errors have a long historical record, dating back to 1990. To enter into the calculation of expectation errors, a company has to be present in the sample of respondents at a three-month interval, and therefore the number of available observations is smaller than when calculating balances of opinion, but it nevertheless remains high. In the survey of activity in industry, for example, the question on observed output has gathered between around 2,500 and 4,000 observations per survey since 1990, compared with about 500 fewer observations for the comparison between expected output and actual output three months later (*Graph 2*).

The size of the sample of firms available for a study of expectation errors over a long period is therefore quite large. This analysis is limited to surveys on activity in industry and in services which have the largest samples.

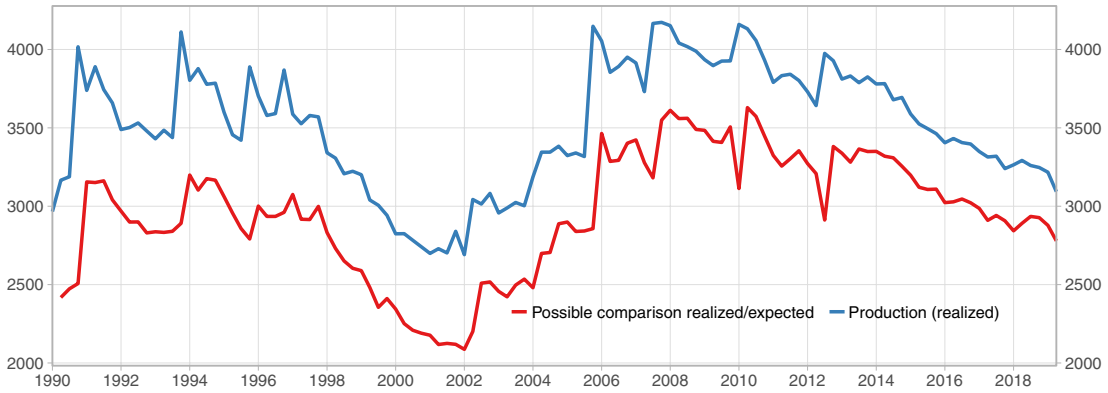
Companies make expectation errors about their output more often than about their selling prices

In general, companies' expectations are correct: the changes they observe over the previous three months tend to coincide overall with the changes they had forecast three months earlier. In industry and services, errors represent less than half of responses for most variables. Major errors (decrease observed when an increase had been forecast and vice versa) are rare (on average between April 1990 and April 2019, industrial firms observed major surprises in only 5% of cases).

Nevertheless, some economic variables are more difficult for companies to predict. In industry, companies make more mistakes, either positive or negative, over future change in global demand or output than over changes in their selling prices. Between October 1990 and April 2019, on average, industrial firms observed a different change in their output from what they had expected three months earlier in 42% of cases, against 24% of cases concerned with selling price (*Graph 3*). The question about selling prices is also the one that produced the fewest expectation errors[2] in the monthly business survey in services (18% on average from April 1990 to

2. This observation is linked to the fact that businesses' selling prices do not change much throughout the year. Catalogue costs account in part for this rigidity in pricing and the fact that in the surveys companies often forecast prices as "stable". Companies also have more control over changes in prices than over demand for their products.

2 - Number of responses available per quarter to the question in the industry survey on change in output



How to read the graph: businesses questioned in the survey on activity in industry replied to the question on past change in output for 3,093 products in April 2019 (blue curve). In the January 2019 survey, for these same products, they had replied to the question on expected change in output in 2,779 cases (red curve).
Note: the occasional reduction in the number of observations available for comparison purposes corresponds to the partial survey sample renewal, as companies coming into and leaving the sample cannot be counted on the renewal date.
Source: Monthly outlook survey in industry, calculations by the authors, INSEE

April 2019; *Graph 4*), whereas companies in this sector made more errors over expected change in their operating results (for the company globally) or turnover (for their main services).

Expectation errors have a seasonal component

The tendency for companies to make mistakes depends on the quarter in which the survey is conducted. Discrepancies between observed changes and changes predicted three months earlier occur more frequently in April for most economic variables, and less frequently in October. This seasonality in expectation errors is particularly noticeable for selling prices, both in industry and in services. From 1991 to 2019, industrial firms observed a change in prices that was different from the expectations they had expressed three months earlier in 29% of cases in April, against 21% in October. Significantly more companies forecast an increase in selling prices in January than in the following quarters. This schedule of pricing by companies is reflected in thecollection of producer prices and corresponds to the time when contracts are signed (Gautier, 2008). At

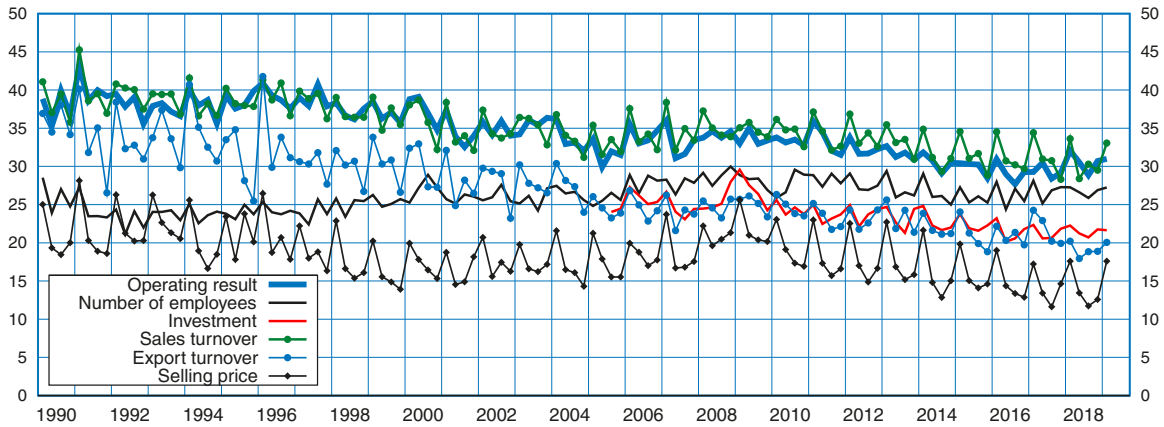
3 - Proportion of expectation errors by companies in the survey on activity in industry

in %

How to read the graph: between October 1990 and April 2019, businesses questioned in the survey on activity in industry observed on average a different change in output from that expected three months earlier in 42% of cases.
Scope: for each question, proportions are calculated from businesses that responded on the survey date and three months earlier. The proportions are not weighted and are calculated according to the unit of questioning: companies for workforce, main products for other questions. As some questions were asked quarterly and others monthly, only quarterly occurrences are retained. These correspond to the first month of each quarter: January, April, July and October.
Source: Monthly outlook survey in industry, calculations by the authors, INSEE

4 - Proportion of expectation errors by companies in the survey on activity in services

in %



How to read the graph: Between October 1990 and April 2019, businesses questioned in the survey on activity in services observed on average a different change in selling price from that expected three months earlier in 18% of cases.
Scope: for each question, proportions are calculated from responses from companies on the date of the survey and three months earlier. The proportions are not weighted and are calculated according to the unit of questioning: companies for operating results, workforce and investments; main services for turnover and selling prices. As some questions were asked quarterly and others monthly, only quarterly occurrences are retained. These correspond to the first month of each quarter: January, April, July and October.
Source: Monthly outlook survey in industry, calculations by the authors, INSEE

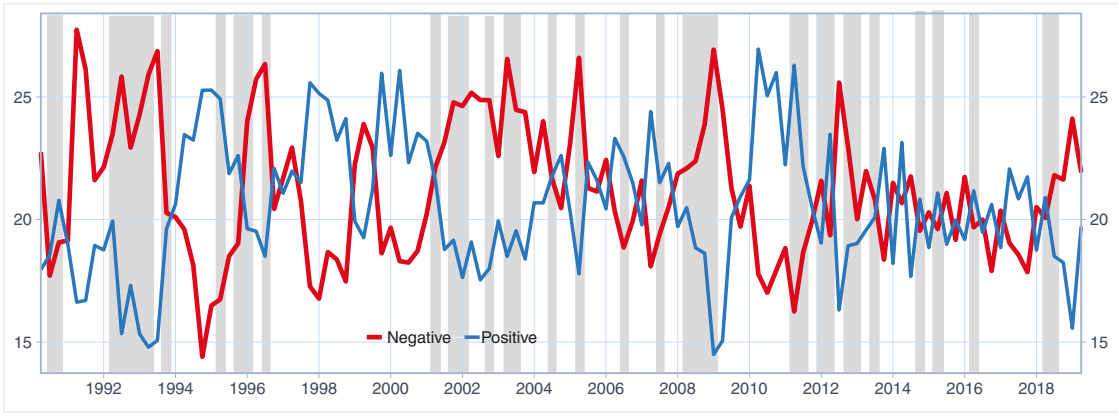
the time of the April survey, companies do not systematically confirm the increase they expected in January.

Expectation errors are procyclical

The occurrence of different types of expectation errors, either positive or negative, depends on the business cycle. Positive surprises (increase or stability observed when stability or decrease, respectively, had been forecast) are more frequent in the upswing phase whereas negative surprises reach their maximum during recessions. In industry, the proportion of negative surprises concerning changes in output exceeded that of positive surprises and reached a maximum at the beginning of 2008 (*Graph 5*). Then in Q3 2009 and until the end of 2011, positive surprises again became more frequent. Similarly, many service companies overestimated their output at the beginning of the 2009 financial crisis; they also overestimated the change in their operating results more often than average (*Graph 6*). More recently, in the industry and services sectors alike, companies had more positive surprises over changes in their output in 2017, then, from 2018, they had more negative surprises. Nevertheless, the scale of fluctuation for errors appears to be fairly limited, even in the event of a short-term economic shock. Thus the procyclicity of

5 - Proportion of positive and negative surprises – question on output in industry

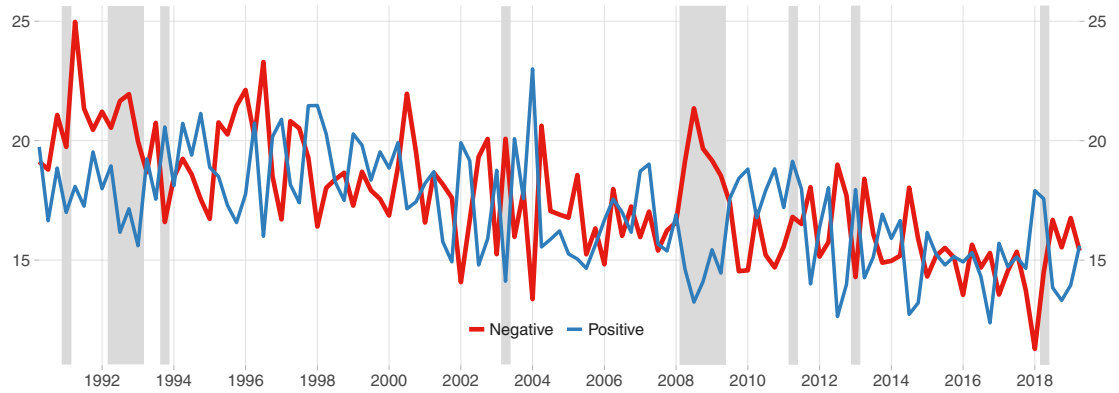
in %



How to read the graph: positive surprises (or, conversely, negative surprises) correspond to the proportion of products for which the businesses questioned in the survey on activity in industry reported a more favourable (or less favourable) change than what they had expected three months earlier.
The quarters in which industrial output declined are shaded in grey.
Scope: proportions are calculated on the basis of businesses that responded both on the survey date and three months earlier.
Source : Monthly outlook survey in industry, calculations by the authors, INSEE

6 - Proportion of positive and negative surprises – question on operating results in services

in %



How to read the graph: positive surprises (or, conversely, negative surprises) correspond to the proportion of services for which the businesses questioned in the survey on activity in services observed a more favourable (or less favourable) change than what they had expected three months earlier.
The quarters in which output in services declined are shaded in in grey.
Scope: proportions are calculated on the basis of businesses that responded both on the survey date and three months earlier.
Source : Monthly outlook survey in industry, calculations by the authors, INSEE

the errors does not challenge the ability of balances of opinion to trace the economic cycle correctly.

Errors are more correlated with macroeconomic variables in industry than in services

Errors are therefore directly correlated with changes in economic activity overall or in a single sector. This is a property shared with the balances of opinion but which in this case derives from information of a different nature. In periods of recession or upswing, companies adjust their assessment of the change in their economic variables downwards or upwards, but they have a heightened tendency to make mistakes in their expectation. For the survey questions on output and employment, the correlation between errors committed (concerning the previous quarter) and changes in macroeconomic aggregates (during the coincident quarter) is greater in industry than in services (*Table 4*). In the majority of cases, balances of opinion remain better correlated with macroeconomic series than the proportion of positive or negative expectation errors made by the companies. Nevertheless, the proportions of expectation errors form a pool of alternative indicators that can be used for short-term economic forecasting, like surprise indicators. In particular, "positive" expectation errors concerning change in output in industry appear to be slightly better correlated with change in industrial output than the balance of opinion on past output.

Companies' expectations are based on their past situation but also on the global economic environment

Business tendency surveys can be used to explore the way companies shape their expectations

Individual data from business tendency surveys represent a vital source of information which we can use to analyse the way that expectations announced by companies are formed. In attempting to describe how decisions and behaviours of a large number of varied agents interact and express themselves with any consistency on the aggregate scale, economics is a prospective discipline. In order to take an economic decision, each agent must have an expectation, no matter how cursory, of the future state of the economic environment in order to be able to correctly envisage the possible consequences of their decision. Thus expectations occupy a central place in economic theory.

Companies' expectation behaviour can be analysed by econometric modelling

To analyse how companies form their expectations, we estimate the probability that an industrial company will anticipate an increase (decrease or stability) in its orders according to determinants specific to the company (past changes in orders, the fact of having been surprised by this past change) and determinants relating to the global economic environment (growth in gross domestic product (GDP) forecast in INSEE's

Table 4 - Correlation between balances of opinion on past changes, proportion of positive or negative errors and macroeconomic series

Survey	Question relating to...	Correlation between corresponding balance of opinion (output or employment) and...		Correlation between corresponding macroeconomic series (output or employment) and...		
		Positive errors	Negative errors	Balance	Positive errors	Negative errors
Industry	Output	0,80	–0,74	0,43	0,49	–0,43
	Employment	0,61	–0,16	0,84	0,64	–0,43
Services	Output	0,18	–0,30	0,55	0,38	–0,16
	Employment	0,27	–0,03	0,62	0,22	–0,38

Note: correlations are calculated from Q1 1991 to Q2 2019, based on proportions of errors and balances of opinion calculated in the first month of the quarter. The series of errors and balances have been seasonally adjusted. Output and employment correspond to output in chained volume measured in the quarterly national accounts and to payroll employment of natural persons.
How to read the graph: the correlation between the balance of opinion on past output in the survey on activity in industry and positive errors on this same question in this same survey is 0.80; the correlation between this balance (or positive errors on this question in this survey) and output in industry estimated from the quarterly national accounts is 0.43 (or 0.49).
Source: Insee, calculs des auteurs

Conjoncture in France, past GDP growth, inflation, unemployment rate, *Appendix 1*). An equivalent model is estimated for services, which looks at expected change in turnover instead of in order books.

Company expectations experience inertia over time…

When estimating these models an adaptive expectations component is highlighted: in reporting their expectations businesses have a tendency to take into account the last change observed. In services (*Table 5a*), the fact of reporting a decrease in turnover over the previous three months causes the probability of predicting a decrease in activity for the coming quarter to increase by almost 43%. In industry, the fact of reporting an increase in orders over the past quarter causes the probability of predicting an increase for the coming quarter to increase by almost 24%. Businesses in the services sector are characterised by a fairly strong tendency to expect a decrease in their turnover after reporting that there had been a change during the past three months, whether this past change was an increase or a decrease.

… even if companies also take their mistakes into account…

In both industry and services, when businesses are surprised by an increase or a decrease, they tend to use this information to correct their expectations for the following quarter. For example, for an industrial company, the fact that they have underestimated the change in their order books in the previous quarter, i.e. a positive surprise, increases the probability that they will expect stability or an increase for the next three months. This result suggests that companies' expectations deviate from their routine behaviour, dictated solely by their past changes.

5a - Estimation results of an ordered logit model to forecast turnover in services

Marginal effects (in %) – Turnover in services			
Probability of forecastin a:	Increase	Stability	Decrease
$\Delta DGDP^{pre}_{Conj}$	1,9	4,4	–2,5
Lag ($\Delta DGDP_{trim}$)	–0,7	1,6	–0,9
Lag(inflation)	0,2	0,5	–0,3
lag (Unemployment)	–0,4	0,9	–0,5
Surprise=Positive	0,5	–1,1	–0,6
Surprise=Negative	–1,8	4,2	2,3
Reality=Increase	10,3	–39,2	28,9
Reality=Decrease	9,5	–52,9	43,4

5b- Estimation results of an ordered logit model to forecast order books in industry

Marginal effects (in %) – Order books in industry			
Probability of forecasting a:	Increase	Stability	Decrease
$\Delta DGDP^{pre}_{Conj}$	0,1	–0,1	0,0
Lag ($\Delta DGDP_{trim}$)	0,5	–0,7	0,2
Lag(inflation)	0,3	–0,4	0,1
lag (Unemployment)	–0,4	0,4	–0,1
Surprise=Positive	3,2	5,1	–2,0
Surprise=Negative	–2,8	–4,3	1,5
Reality=Increase	24,3	–32,1	7,1
Reality=Decrease	18,4	–25,6	7,8

How to read the table: observing that activity has increased over the last 3 months increases by almost 24% (or 10%), the probability that a business in the industry sector (or services sector) will predict a further rise for the following quarter. Conversely, observing a decrease in activity increases by about 8% (or 43%) the probability of predicting a further decrease. All the coefficients estimated in these logistic regressions are significant at a 5% threshold, with the exception, for forecasting orders placed in industry, of the coefficient associated with the GDP growth forecast in *Conjoncture in France*.

Source: calculations by the authors

… and also consider the global economic environment.

In services, changes in the unemployment rate, in inflation, or in the quarterly GDP growth rate observed over the previous quarter, can significantly alter the probability of businesses forecasting an increase or decrease or stability in turnover for the coming quarter. This is also the case for the GDP growth forecast, which appears, for example in INSEE's Conjoncture in France, which also seems to have a significant influence on the expectations of service companies. In industry, the global economic environment seems to have a lesser, although still significant, influence on the probability of anticipating an increase in the order books. Be that as it may, when they form their expectations, businesses in these two major sectors seem to give consideration both to their own development concerns and to those relating to their global environment.

Companies' expectations seem to be consistent with the rationality hypothesis

A test to check the rationality of companies' expectations

The previous results on the determinants of companies' expectations seem to go in the direction of a frequently used hypothesis in economic theory, that of rational expectations. According to this hypothesis, businesses form their expectations by taking into account their exhaustive knowledge of the workings of the economy, the characteristics of other economic agents, etc.[3] In practice, economic agents find themselves constrained in their knowledge of the economic environment, in their access to information, or they rely in part on their intuitions, so that their expectations may deviate from what the rationality hypothesis would dictate: we then talk about bounded rationality.

One way to evaluate the empirical relevance of the strict rationality hypothesis is to use individual expectation errors from the business tendency surveys. A simple statistical test, taken from the literature, is used to characterise discrete choice models (Manski, 1990), and applied here. It consists in identifying the quarters during which the hypothesis cannot be validated a posteriori: this is considered to be the case when more than half of businesses expecting an increase or a decrease in a given quarter contradict it in the following quarter (*Appendix 2*). In the context of this test, we consider that under the rational expectations hypothesis, it is not possible that the majority of companies are mistaken in their expectations of an increase or a decrease, unless an unforeseen shock is affecting all of them at the same time (e.g. macroeconomic shock). In fact, the quarters for which the rationality hypothesis is rejected do not necessarily correspond to an absence or a limitation of the companies' rational expectations, they may also reflect the presence of a short-term outlook shock, common to all the businesses in a sector.

This purely statistical approach does have the merit of not relying on an explicit behavioural model to describe expectations nor of imposing particular functional forms in an ad hoc fashion to represent the probability distributions of answers in surveys. On the other hand, it is only able to test the rational expectations hypothesis jointly with other relatively strong hypotheses (*Appendix 2*). This joint testing of hypotheses automatically reduces the power of the test used. A rejection of joint hypotheses will therefore not be interpreted, strictly speaking, as just a rejection of the rational expectations hypothesis but as an indication of a one-off disturbance in the process of forming expectations. Some phases of short-term turbulence may therefore be mistakenly identified by this test as deviations from strict rationality.

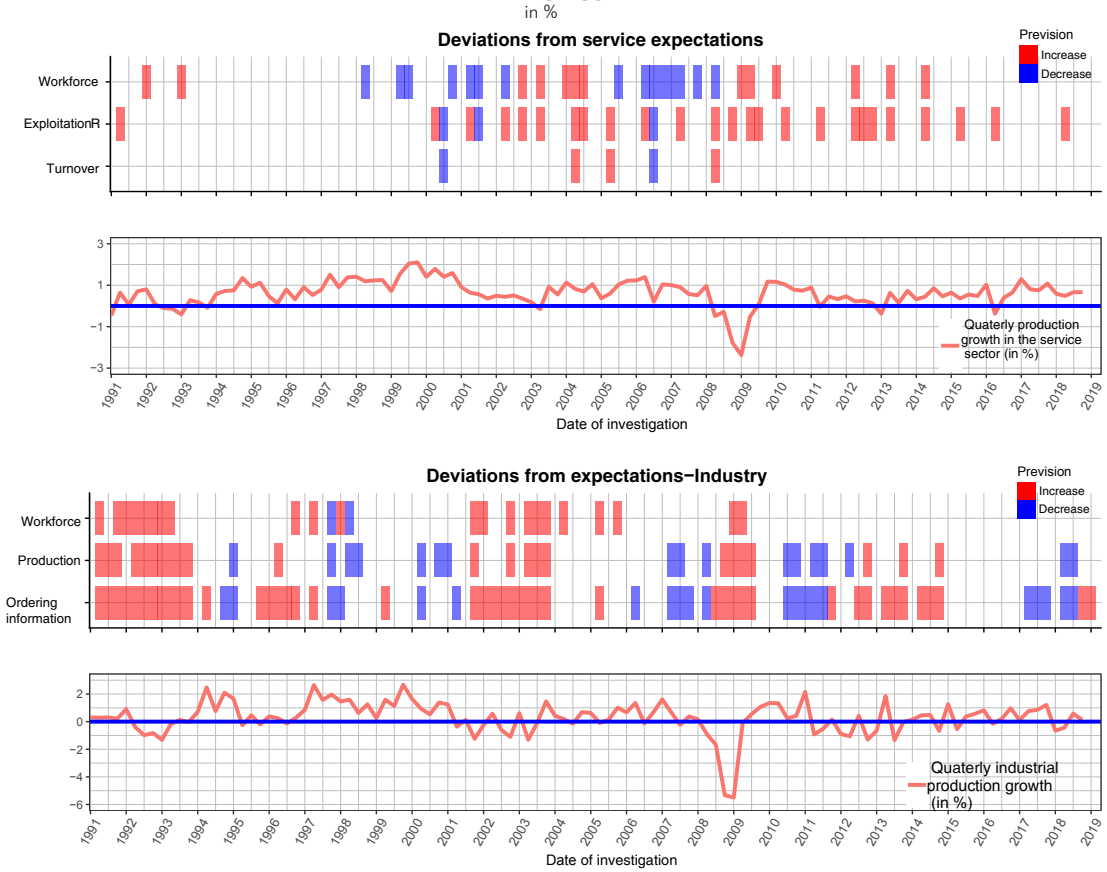
3. More specifically, the rational expectations hypothesis requires that expectations identify with the statistical conditional expectation that would be provided by a model capable of describing the entire functioning of the economy.

How do compagnies form their opinions on their business prospects ?

In services, companies' expectations remain rational overall

In the monthly outlook survey of businesses in the services sector, the rationality of expectations is very rarely rejected, in other words, forecasting errors in this sector are very much in the minority. The quarters where the rationality hypothesis is rejected are not linked in any particular way to the short-term outlook cycle: only the question on change in workforce reveals a few deviations from the rationality hypothesis, in line with the short-term outlook situation in the sector (*Graph 7*). For the other two questions analysed (change in turnover and operating results), the quarters where the rationality of expectations is rejected have no strong links with the short-term outlook. Concerning change in operating results, however, there is a small degree of seasonality in deviations from the rationality hypothesis: in the first quarter of the year, service companies have a tendency to be systematically more optimistic than what would strictly be assumed by the rational expectations hypothesis.

7 - Quarters during which businesses' expectations are considered to deviate from the rationality hypothesis



How to read the graph: quarters in red (or, conversely, in blue) correspond to quarters when more than half of businesses had expected stability or an increase (or a decrease or stability) in the previous quarter, regarding change in the variable concerned, but they in fact observed a decrease or stability (or stability or an increase). These quarters correspond to dates when the rationality hypothesis regarding companies' expectations (in the absence of any correlation of these expectations) is rejected statistically. This may therefore mean that companies have formulated their expectations in a non-rational way on the date in question and/or that companies' responses are inter-correlated, especially as the result of a common shock across the entire sector.
Source: INSEE, calculations by the authors

In industry, the influence of the short-term outlook cycle on expectations makes it impossible to properly assess their rationality

The industry sector, because of its international exposure, is more sensitive to the economic outlook worldwide. Businesses in this sector are affected by shared shocks which automatically generate discrepancies between their expectations and reports in the following quarter. Thus at every turning point in the outlook in this sector, perceived by the growth rate of whole industrial production (*Graph 7*), the majority of industrial companies see their expectations invalidated when it comes to changes in their output and their order books. This result confirms the procyclicity of forecasting errors, as discussed above.

However, at the end of the 1990s, also from 2004 to 2007, then from 2015 to 2017, the rational expectations hypothesis is not rejected, or only slightly. These years correspond to periods when the proportion of forecasting errors involving an increase or a decrease seems relatively static (*Graph 5*), reflecting a lesser impact by shocks in the short-term outlook that are shared by all companies. This suggests that in the industry sector, business leaders' expectations very rarely deviate from rationality, provided the influence of the short-term outlook cycle remains sufficiently weak to be able to make the judgement.

Across the entire period, expectations of change in the workforce seem to be less subject to deviations from the rationality hypothesis than other economic measures. There has not even been any deviation since the 2008 crisis. The best predictability of employment is due in part to the fact that this variable is better controlled by the companies than those that are more directly linked to demand for their products. Hiring and downsizing decisions are generally medium- to long-term strategic choices for companies as a result of institutional rigidity in the labour market, which makes it difficult to introduce any sudden variations into employment, either upwards or downwards. It is therefore justifiable that expectations of fluctuations in employment from one quarter to another are usually confirmed the following quarter. ■

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Appendix 1 – Econometric characterisation of expectations

There are many ways of representing the way in which economic agents form their expectations, apart from the strict rationality paradigm. Among these alternatives, one particular process which represents the agents' bounded rationality in a simple form, and is called the formula for "adaptive expectations", is used particularly often in the economic literature.

This theory is based on the principle that agents predict what happens in the future based only on what has already happened in the past, which limits the range of possibilities by restricting it only to situations that have already been encountered or experienced. Expressed in more formal terms, the forecast y^a of any variable y is interpreted in this process as a combination of expectation produced during the previous period and a term for surprise or forecasting error, representing the gradual adjustment of expectations. It can be written thus:

$$y_t^a = y_{t-1}^a + \lambda\left(y_{t-1} - y_{t-1}^a\right) = \lambda\, y_{t-1} + (1-\lambda)\, y_{t-1}^a$$

The theoretical advantage of this process is its great adaptability according to what the modeller considers to be the source of the forecasting errors. Purely statistical expectations (case where $\lambda = 1$) represent a situation where forecasting errors are solely the result of the presence of permanent shocks leading to long-lasting deviations in variables: in this case, agents produce their forecast based on the last value observed for the variable. If, on the contrary, the deviations are thought to be purely temporary (case where $\lambda = 0$), expectations are then simply repeated in identical format from one period to the next. By re-writing the formula, a remarkable property is highlighted:

$$y_t^a = \lambda\, y_{t-1} + (1-\lambda)\left[\lambda\, y_{t-2} + (1-\lambda)\, y_{t-2}^a\right] = \cdots = \lambda \sum_{k=1}^{\infty} (1-\lambda)^{k-1}\, y_{t-k}$$

When expectations are adaptive, the forecast is written only as a weighted sum of previous values, with weights decreasing exponentially as we move away from the date the forecast was made. This type of formula appears to be consistent with the empirical observations proposed by behavioural economics, which highlights the fact that economic agents rely in general on a collection of past observations to best forecast change in an economic variable.

In order to test the adaptive nature of companies' expectations, a specific econometric estimate is required. The qualitative responses provided by companies in the business tendency surveys in services and in industry can be modelled using a polytomous discrete choice model. Since the responses can easily be ordered along a scale from "decrease" to "increase", here we use an ordered polytomous model to study expected change in business activity (turnover in services or orders for goods in industry).

According to the mathematical framework that underlies this model, modelled variable Y (qualitative response by the company regarding expected change in activity) is set in relation to a hidden variable Y^*, called the latent variable (quantitative anticipation of change in its activity) The value of variable Y is assumed to be determined from the positioning of the value taken by the latent variable Y^* in relation to non-observed thresholds (μ_k). Latent variable Y^* is then explained linearly by a set of macroeconomic short-term variables X and by a set of variables Z specific to each company. The residuals ε of this regression are assumed to follow a logistic distribution.

$$Y^* = \alpha + \gamma\, Z + \kappa\, Z + \epsilon$$

$$Y = k \text{ pour } k \in \{\text{ decrease, stable, increase}\} \text{ si } \mu_1 < Y^* < \mu_2$$

• X includes short-term variables such as GDP growth, inflation and the unemployment rate observed in the quarter that precedes the forecast. We also add the quarterly GDP growth forecast published in INSEE's Conjoncture in France, making the implicit assumption that this publicly available information is used by companies to form an opinion on the state of the macroeconomic short-term outlook.

• Z includes variables specific to the recent situation of each business, such as the type of change their activity has recently experienced (increase, stability or decrease) and the type of forecasting error it made when last questioned (increasing surprise[1], no surprise, decreasing surprise). By adding these variables the theoretical adaptive expectations framework can be used and we can therefore test whether it is significantly validated or empirically rejected.

1. According to the convention adopted in this paper, an increasing surprise will occur, for example when a company that expected a decrease in its activity in fact finally observes stability or even an increase.

In the usual econometric methods, coefficients resulting from regression correspond to the effects of an exogenous change[2] in the explanatory variable over the dependent variable. Conversely, in the ordered polytomous model, coefficients correspond to effects on the latent variable only. The effects on the observed variable are then expressed in the form of an increase or decrease in percentage points of probability of replying in a certain category rather than in the reference category (in this case an expectation of stability).

Appendix 2 – Testing the rationality of expectations in the business tendency surveys

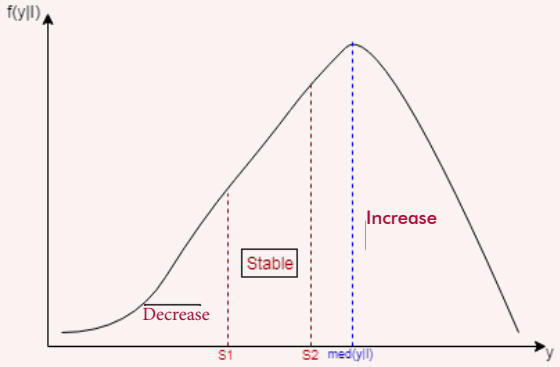
Normally, the Rational Expectations Hypothesis (REH) is formulated thus: there is a set of information such that the announced forecast (i.e. the forecast in the business tendency survey) corresponds to the optimum forecast, in the sense of the general running of the economy. This definition implies, in particular, that the stochastic processes governing the changes in observable economic measurements, and those that the econometric agents mobilise subjectively in their forecasts, are identical. This affirmation can be expressed in the form of several propositions that can be tested statistically , according to the nature of the data available.

In the case where the collected data are qualitative or categorical (response distribution into modalities such as "increase", "stable" or "decrease", for example), the tests are based on a probabilistic approach.

The probabilistic approach starts from the hypothesis that the categorical responses obtained from the forward-looking questions in the business tendency surveys provide information on "subjective" distributions of probability of change in the variables under consideration. Responses to retrospective questions, on the other hand, provide us with information on "objective" distributions of probability on which they are based. Under the REH, these distributions must coincide, the former being expressed subjectively beforehand and the latter observed objectively afterwards. The rationality tests that can be carried out based on this probabilistic approach are basically statistical tests to ensure consistency between company expectations expressed in a given quarter and their observations in the following quarter.

Using this approach, the probability distribution of an economic variable's values (demand for company products, output, turnover or workforce) is correctly described by a response category "Increase", "Stable" or "Decrease" depending on the position of a certain characteristic of this probability distribution in relation to well-defined thresholds. In this Special Analysis, we assume that companies systematically report the category containing the median of their subjective probability distribution (*Figure*) even if other approaches may be possible (Das & Van Soest, 1999).

Figure - Subjective probability distribution of change in a variable



How to read this graph: *f(y|I)* represents the subjective probability distribution of variable *y*, conditionally on all of the information set *I*. The median of this distribution is located above the *S2* threshold defining entry into the "Increase" category. The company therefore reports an increase in the variable *y* in the business tendency survey.

The underlying reasoning to this probabilistic approach is similar to that described by the companies when they were questioned on the way they respond to business tendency surveys. A "survey on the survey" carried out in September 2014 by INSEE on businesses in industry that made up the panel of respondents to the monthly outlook survey on activity, showed that about half of businesses say that they respond with the "Stable" modality if the growth rate in their order books falls within the interval +/– 5% and almost a quarter of businesses do this if their growth rate falls within the interval –1% to +1% (Gorin et al., 2015).

2. The effect of an exogenous change in the variable while all the other variables remain unchanged.

Under REH, the median of the "objective" probability distribution is believed to be in the same response category as the median of the "subjective" distribution of forecasts. As a result, among the businesses expecting, for example, a downward change in a given economic variable, the proportion of those that report an increase or stability after the fact should not be more than 50%. Thus, in considering the estimated conditional proportions pkj of the 9 combinations of modalities based on responses to two successive surveys[3], the REH results in the following two conditions:

$$\begin{cases} p_{BS} + p_{BH} < 0{,}5 \quad (1) \\ p_{HS} + p_{HB} < 0{,}5 \quad (2) \end{cases}$$

These conditions are valid in the absence of any correlation between the responses by companies, especially outside of any common macroeconomic or categorical shock affecting all or only some companies simultaneously. The conditional proportions are calculated for each economic value and for each survey date, in order to check whether these two conditions are respected in a significant way, with the statistical significance here being to understand in the sense of the asymptotic law expected under the null hypothesis for these estimators[4]. In the graphs presented in the text, we show, for each economic value, the quarters for which the condition (1) (called "Decrease forecast") and/or condition (2) (called "Increase forecast") is/are significantly invalidated (*Graph 7*). ■

3. Thus the conditional proportion p_{BS} refers to, for example, the proportion of businesses that observed stability in the variable considered over the three months of the current quarter, knowing that they had forecast a decrease in the previous quarter.
4. The associated probability law here is the asymptotic law of a stochastic Bernoulli variable, i.e. according to the central limit theorem, a normal law whose variance is inversely proportional to the number of observations in each survey.

French Developments

Review of the previous forecast

In Q1 2019, gross domestic product (GDP) maintained its pace with +0.3%, slightly less than forecast in the March 2019 issue of Conjoncture in France (+0.4%). Domestic demand excluding inventories sustained activity a little less than expected (+0.4 points against +0.5 points). Imports grew more strongly than forecast (+1.4% instead of +0.9%) and exports slowed, almost in line with the forecast (+0.4% instead of +0.6%). Therefore, foreign trade had a more negative impact on growth (–0.3 points against –0.1 points). At the same time, changes in inventories made a larger contribution than expected (+0.3 points). The growth forecast for Q2 2019 is slightly lower than that given in the March issue of Conjoncture in France (+0.3% against +0.4%).

In Q1 2019, market employment grew by 92,000, more strongly than expected (+35,000). Simultaneously, the unemployment rate fell slightly, to 8.7% of the French labour force (against the forecast for stability at 8.8%).

In May 2019, according to the provisional estimate, headline inflation stood at +1.0%.

In Q1, activity grew more quickly than forecast

In Q1 2019, growth reached +0.3%, a slightly slower pace than forecast in the March 2019 issue of Conjoncture in France (+0.4%). Total output grew as forecast (+0.5%). Energy production surprisingly slowed (+0.5% against the +0.8% forecast), mainly on account of the unseasonably mild temperatures. The underestimation of manufacturing output (+0.6% compared to the +0.4% expected), caused by the output of coke and refined petroleum, capital goods and motor vehicles being more buoyant than expected, did not offset the slowdown in energy production.

Domestic demand sustained growth slightly less than forecast

The contribution of domestic demand excluding inventories to GDP growth was lower than forecast (+0.4 points against the +0.5 points initially forecast). Household consumption rebounded less than forecast (+0.4% against +0.5%), due mainly to the temperatures being warmer than normal for the period in question and to the consumption of manufactured goods being

1 - Gross domestic product and its main components in the expenditure approach

Percentage changes from previoux period in %

	Conjoncture in France March 2019		*Conjoncture in France* June 2019	
	Q1 2019	**Q2 2019**	**Q2 2019**	**Q3 2019**
Gross domestic product	0.4	0.4	0.3	0.3
Imports	0.9	0.6	1.4	–0.3
Household consumption expenditure	0.5	0.4	0.4	0.3
General government consumption expenditure*	0.5	0.4	0.2	0.3
Gross fixed capital formation	0.5	0.6	0.5	0.5
of which: Non financial enterprises	0.7	0.8	0.7	0.8
Households	–0.3	–0.2	0.0	–0.3
General government	0.7	0.7	0.7	0.6
Exports	0.6	0.2	0.4	–0.7
Contributions (in percentage points)				
Domestic demand excluding changes in invetories**	0.5	0.4	0.4	0.3
Changes in inventories**	0.1	0.1	0.3	0.0
Net foreign trade	–0.1	–0.1	–0.3	–0.1

Forecast

* General government and non-profit institutions serving households

** Changes in inventories include acquisitions net of sales of valuable

Source: INSEE

lower than anticipated, despite the considerable rise in incomes in Q1. Total investment rose as forecast (+0.5%). Indeed, corporate investment grew as expected (+0.7%), due to an increase in investments in automobiles, in particular.

The external balance hampered growth more than forecast (–0.3 points, against –0.1 points). Exports were slightly below expectations (+0.4% against +0.6%), and imports rose more sharply than forecast (+1.4% against +0.9%).

Finally, due to lower exports and weaker than anticipated domestic demand, changes in inventories were more dynamic than forecast (+0.3 points against +0.1 points).

The labour market was much stronger than forecast

In Q1, 92,000 non-farm market-sector jobs were created, whereas the creation of only 35,000 net jobs had initially been forecast. Temporary employment was surprising with a return to job creations (+8,000 against –5,000 anticipated), after four quarters of decline in this workforce in 2018, while job creations in construction accelerated (+16,000 after +10,000), whereas the creation of only 4,000 jobs had been initially expected. Meanwhile, unemployment fell by one-tenth of a point (to 8.7%), against the forecast for stability, with this new downturn following a notable reduction of 0.3 points in Q4 2018.

Core inflation is lower than forecast

In May 2019, according to the preliminary estimate, headline inflation stood at +1.0% year-on-year, as forecast in the March 2019 issue of Conjoncture in France. Core inflation would have been lower than expected (+0.5% in May against +0.9%), due mainly to a slowdown of services prices. For June 2019, headline inflation has been revised upwards (+1.3%, against +1.0% expected in March). This revision mainly stems from the upwards revision in oil prices. ■

2 - Activity by sector and labour market

	Conjoncture in France March 2019		Conjoncture in France June 2019	
	Q1 2019	Q2 2019	Q1 2019	Q2 2019
Agriculture	0.2	0.2	0.5	0.6
Manufacturing	0.3	0.2	0.5	0.0
Energy, water and waste	0.8	0.7	0.6	0.6
Construction	0,0	0,0	0.2	–0.1
Trade	0.3	0.3	0.4	0.0
Market services excluding trade	0.5	0.6	0.3	0.4
Non market services	0.4	0.3	0.1	0.2
Total	**0.4**	**0.4**	**0.3**	**0.3**
Employment, unemployment, princes				
Non-agricultural market sector employment	35	35	92	41
ILO* unemployment rate - Metropolitain France	8.8	8.7	8.7	8.5
Consumer price index[1]	1.2	1,0	1.1	1.3
Core inflation[1]	1,0	1.1	0.5	0.8

Forecast

* ILO unemployment: unemployement as defined by the International Labour Organisation

1. Year-on-year on the last month of the quarter

Source: INSEE

Output

In Q1 2019, total output of goods and services grew at the same pace as in the previous two quarters (+0.5%). After dropping to its lowest level since the end of 2016 in December, the business climate recovered a little and returned to its July 2018 level, above its long-term average. In Q2 2019, the output of goods and services is expected to slow (+0.2%), then accelerate slightly in H2 (+0.3% to +0.4% per quarter). As an annual average, output should increase by 1.6% in 2019.

Output of goods and services is expected to grow steadily through to the end of 2019

In Q1 2019, the output of goods and services grew as it had done during the previous two quarters (+0.5%; *Table*). After slipping back more or less continually in 2018, the business climate picked up at the beginning of 2019; it has been relatively stable since April, above its long-term average (*Graph 1*). In May, it stood at its July 2018 level. The business climate in industry has fluctuated a little above its average since December 2018. In services, the business climate has rallied since December 2018 and remains relatively high. In retail and wholesale trade it has recovered after a slower pace at the end of 2018 – beginning of 2019. For building construction, the business climate remains high. Given this context, total output of goods and services should increase moderately by the end of 2019, slowing in Q2 (+0.2%) before accelerating a little in H2 (+0.3% to +0.4% per quarter), suffering from the sluggishness of manufacturing output.

Manufacturing output is expected to fall back in Q2 2019 and should scarcely move in H2

In Q1 2019, manufacturing activity increased significantly (+0.6%) as a result of the rebound in the manufacture of coke and refined petroleum (+3.2% after −4.2%) and the buoyancy in capital goods (+0.9% after +0.7%) and automobiles (+2.8% after +2.7%).

Manufacturing output is expected to fall back in Q2 2019 (–0.2%). In May, the quarterly carry-over effect of the industrial production index for Q2 was negative (−0.5%) while the business climate improved, and was above its long-term average (*Graph 2*).

The balance of opinion on inventory once again fell below its average, after increasing strongly during Q1 2019. Looked at in detail, activity is expected to remain dynamic in capital goods (+1.0% after +0.9%). Given that refineries reopened in Q1 and there were announcements of temporary closures in Q2, activity looks set to decline in the manufacture of coke and refined petroleum products (−4.0% after +3.2%). It is likely to remain sluggish in "other industries" (+0.1% after +0.4%) and in agri-food (+0.2% after +0.5%) while it will probably edge down again in transport equipment (–1.2% after +0.4%).

In H2 2019, manufacturing output should increase slightly (+0.3% in Q3 and +0.2% in Q4). As an annual average, it is expected to accelerate compared with 2018 (+1.0% after +0.6%).

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

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

	Quarterly changes												Annual changes		
	2017				2018				2019						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Agriculture (%)	1.8	1.7	1.0	0.7	–0.2	–0.1	–0.1	0.3	0.4	0.4	0.2	0.1	3.8	1.1	1.0
Manufacturing industry (%)	0.4	0.8	0.9	1.4	–1.3	–0.2	0.7	0.2	0.6	–0.2	0.3	0.2	2.4	0.6	1.0
Energy, water, waste (%)	–1.1	0,0	1.2	–0.4	2.1	–3.4	0.9	0.4	0.5	0.6	0.2	0.2	0.3	0.4	0.9
Construction (%)	1.4	1.6	0.9	0.4	–0.2	0.8	0.1	0.4	0.4	0.1	0.2	0.2	4.8	1.8	1.2
Trade (%)	0.7	1.0	1.2	1.0	0.1	0.6	0.2	0.6	0.6	0.1	0.3	0.3	3.2	2.4	1.5
Market services excuding trade (%)	1.7	1.0	0.7	1.2	0.9	0.5	0.6	0.8	0.5	0.5	0.5	0.5	3.9	3.2	2.3
Non-market services (%)	0.1	0.4	0.5	0.3	0.1	0.2	0.1	0.3	0.3	0.2	0.3	0.3	1.1	0.8	1.0
Total (100 %)	1.0	0.9	0.8	0.9	0.2	0.2	0.5	0.5	0.5	0.2	0.3	0.4	3.0	2.0	1.6

Forecast

Source: INSEE

French developments

Agricultural output is expected to increase slightly in 2019

In Q1 2019, agricultural output rose slightly (+0.4%). Assuming that weather conditions are normal, it is likely to slow by the end of the year (+0.4% in Q2 then +0.2% and +0.1% in Q3 and Q4). As an annual average, agricultural output should increase slightly in 2019 (+1.0%).

Energy output is likely to gather pace a little in 2019

In Q1 2019, energy output picked up slightly (+0.5%). On the assumption that temperatures are seasonal, it should continue to gather pace again slightly in Q2 (+0.6%) then slow in H2 (+0.2% per quarter). Its annual average for 2019 is expected to increase by 0.9%.

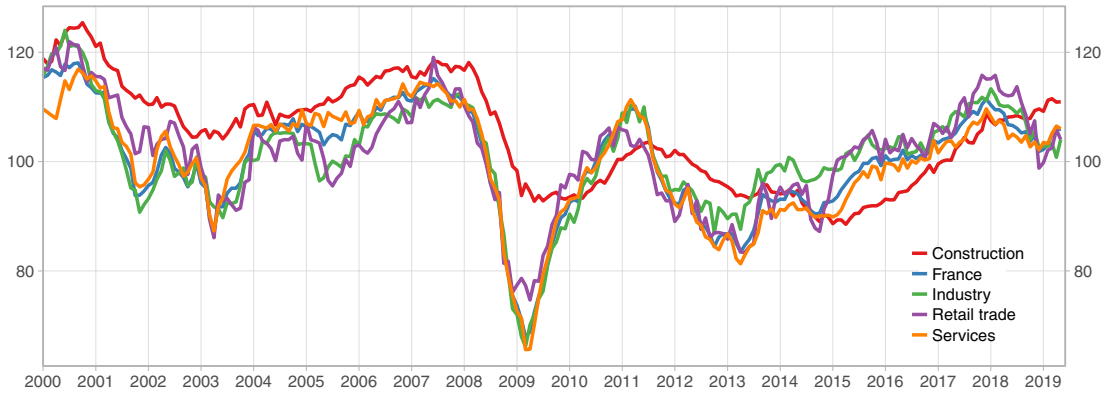
In construction, activity is likely to increase slightly until the end of 2019

In Q1 2019, output in the construction sector kept up its Q4 pace of solid growth (+0.4%) as a result of the sustained growth in activity in civil engineering, and despite activity being stable in building construction.

The number of building permits for individual dwellings fell back in Q1 2019 (−5.2%) after a rise in the previous two quarters. The number of building permits for collective housing remained almost unchanged (+0.3%) after a sharp decline in H2 2018. In the business tendency survey of business leaders in the building sector, the balance of opinion on past activity fell significantly although it remained above its long-term average. Business leaders in the building industry remain optimistic about their

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

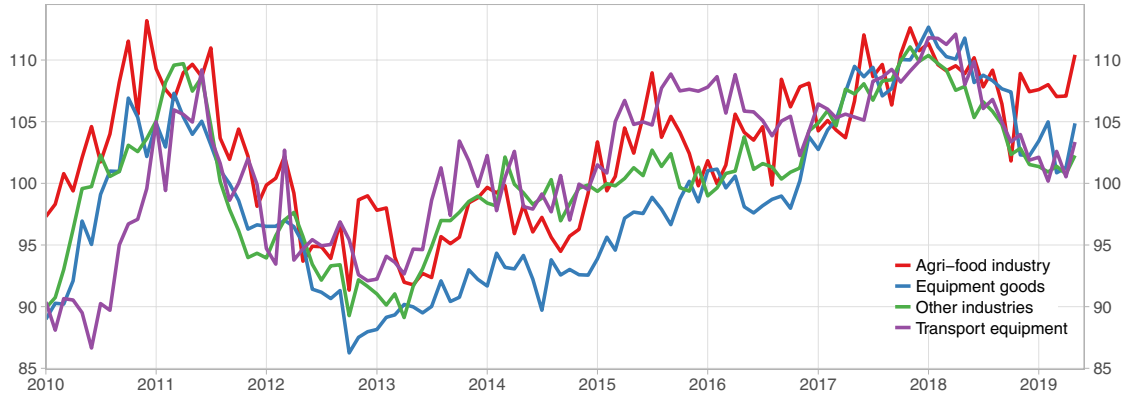
normalized to 100 with standard error of 10



Source: INSEE

2 - Sub-sector business climates in industry

normalized to 100 with standard error of 10



Source: INSEE

personal prospects for future activity (*Graph 3*). The corresponding balance declined but still remained well above its long-term average.

In addition, property developers report demand for new housing, which is picking up, and prospects for housing starts are more favourable than in the previous quarter. However, the corresponding balances remain below their average. Output in the building sector is therefore likely to fall a little in Q2 2019, then remain stable in Q3 before increasing slightly in Q4. In civil engineering, the opinion of business leaders about their expected activity declined further, but their views on their order books improved again, as the corresponding balances remained well above their long-term average. Activity should continue to grow steadily in this sector, as government demand in particular has been boosted by the ramping up of work related to the Greater Paris development project. Thus, total building output should grow a little in Q2 (+0.1%), then again in H2 2019 (+0.2% per quarter). As an annual average, activity in the construction sector is likely to slow in 2019, to +1.2% after +1.8% in 2018, a much lower growth rate than in 2017 (+4.8%).

Trade activity is likely to slow in 2019

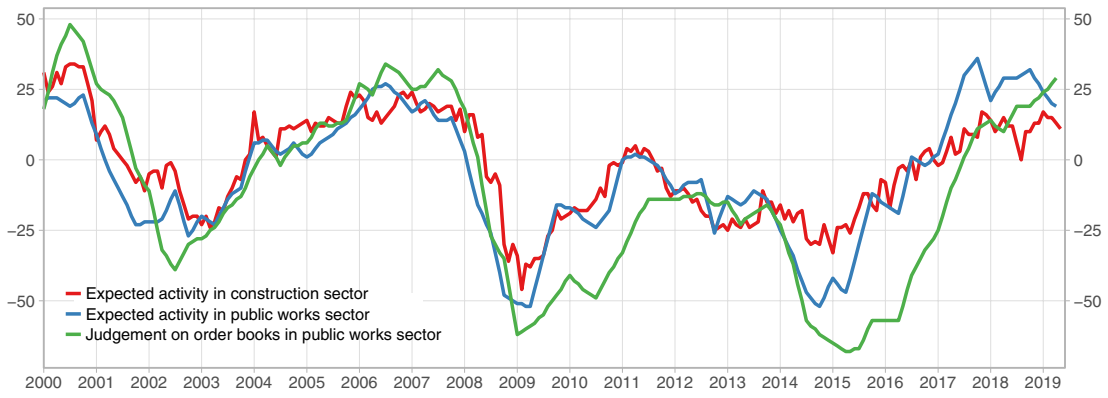
In Q1 2019, trade activity increased solidly (+0.6% as in the previous quarter), affected mainly by the rebound in corporate investment in manufactured goods.

After having deteriorated significantly in December 2018 in retail trade, and in January 2019 in wholesale trade, the business climate has picked up since: timidly in the retail sector and more markedly in wholesale.

In Q2, trade activity is likely to slow (+0.1%), still sustained by corporate investment in manufactured goods and despite the expected decline in exports. Trade activity is expected to pick up moderately in H2 (+0.3% per quarter). As an annual average, it should increase by 1.5% in 2019, slowing a little compared with 2018 (+2.4%).

3 - Expected activity in construction, judgment on order books in civil engineering

balances in %



Source: INSEE

Market services excluding trade: activity should continue to be sustained until the end of 2019

In Q1 2019, activity in market services excluding trade slowed (+0.5%), after vigorous growth in Q4 2018 (+0.8%).

At subsector level, output in transport gathered pace (+0.7% after +0.1%). Output continued to increase in accommodation and food services, a little more vigorously than in the previous quarter (+1.3% after +1.1%). Activity remained moderate in financial activities (+0.5%). It slowed in real estate activities (+0.3% after +0.4%), in services to businesses (+0.5% after +1.2%) and in "other service activities" (+0.7% after +0.9%). Activity in information-communication decelerated sharply (+0.1% after +1.3% in Q4 2018).

In May 2019, the business climate in services was weakened by one point. It stood at 106, which was nevertheless above its long-term average. The business climate is deteriorating in goods transported by road, accommodation and food services, information-communication, specialised scientific and technical activities and in real estate activities where it remains below its average (*Graph 4*). It is stable in administrative and support services.

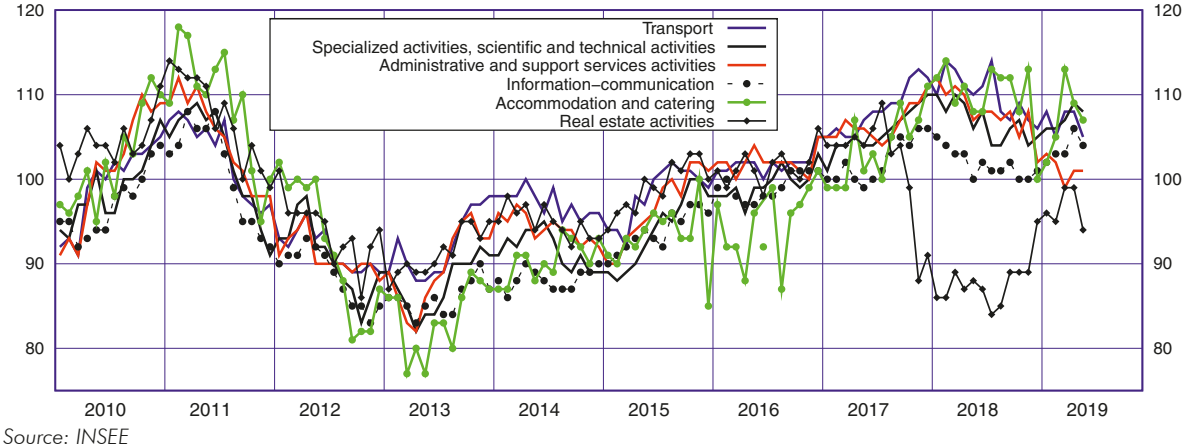
Activity in market services excluding trade should increase solidly by the end of 2019 (+0.5% each quarter). Over the entire year, it is expected to grow by 2.3%, less than in 2018 (+3.2%).

Mainly non-market services: steady growth during 2019

Mainly non-market activity maintained its pace of growth in Q1 2019 (+0.3%). Output is likely to continue to grow at a similar pace (+0.2% to +0.3%) by the end of 2019. As an annual average for 2019, growth is expected to be slightly higher than in 2018 (+1.0% after +0.8%). ■

4 - Sub-sector business climates in services

normalized to 100 with stadard error of 10



Source: INSEE

The "Economic Climate Tracer": a graphic tool to represent the phases of the economy in a simple format

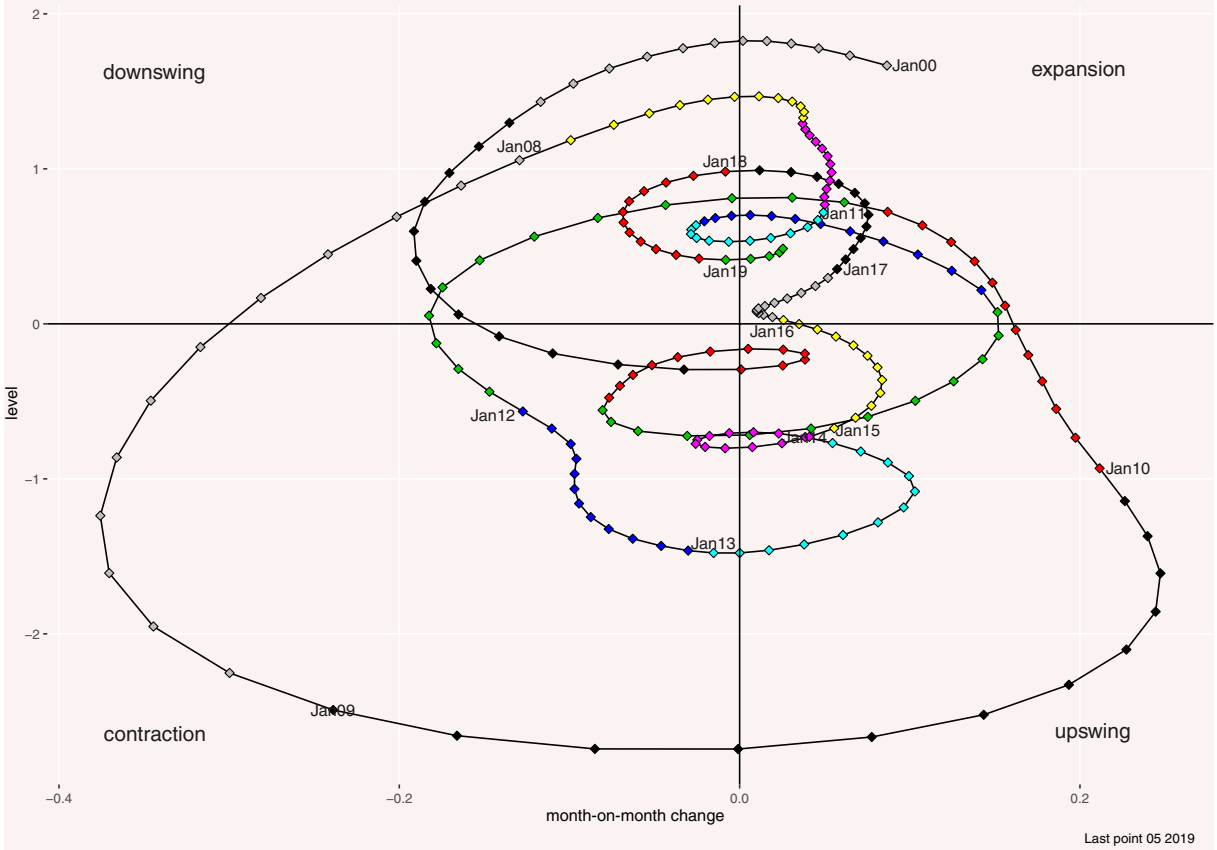
Analysing the position of the economy in its cycle is a delicate operation. However, a graph based on business climate indicators that uses data from INSEE's business tendency surveys can make it easier to assess the situation. The European Commission's Directorate-General for Economic and Financial Affairs (DG EcFin) regularly publishes graphs using the "Economic Climate Tracer", based on data taken from surveys of businesses and households. The same methodology is applied here to the French economy and its main economic sectors. At the start of 2019, this graphic tool suggested that the economic outlook was hesitant.

Four quadrants for a monthly short-term diagnosis

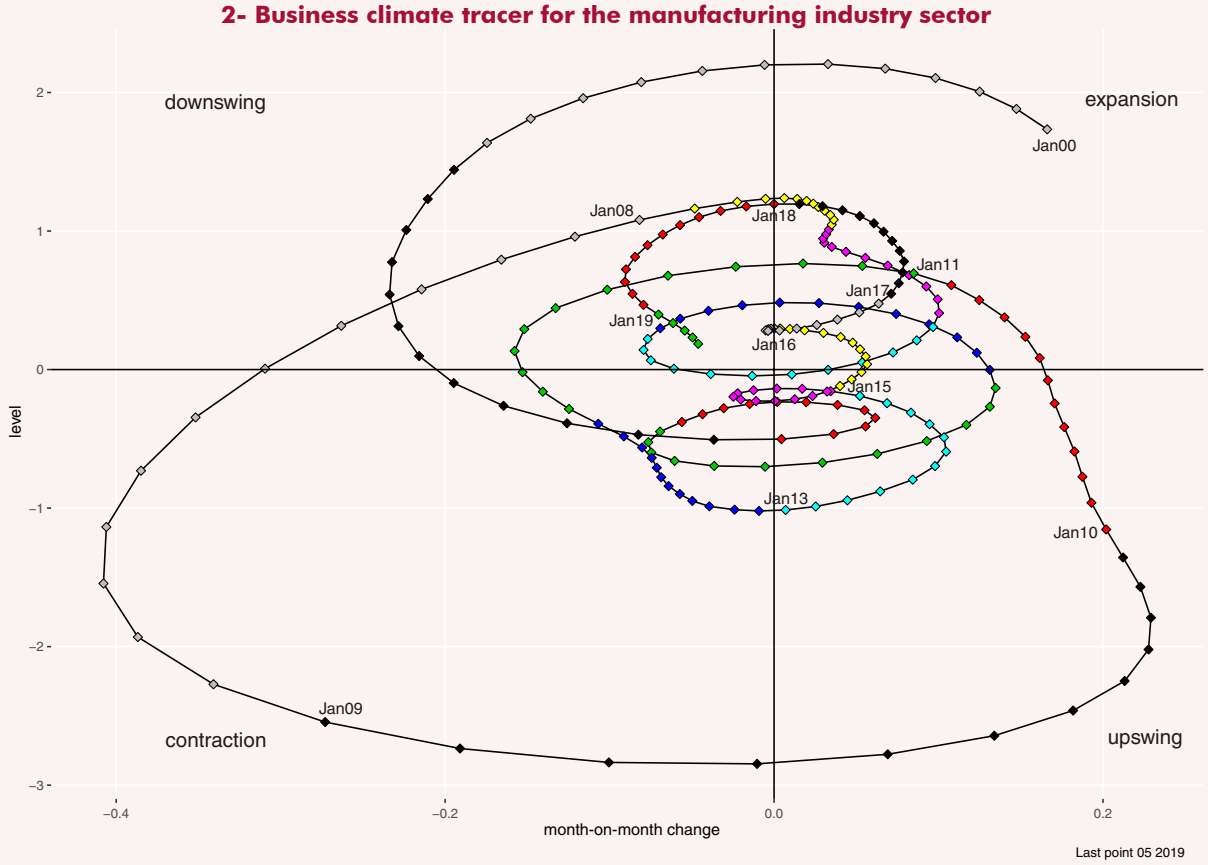
The Economic Climate Tracer produces a graphic representation used by the European Commission's Directorate-General of Economic and Financial Affairs (DG EcFin) to represent the phases of the economy in a simple format[1]. Here, this process is applied to the business climate indicator for the French economy overall, as published by INSEE (*Graph 1*), then to the sectoral business climate indicators in the manufacturing industry, services, building construction and, finally, retail trade and the trade and repair of motor vehicles (*Graphs 2 to 5*). The first step is to smooth and then centre and reduce the reference series (*Method*). The y-coordinates on the graph are the values for the smoothed series and the x-coordinates are the differences between successive values in this series. The short-term interpretation of a given point relates to its position on the graph, which is divided into four quadrants. When the coordinates are positive, the point is in the "expansion" quadrant: the business climate indicator is above average and climbing. When the y-coordinate is positive and the x-coordinate negative, the indicator is above average but decreasing: the point is then in the "downswing" quadrant. Lastly, when the indicator is below average, it is either decreasing and located in the "contraction" quadrant, or increasing when it is in the "upswing" quadrant.

1. European Commission, "Europe Business Cycle Indicators, 1st Quarter 2019", Technical Paper 031, April 2019, pp. 13-14 and 23

1- Business climate tracer for the French economy

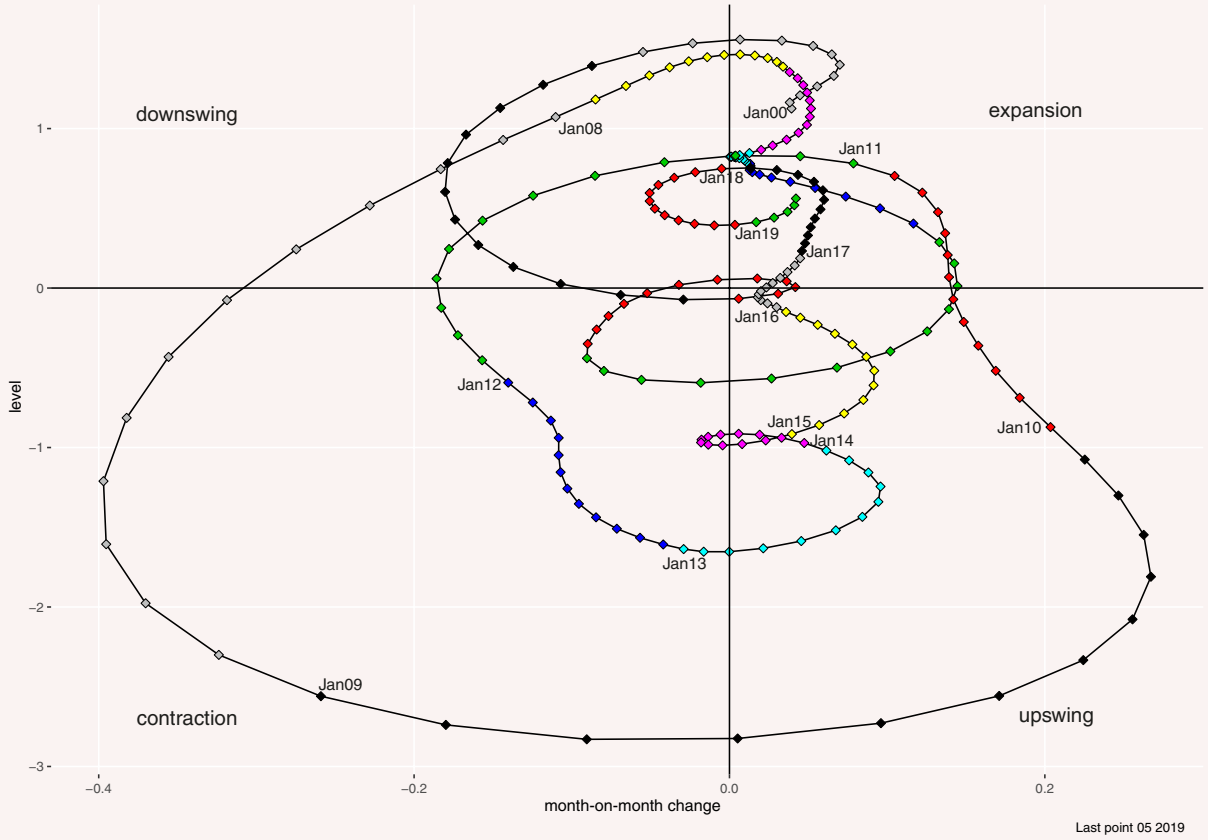


2- Business climate tracer for the manufacturing industry sector



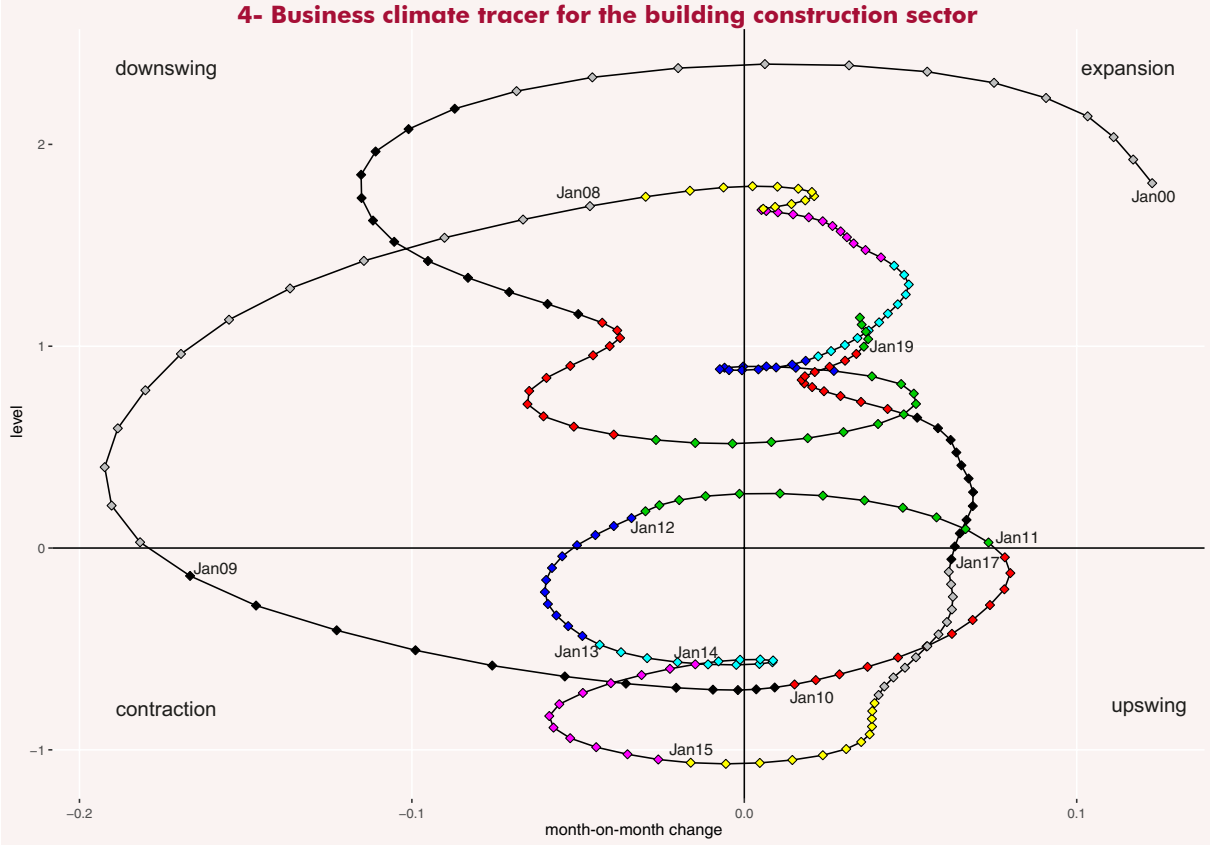
Last point 05 2019

3- Business climate tracer for the services sector



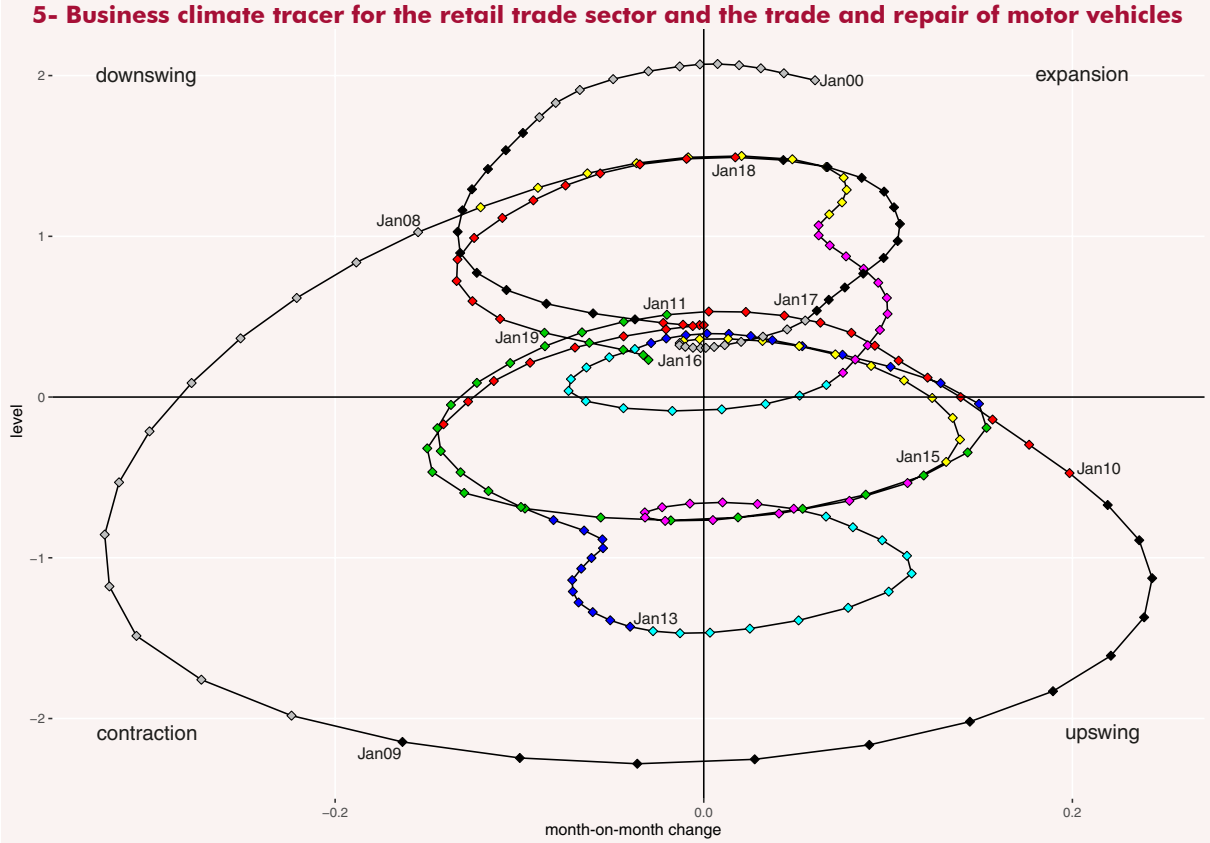
Last point 05 2019

4- Business climate tracer for the building construction sector



Last point 05 2019

5- Business climate tracer for the retail trade sector and the trade and repair of motor vehicles



Last point 05 2019

The Economic Climate Tracer tracks the time series of major cyclical episodes in France

The graph provides both a static interpretation, by representing month-on-month the associated phase in the economic outlook, and a dynamic view, by describing the trajectory the economy is taking. In the case of the business climate indicator for the economy overall, this representation clearly shows the time series for the main phases of economic activity. After solid, regular growth in 2006 (the indicator increased at a relatively steady pace), in July 2007 the business climate moved into the "downswing" quadrant (the indicator fell but still remained above its average level). This movement grew and the decline accelerated until September 2008 – at this point the indicator moved into the "contraction" quadrant. This intense episode was short-lived: the deterioration in the economic situation faded towards the end of 2008-beginning of 2009, with the indicator returning to the "upswing" quadrant in April 2009. It continued its momentum and accelerated until October 2009 then slowed gradually, returning to the "expansion" quadrant in July 2010. However, the economic slowdown continued during this positive phase. In March 2011 the indicator tipped into the "downswing" quadrant: this decline intensified into September 2011. The sovereign debt crisis in the Eurozone caused the indicator to move into the "contraction" phase, where it stayed until February 2013. After this, the outlook remained relatively gloomy: the indicator increased slightly, still remaining in the "upswing" phase, but with an incursion into the "contraction" quadrant. Of course these relatively limited movements of the indicator contrasted with the crisis episode in 2008-2009 during which it crossed three quadrants. In 2015, the outlook became a little stronger: the indicator increased and moved tentatively at the end of 2015 into the "expansion" quadrant. From June 2016 to June 2017 it accelerated, the economy brightened. This expansion movement then slowed down: the indicator moved into the "downswing" phase at the start of 2018.

According to this representation, the economic outlook for France seemed hesitant at the start of 2019

The decline in the indicator increased until mid-2018 but has eased since then, so that by February 2019 it had moved back into the "expansion" phase, although its trajectory has not become any stronger since then. Care must be taken when interpreting such cases where points fall "in between". Indeed, during this latest period, the DGEcFin produced a different diagnosis for France based on its own short-term indicator (*Method*), which, in addition to including the business tendency surveys, also uses data on household confidence. During 2018, the indicator calculated by the DG EcFin declined steadily and in March 2019 was at the intersection with the "contraction" phase.

The short-term message delivered by the business climate sector indicators also seemed confused at the beginning of the year. For services, the indicator has been just inside the "expansion" phase since December 2018, after eleven months in the "downswing" phase. The industry indicator also spent 2018 in the "downswing" quadrant, but in this case it continued to fall back, with the result that the associated indicator came close to the intersection with the "contraction" phase. The same was true for the retail trade and the trade and repair of motor vehicles. The trajectory for the building industry appeared to be very different: since 2017, the indicator has remained in the "expansion" quadrant and in 2019, it continues to increase at a steady pace.

This type of analysis is not the only way to assess or define the different short-term periods. For example, the economic turning point indicators, published every month by INSEE, aim to detect any changes in economic trends as early as possible. In May 2019, for instance, the economic turning point indicator suggested a favourable short-term business climate although it has fluctuated, notably since the beginning of 2019, resulting in a diagnosis that is more or less consistent with the "Economic Climate Tracer".

Apart from the building construction sector, do economic trends in the other sectors tend to coincide?

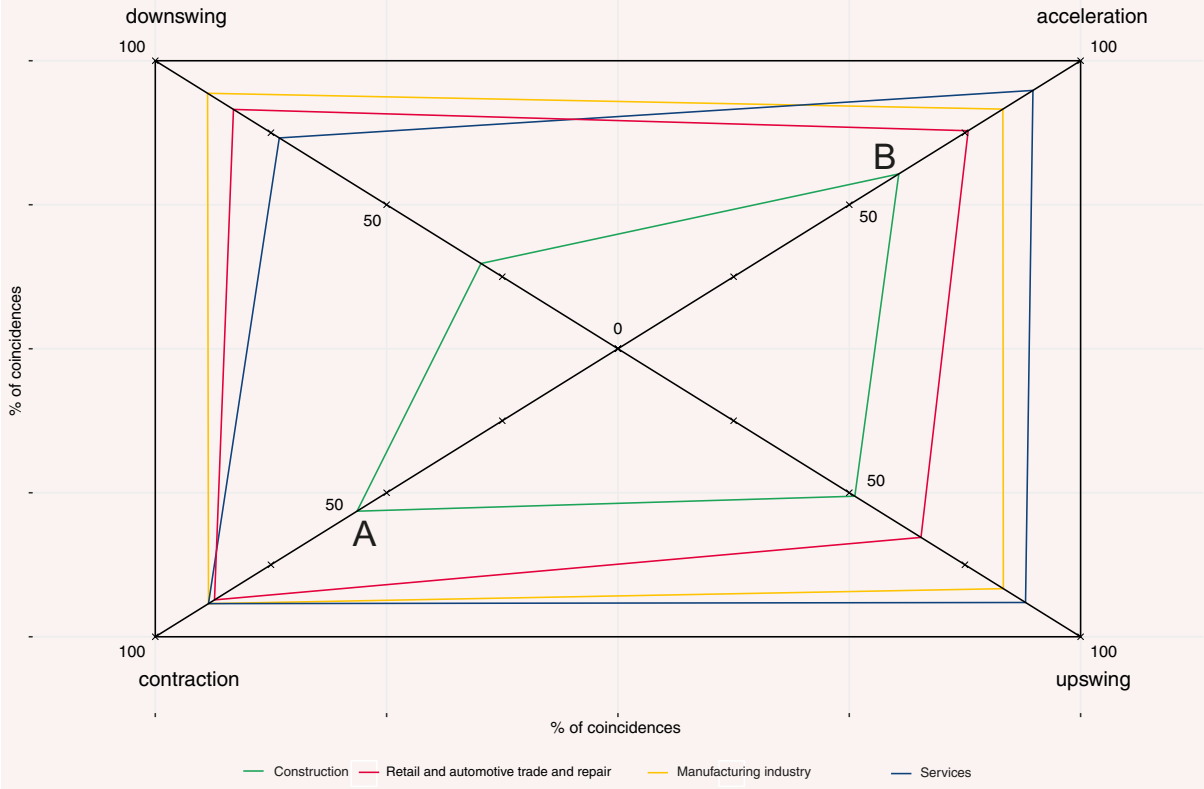
When phases are analysed using the "Economic Climate Tracer" the general business climate indicator can be compared against indicators for different sectors of activity. Thus a study of phases that coincide (*Table 1* and *Graph 6*) confirms the notion that the building construction sector has its own specific economic trend. In this sector, the frequency with which phases coincide with the same phases for the general climate indicator is no greater than 60% of cases, which is less than for the other sectors of activity. In services, a large proportion of "expansion", "contraction" and "upswing" phases in the general indicator correspond to the same phases in this sector, whereas this is much less true for the "downswing" phases. In industry, the downswing and contraction phases of the general climate indicator are the ones that coincide best with the phases in this sector. The short-term outlook in retail trade seems fairly atypical: the "upswing" phases in the general indicator correspond relatively little with the same phases in this sector, while the contraction phases are more similar. Overall, results for the contraction phase are consistent: when the general indicator is positioned in this phase, the indicators for industry, retail trade and services also seem to be in this phase more often than in the case of other types of phase. ■

Table of frequencies (in %) of phase coincidences between the French climate and the climates of the sectors

Climate phase France	Industry	Services	Construction	Trade
Expansion	85.7	88.6	59.0	77.1
Downswing	89.0	72.6	28.8	83.6
Contraction	88.5	88.5	56.4	87.2
Upswing	84.3	88.0	50.6	65.1

How to read it: 85.7% of the expansion phases of the general indicator coincide with a phase of expansion of the indicator in industry
Source: INSEE, calculations based on monthly business surveys of companies

6- Frequency with which phases coincide with those of the general business climate, according to sector



INSEE, last point: May 2019

How to read this graph: for the construction sector, the contraction (A) and expansion (B) phases coincide in about 55% and 60% of cases respectively, with a general phase of the same kind.

Foreign trade

In Q1 2019, world demand for French goods and services gathered pace (+1.1% after +0.3%) in the wake of world trade (+1.2% after +0.0%). Yet French exports slowed (+0.4% after +2.0%), mainly due to the downturn in sales of refined petroleum products. In Q2, exports are likely to slip back (–0.7%), mainly in reaction to the naval delivery in the previous quarter, before bouncing back in Q3 (+0.7%) then picking up again strongly in Q4 (+1.4%), driven both by sustained world demand and by deliveries of major aeronautical and naval contracts. Imports picked up slightly in Q1 2019 (+1.4% after +1.1%), spurred on by the rise in the purchase of energy products. In Q2, they are likely to stall (–0.3%) due to the downturn in imports of manufactured goods. In H2 2019, imports should increase once again in line with domestic demand (+0.9% in Q3 and +1.1% in Q4). As an annual average, foreign trade is likely to hamper GDP growth in 2019 (–0.1 points after +0.7 points in 2018), echoing the many uncertainties and a certain wait-and-see attitude affecting world trade.

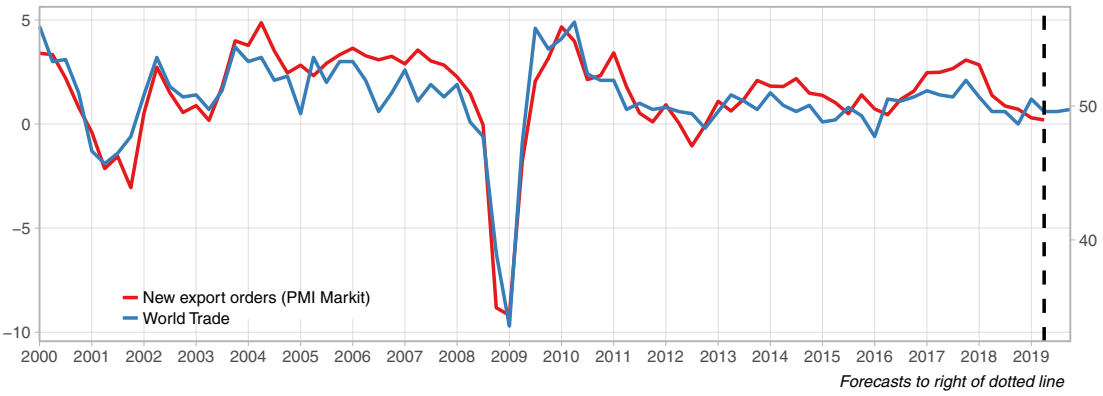
2019, a year of slowdown in world trade in a context of protectionist tensions

In Q1 2019, world trade gathered pace (+1.2% after +0.0%, *Table 1*), due to the recovery of imports by the emerging countries (+2.0% after –1.6%), bolstered by renewed vigour in domestic demand. Excluding the emerging countries, world trade picked up (+0.9% after +0.8%), mainly due to British imports (+10.8% after +2.1%) and despite a downturn in US imports (–0.6% after +0.5%) and a slowdown in the Eurozone (+0.4% after +1.2%).

World trade should continue to expand through to the end of 2019 (+0.6% in Q2 and Q3, +0.7% in Q4), but less briskly than during previous years, as suggested by the decline in balances of opinion related to export orders in world business tendency surveys (*Graph 1*). In a context of strong commercial and protectionist tensions, world trade is expected to slow considerably in 2019 (+2.6% after +4.6% in 2018 and +5.8% in 2017) after two consecutive years of strong growth.

1 - World trade and new export orders

quarterly variations in %, levels in points



Source: INSEE

1 - World trade and world demand for French products

	2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
World trade	1.3	0.6	0.6	0.0	1.2	0.6	0.6	0.7	5.8	4.6	2.6
Imports of advanced economies	0.5	0.5	0.7	0.8	0.9	0.3	0.9	0.5	5.2	3.5	2.7
Imports of emerging economies	3.0	0.7	0.4	–1.6	2.0	1.1	0,1	1.0	7.0	7.0	2.2
World demand for French products	0.6	0.7	0.7	0.3	1.1	0.4	0.7	0.6	5.5	3.9	2.7

Forecast

Source: INSEE, DG Trésor

World demand for French goods and services also gathered pace in Q1 2019 (+1.1% after +0.3%, *Graph 2*), due mainly to the buoyancy of German and British imports, which together represent almost 25% of French exports. By the end of the year, world demand should grow at virtually the same pace as world trade (+0.4% in Q2 then +0.7% per quarter on average in H2). As an annual average for 2019, world demand for French goods is likely to slow significantly (+2.7% after +3.9%).

French exports are expected to slow down in 2019 along with world trade

In Q1 2019, despite the buoyancy of world trade, French exports slowed (+0.4% after +2.0%, *Table 2*). In particular, exports of manufactured goods were at a standstill after a very dynamic Q4 2018 (+0.5% after +2.7%). All manufacturing sectors are concerned, apart from agri-industry and capital goods. More precisely, the fall in sales of refined petroleum products (–10.9% after +9.0%) contributed 0.3 points to the deceleration of exports of manufactured goods. Exports of transport equipment also affected trade, but to a lesser extent, as the delivery of the ocean liner Bellissima offset the backlash effect from aeronautical deliveries and the delivery of the ocean liner Celebrity Edge in the previous quarter.

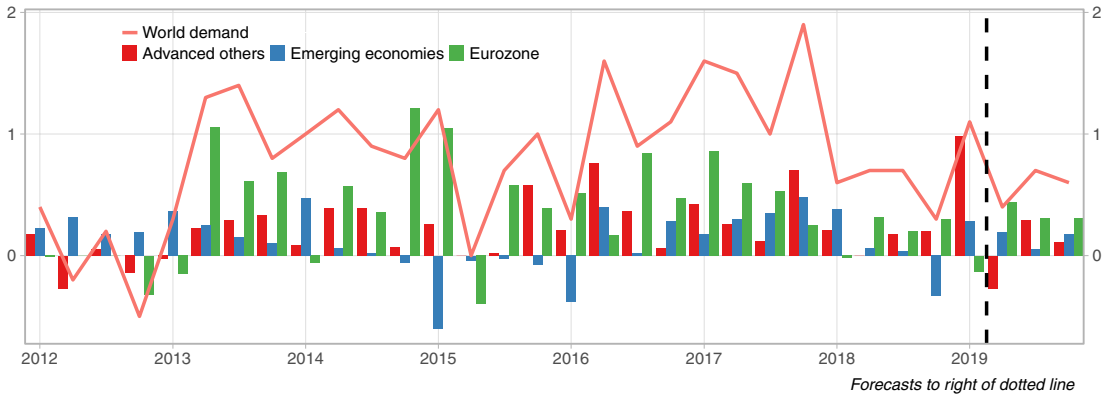
Sales of other industrial goods slowed (+0.8% after +2.3%), as did those of agricultural products (+2.5% after +3.0%), while service exports fell back (–0.8% after +0.9%). Only energy exports soared (+12.3% after –0.8%), especially hydrocarbons.

In Q2 2019, exports of goods and services seem to be declining (–0.7%), mainly because of the downturn in sales of manufactured goods (–0.9%, *Graph 3*). Despite the ongoing deliveries of military hardware and the upswing in aeronautical deliveries, any development in aeronautical and naval exports is likely to be marred by the backlash effect from the delivery of the ocean liner in Q1. In addition, exports excluding aeronautical and naval exports are expected to fall back (–0.8% after +1.1%) in line with the main indicators from business tendency surveys in industry, most of which fell in May. Agricultural exports look set to slow (+2.0%) while exports of services are expected to shrink (–0.7%), likewise for energy exports (–2.0%).

In H2 2019, French exports should get back on track, benefitting from a more favourable schedule of deliveries of major aeronautical and naval contracts. Exports of manufactured goods (+1.1%), should be invigorated by the slight depreciation forecast for the euro, and should

2 - Foreign demand for French goods and contributions of the main trading partners

quarterly variations in %, contributions in points



Source: INSEE, DG Trésor

2 - Foreign trade growth forecast

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

	Quarterly changes								Annual changes		
	2018				2019						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Exports											
All goods and services	–0.4	0.7	0.5	2.0	0.4	–0.7	0.7	1.4	4.0	3.5	2.5
Manufactured products (69%*)	–1.2	0.5	1.1	2.7	0.5	–0.9	1.1	1.8	4.9	3.6	3.5
Imports											
All goods and services	–0.7	0.8	–0.2	1.1	1.4	–0.3	0.9	1.1	4.1	1.2	2.8
Manufactured products (69%)	–0.6	2.2	–1.1	1.9	1.2	–0.7	0.8	1.1	5.4	2.5	2.7
Contribution of foreign trade to GDP	0.1	0.0	0.2	0.3	–0.3	–0.1	0.0	0.1	–0.1	0.7	–0.1

Forecast

* Part of exports (resp. imports) of non-energy industrial goods in exports (resp. imports) in a whole in 2018.

Source: INSEE

improve a little more than world demand in Q3. They are expected to accelerate more strongly in Q4 (+1.8%) with the delivery of a cruise ship and ongoing aeronautical deliveries, as Airbus has once again revised its 2019 target upwards. Service exports are expected to gradually return to their trend pace (–0.2% then +0.8%), and the same goes for sales of agricultural products (+0.5% per quarter). Energy exports should stabilise by the end of the year (+0.5% per quarter).

All in all, exports are expected to slip back in Q2 (–0.7%) then rally in H2 2019 (+0.7% in Q3 then +1.4% in Q4). Across 2019 as a whole, they are likely to be much less buoyant than in 2018 (+2.5% after +3.5% in 2018).

Imports are expected to grow more than exports in 2019

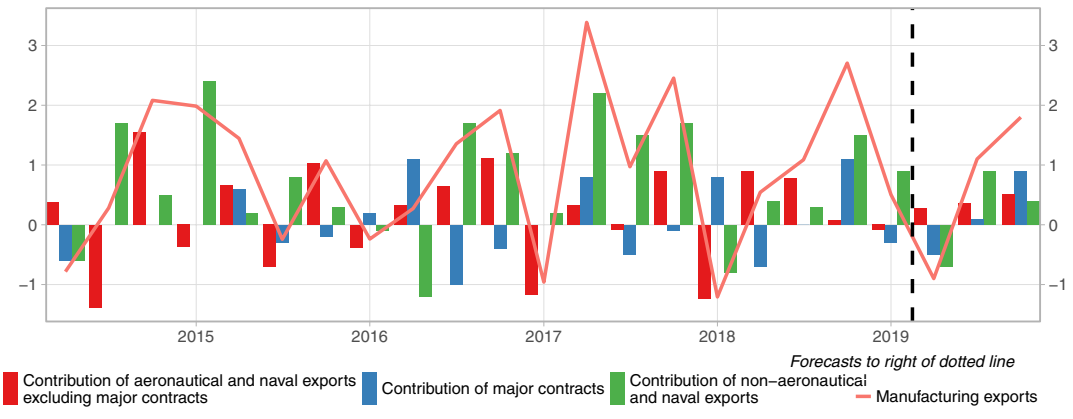
Imports gathered pace in Q1 2019 (+1.4% after +1.1%), mainly thanks to the dynamism of purchases in the energy sector (+9.7% after –3.9%). In addition, imports in the manufacturing sector slowed slightly (+1.2% after +1.9%) due mainly to the downturn in purchases of transport equipment (–0.8% after +0.1%) and the slowdown in imports of other industrial goods (+1.5% after +1.9%). However, the upswing in sourcing in the agri-food industry (+2.5% after –0.2%), and the continuing purchases of refined petroleum products (+8.2% after +5.0%) maintained the relative buoyancy of imports of manufactured goods in Q1. Imports of agricultural products slowed (+2.0% after +3.7%) and service imports were at a standstill (–0.4% after –0.3%).

In Q2, imports of manufactured goods are expected to fall back (–0.7%) and are likely to come to a standstill, especially in manufacturing excluding aeronautical and naval imports (–0.9%). In H2 2019, imports of manufactured goods should increase again (+0.9% on average per quarter), driven both by dynamic purchasing in the aeronautical and naval sector and by the recovery of purchasing in the other manufacturing sectors, linked with the boost in domestic demand. Agricultural imports look set to stall (+0.0%) before recovering (+0.5% in Q3 then +1.0% in Q4), and the same goes for energy imports. Finally, imports of services are expected to pick up slightly (+0.6%) before returning to their trend growth (+1.3% on average per quarter).

All in all, imports are likely to feel these effects in Q2 (–0.3%) then recover their vigour in H2 2019 (+0.9% then +1.1%). Throughout 2019 they should increase more strongly than in 2018 (+2.8% after +1.2% in 2018). 2018 was an exceptional year for the positive contribution to growth, but in 2019 foreign trade is likely to once again hold back growth (–0.1 points in 2019 after +0.7 points in 2018). ■

3 - Manufacturing exports and main components contributions

variation in %, contributions in points



Source: INSEE

Employment

In France, non-farm market payroll employment increased considerably in Q1 2019 (+92,000 after +63,000 in Q4 2018). It is likely to rise by 41,000 in Q2 2019, in line with the generally favourable hiring intentions declared by business leaders in business tendency surveys. In H2 2019, growth in activity should lead to the creation of jobs at a slower pace than at the start of the year (+80,000 over the half-year). Consequently, throughout 2019 as a whole, non-farm market payroll employment is expected to increase by 213,000 after +167,000 in 2018.
In the non-market sector, employment looks set to bounce back slightly in 2019 (+9,000, after –5,000 jobs in 2018), with a much less pronounced decline in the number of beneficiaries of subsidised employment contracts than between mid-2017 and the end of 2018.
All in all, 241,000 jobs are likely to be created in 2019, which would be more than in 2018 (+182,000). The pace of job creations is expected to be slower in H2 2019 (+96,000) than in H1 (+145,000).

Market payroll employment should continue to increase in 2019

In 2018, the increase in payroll employment in the non-farm market sectors in France (excluding Mayotte) was significantly smaller than in 2017 (+167,000, after +323,000 Table 1), mainly due to the downswing in temporary employment (–28,000 after +124,000). In Q1 2019, non-farm market payroll employment increased steadily (+92,000). It remained robust in the non-temporary tertiary sector (+61,000, after +56,000 in Q4 2018); it accelerated in construction (+16,000 after +10,000) and rebounded slightly in the temporary sector (+8,000, after –12,000).

Based on business leaders' responses to questions in business tendency surveys about their workforces, the employment climate has declined slightly since the summer of 2018 but remained favourable, at 105, in May 2019. Consequently, payroll employment should continue to rise in the market sectors in Q2 2019 (Graph 1). After a very dynamic H1 2019 (+133,000), employment is expected to grow at a somewhat slower pace in H2 (+80,000), in line with the anticipated increase in activity and the slightly positive effect of policies designed to reduce the cost of labour. In particular, the transformation of the CICE (competitiveness and employment tax credit) into reductions in employers' contributions from 2019 onwards should contribute to the creation of around 15,000 jobs per half-year (Focus in the December 2018 issue of *Conjoncture in France*, p. 64).

1 - Change in employment

in thousands, SA

	2018				2019				2018		2019		2018	2019	Niveau fin 2018
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	H1	H2	H1	H2			
Mainly non-agricultural market sectors:	**39**	**31**	**34**	**63**	**92**	**41**	**40**	**40**	**70**	**97**	**133**	**80**	**167**	**213**	**16 896**
Industry	0	1	1	9	8	3	3	3	1	10	11	6	12	17	3 150
Construction	8	5	6	10	16	7	6	5	13	16	23	11	28	34	1 388
Temporary employment	–6	–5	–5	–12	8	0	0	0	–11	–17	8	0	–28	8	788
Market services excl. tempory employment	36	30	31	56	61	31	31	32	66	88	91	63	154	154	11 570
Agricultural workers	**3**	**2**	**0**	**1**	**1**	**1**	**1**	**1**	**5**	**1**	**2**	**2**	**6**	**4**	**309**
Mainly non-market service sectors	**0**	**–13**	**2**	**6**	**1**	**2**	**4**	**3**	**–13**	**7**	**3**	**7**	**–5**	**9**	**8 031**
Self-employed	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**7**	**7**	**8**	**8**	**15**	**15**	**2 884**
TOTAL EMPLOYMENT	**46**	**23**	**39**	**74**	**98**	**47**	**49**	**48**	**69**	**113**	**145**	**96**	**182**	**241**	**28 121**

Forecast
(1) Sectors DE to MN and RU
Source: INSEE

Temporary employment is likely to stabilise and non-temporary tertiary employment should increase moderately through to the end of 2019

After 2017, when temporary employment exceeded the high levels recorded before the economic crisis of 2008-2009, this sector, which responds particularly quickly to fluctuations in activity, suffered a reversal of fortunes in 2018 (–28,000 after +124,000 in 2017: *Graph 2*). In Q1 2019, temporary employment rebounded slightly (+8,000); it is now expected to stabilise through to the end of the year.

Employment in the non-temporary tertiary market sector slowed down a little in 2018, while remaining solid (+154,000 after +173,000 in 2017), and this trend continued in Q1 2019 (+61,000). With business leaders remaining optimistic about growth prospects in their workforce, employment in these sectors should remain solid in Q2 (+31,000, *Graph 3*). It should therefore increase by +91,000 in H1, before slowing a little in H2 2019 (+63,000).

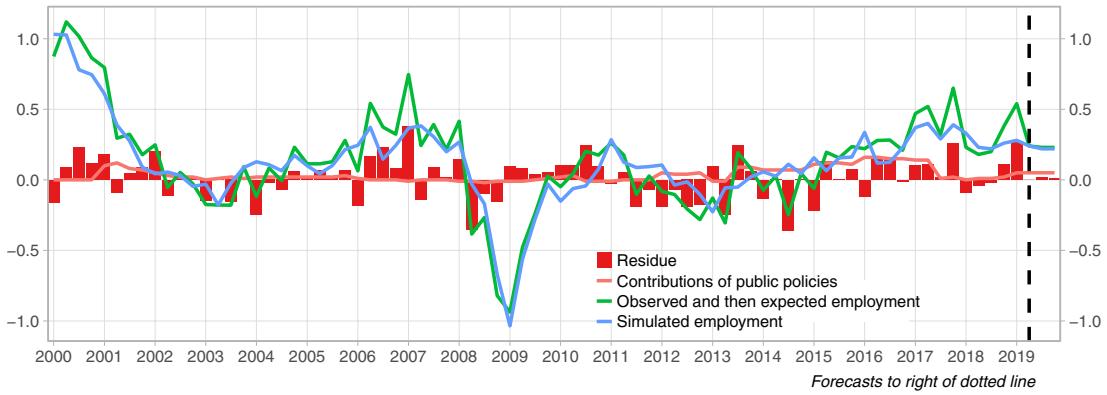
All in all, employment in the mainly market tertiary sector, including temporary work, is set to increase by 162,000 in 2019 (+99,000 in H1 2019, then +63,000 in H2).

Industry should continue to create jobs

Payroll employment in industry fell almost continuously between the end of 2001 and the end of 2016. However, job losses have gradually decreased and since the end of 2017, the workforce in this sector has returned to growth. Consequently, employment in industry increased at the end of 2018 (+9,000 in Q4 2018), as in Q1 2019 (+8,000). The expectations of business managers in industry regarding their workforces suggest that employment in industry should continue to grow slightly over the coming quarters (+3,000 jobs per quarter). As a consequence, industry is expected to create 17,000 jobs throughout 2019 as a whole.

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

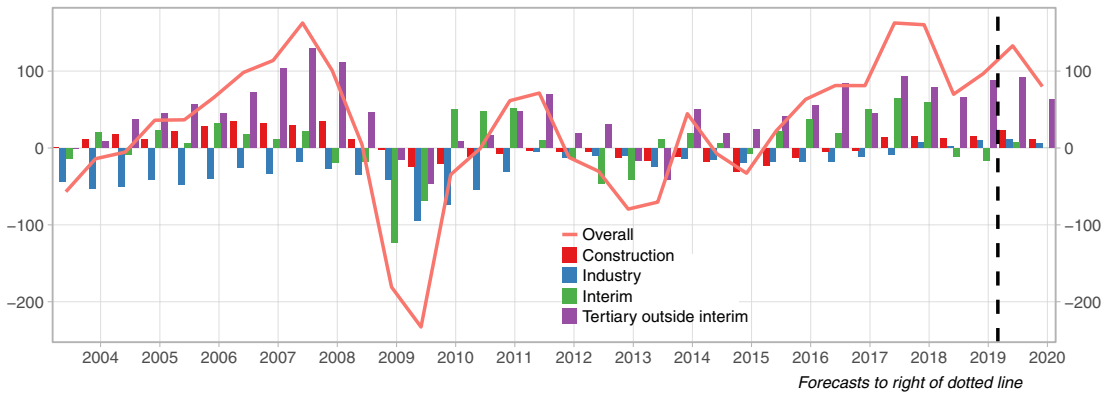
in %



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 effects ot the CICE, the PRS and the employment plan). A positive redidual, such as that observed in 2015, indicates that observed employment showed better growth than past behaviour would lead us to expect. Estimation period: 1984-2015.
Période d'estimation de l'équation : 1984-2015
Scope: France excluding Mayotte
Source: INSEE

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

thousands per quarter



Scope: France excluding Mayotte
Source: INSEE

Employment in the construction sector is also expected to remain solid

In 2018, employment in the construction sector continued to grow at the same pace as in the previous year (+28,000 jobs, as in 2017). In Q1 2019, it accelerated with +16,000 additional jobs created in this branch. According to the business tendency surveys, the expectations of business leaders concerning the growth of their workforces remain very favourable in civil engineering and the building industry. Through to the end of 2019, employment in the construction sector should therefore continue to increase but at a somewhat slower pace (+34,000 throughout 2019 as a whole).

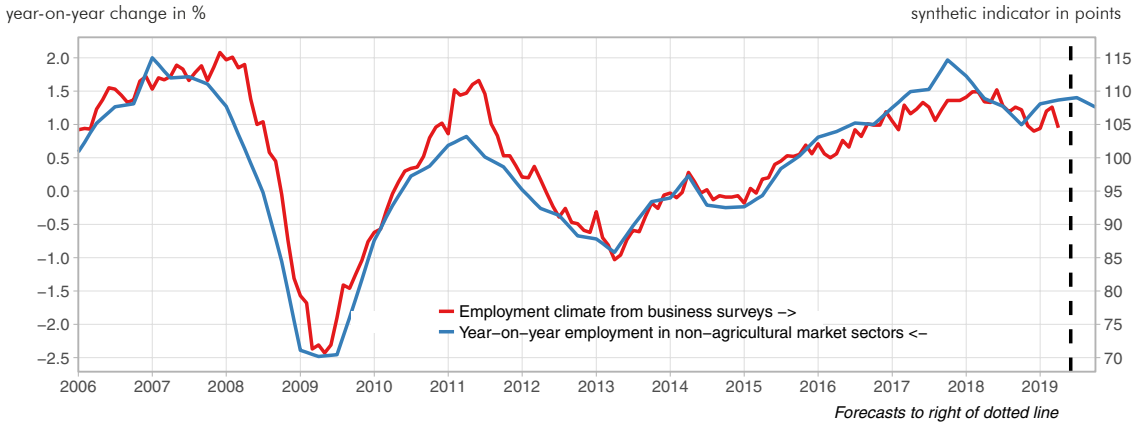
Non-market employment is expected to bounce back in 2019

In 2018, non-market employment slipped back a little: –5,000 after remaining stable in 2017. This slowdown was mainly due to the reduction, starting in mid-2017, in the number of "Contrats uniques d'insertion" (single integration contracts, CUI) and "Emplois d'avenir" (future jobs contracts) (Table 2), which was partly offset by an increase in the number of employees in unsubsidised employment. Non-market employment should also bounce back slightly in 2019 (+3,000 in H1, then +7,000 in H2), with the reduction in the number of beneficiaries of subsidised employment contracts diminishing after dropping sharply for two consecutive years (Focus in the March 2019 issue of *Conjoncture in France*).

Total employment is likely to rise by 241,000 in 2019

Taking account of the self-employed and agricultural workers, net job creations, all sectors combined, should reach 241,000 in 2019, i.e. more than in 2018 (+182,000). After a relatively dynamic Q1 2019 in the market sector, total employment should slow a little in H2: +96,000 after +145,000 in H1. ■

3 - Balance of opinion of business leaders on expected workforce and variation in non-farm payroll employment



Source: INSEE

2 - Change in subsidised employment and civic service in the non-marked sector

in thousands

	2018				2019				2018		2019		2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	H1	H2	H1	H2		
Supported non-market contracts, excluding ACI	–41	–32	–24	–2	–9	–1	–6	–7	–72	–26	–10	–14	–99	–24
job of the future	–9	–7	–7	–5	–6	–3	–3	–3	–16	–12	–8	–5	–28	–13
Single integration contract (CUI-CAE)	–54	–53	–50	–19	–5	–1	0	0	–106	–68	–6	–1	–174	–6
Competence employment parth (PEC)*	22	28	33	21	2	2	–3	–4	50	54	4	–8	104	–4
Workshops and insertion sites (ACI)	–2	0	–1	1	0	1	0	1	–2	0	1	2	–2	2
Civic services	1	0	4	2	–1	–4	3	1	1	6	–4	4	7	0
Total	**–42**	**–31**	**–21**	**1**	**–10**	**–4**	**–3**	**–5**	**–73**	**–20**	**–14**	**–8**	**–94**	**–21**

Forecast

* Since January 2018, recrutment 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

Source: INSEE

Barriers to hiring reported in the business tendency surveys: inclusion of series on the INSEE website

Since January 2017, companies in industry, services and the building sector have been surveyed in the first month of each quarter in the business tendency surveys about the barriers to hiring that they perceive. The proportions of companies reporting barriers to hiring are now accessible online among the indices and time series on the INSEE website. They are calculated by sector and type of barrier and are now updated on a quarterly basis following the same calendar and the same methodology as the other quarterly series based on the business tendency surveys.

Questions on the barriers to hiring have been asked since 2017

Since January 2017, some 10,000 companies in industry, services and the building sector have been surveyed in the first month of each quarter in the business tendency surveys on the possible barriers preventing them from hiring more employees on open-ended contracts or on long fixed-term contracts (Figure). The scope of these surveys covers about 70% of salaried employment in the non-agricultural market sector in Metropolitan France. These questions enable estimates of the proportions of companies reporting barriers to hiring, and the results are now available online on the INSEE website (see *Instructions for accessing the series*).

The calculation method is based on that of the quarterly business tendency surveys

The series published in the BDM are calculated using the same methodology as the other quarterly series based on the business tendency surveys[1].

They are produced in two stages. A first "provisional" estimate is produced about two-thirds of the way through the survey month. The provisional estimate of the short-term indicators for April 2019, for example, was produced from the responses available on 18 April. A second "final" estimate is produced during the next quarter. The final estimate of the short-term indicators for April 2019 will be produced with the responses available on 19 July. With each survey the provisional results of the ongoing survey are therefore published along with the final results of the previous survey. The series provided on the INSEE website consist of the provisional estimate for the April 2019 survey and the final estimates of the previous surveys.

Companies' responses are partially imputed. In a company fails to respond to the entire block of questions on barriers to hiring at the time of the provisional estimate, its answers from the previous survey are used again. When making the final estimate for quarter Q, this imputation is done if the company has answered the block of questions on barriers to hiring in both the previous survey (in Q-1)

1. The calculation methodology is described in more detail in the survey documentation. In particular the reader may refer to INSEE Méthodes no. 117: "The business tendency survey on the situation and perspectives in industry: methodology" for more information on the imputation of non-responses and the constant sample method.

Figure - Barriers to hiring module in the business tendency surveys

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

YES ☐ NO ☐ Not applicable ☐

If **YES**, what are the main barriers?

- uncertainty about the economic situation ☐
- unavailability of skilled labour ☐
- recruitments costs ☐
- social contributions too high ☐
- wage level too high ☐
- direct financial costs of dismissals ☐
- legal risks associated with dismissal procedure ☐
- uncertainties as to whether labour legislation will remain in place ☐
- others ☐

and the following survey (in Q+1)[2]. From April 2017 to January 2019, the response rate to the module on barriers to hiring for the final estimates was 62% on average before the imputation of non-responses and 65% after imputation of non-responses.

Provisional estimates are produced with "constant" samples. After imputation of non-responses, only the companies that answered the module on barriers to hiring in the previous survey are retained for the provisional estimate of the proportions for the current survey. This limitation enables the proportions of the barriers to hiring to be calculated for the current survey (provisional estimate) and the previous survey (final estimate) based on the same sample of companies, thereby guaranteeing that there is no sample structure effect for the latest evolutions.

Finally, a company's answers are weighted according to its salaried workforce and according to the weight of the stratum[3] it belongs to.

In April 2019, according to the provisional estimate, 53% of companies in industry, 67% of companies in the building sector and 43% of service companies reported the existence of barriers to hiring. Compared to April 2017, this proportion has increased in the service sector (+5 points) and in industry (+9 points), while it has remained virtually stable in the building sector (+1 point).

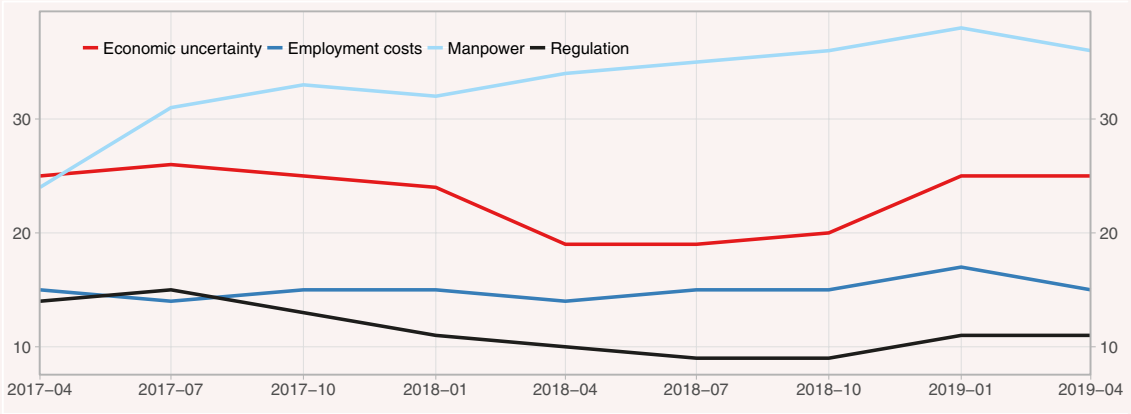
2. The barriers to hiring module was added to the business tendency survey questionnaire in January 2017. However, the series for January 2017 were not published, as the method of imputation for the final estimate cannot be fully applied for the first survey.
3. In the business tendency surveys, the strata correspond to combinations of sectors of activity and bands of company sizes. Their weights are calculated based on workforce in industry and the service sector, and on turnover for the building sector.

Proportion of enterprises mentioning each barrier to hiring in Q2 2019
as a %, weighted by workforce, provisional estimate

	Industry	Building	Services
Existence of barriers	53	67	43
Uncertainty about the economic situation	25	27	22
Skilled labour unavailable	36	55	29
Employment-related costs	15	32	15
Recruitments costs	5	11	4
Social contributions too high	11	23	11
Wage level too high	6	12	5
Regulations	11	19	8
Dismissal costs	5	11	4
Legal risks linked to dismissals	7	13	5
Possible changes to labour legislation	6	10	4
Others	4	2	3

Note: the same company may report several types of barriers to hiring
Source: INSEE

1 - Trend in the main barriers to hiring in industry since Q2 2017
as a % weight by workforce



Source: INSEE

In the first half of 2019, the unavailability of labour remains the main barrier to hiring, but economic uncertainty is increasing in industry and the service sector

Since April 2017, the proportion of companies reporting barriers to hiring due to a lack of available skilled labour has increased not only industry, but also in the building and service sectors (*Graphs 1, 2 and 3*). Since the end of 2018, this barrier has stabilised in industry and the building sector. In all three sectors, it remains the barrier most often mentioned by companies.

Conversely, the scale of uncertainty in the economic situation fell from April 2017 to July 2018, then stabilised in the building sector while it rose in industry and the service sector. In April 2019, even more business leaders in the service sectors covered by the survey reported economic uncertainty as a barrier to hiring than in April 2017.

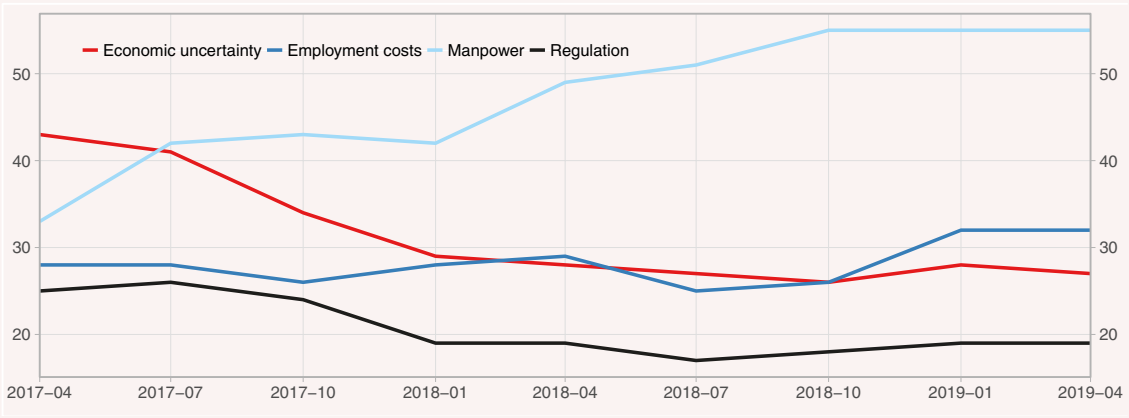
The application of the methodology specific to the business tendency surveys leads to revisions

The proportions of barriers to hiring previously published in the June 2017 and December 2018 issues of Conjoncture in France and in *INSEE Focus* no. 106 of December 2017 did not apply all the methodological specificities used for the publication of the series on the INSEE website, as they were not intended for regular publication. In particular, the last survey was not processed using the constant sample methodology, the estimates were not done on the same day as the other series based on the business tendency survey (they could be done later in order to take more responses into account) and they used a different method for the imputation of non-responses. The barriers to hiring series have therefore been revised: the proportions of barriers have been reduced slightly[4], mainly due to the method of imputing non-responses, but the hierarchies between the sectors of activity and the different barriers have been retained. ■

4. The revisions range from 0 to 8 points according to the barrier in question between the October 2018 estimate published in the December 2018 issue of *Conjoncture in France* and the final estimate published on the INSEE website.

2 - Trend in the main barriers to hiring in the building industry since Q2 2017

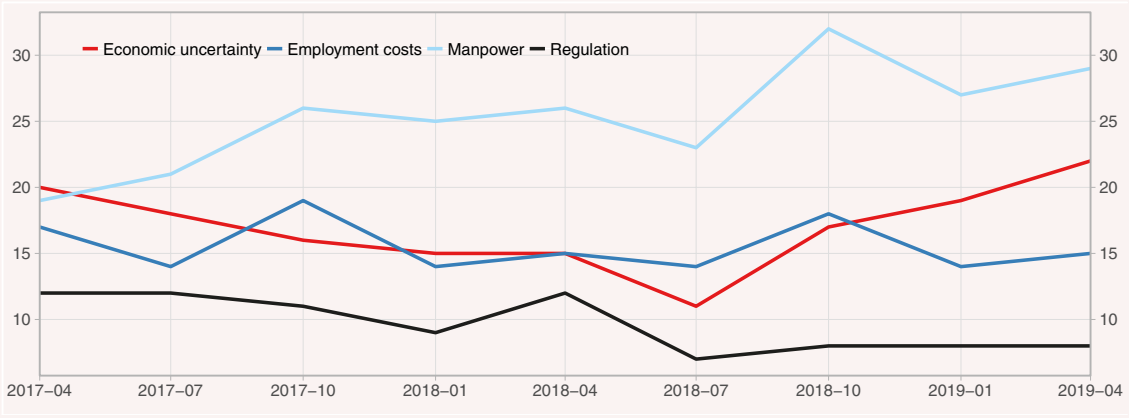
as a % weight by workforce



Source: INSEE

3 - Trend in the main barriers to hiring in the service sector since Q2 2017

as a % weight by workforce



Source: INSEE

Instructions for accessing the series

The barriers to hiring series can be accessed in the INSEE website, in the sets of series for each of the three surveys concerned: Outlook survey in good-producing industry[5], Outlook survey in the building construction industry[6]* and Outlook survey in services[7]*. They are now updated at the same time as the other indicators in the quarterly business tendency surveys.

The series provided correspond to the proportion of companies reporting the barrier to hiring in question, the same company being able to declare several barriers. The barrier entitled "employment-related costs" covers the reporting of at least one of the following barriers: "cost of recruitment" "social contributions too high" or "wage level too high". The barrier entitled "regulations" for its part includes at least one of the following barriers: "direct financial costs of dismissals", "legal risks associated with dismissal procedure" or "uncertainties as to whether labour legislation will remain in place".

The proportions of barriers to hiring are available for the scope of each survey as well as for a set of subsectors defined according to the activity classification specific to each of the surveys. Six subsectors have been selected for dissemination in manufacturing industry, two in the building industry and seven in the service sector. In all, 216 new series have been posted online. ■

5. https://www.insee.fr/fr/statistiques/series/102393833
6. https://www.insee.fr/fr/statistiques/series/102411948
7. https://www.insee.fr/fr/statistiques/series/102391902

Exploring the use of business tendency surveys to analyse the short-term outlook for employment in building construction in Île-de-France and the rest of Metropolitan France

This Focus presents an original method using business tendency surveys – originally created to provide results at national level – to obtain balances of opinion and short-term economic indicators at regional level. We look particularly at the short-term monitoring at local level of employment in building construction, comparing results in Île-de-France with those in the rest of the country: the verdict from the business tendency surveys appears to match the economic reality measured using other channels. For example, in both Île-de-France and the rest of the country, balances of opinion on past workforce size are a fairly good reflection overall of changes measured in employment in building construction, and also of short-term differences between these areas.

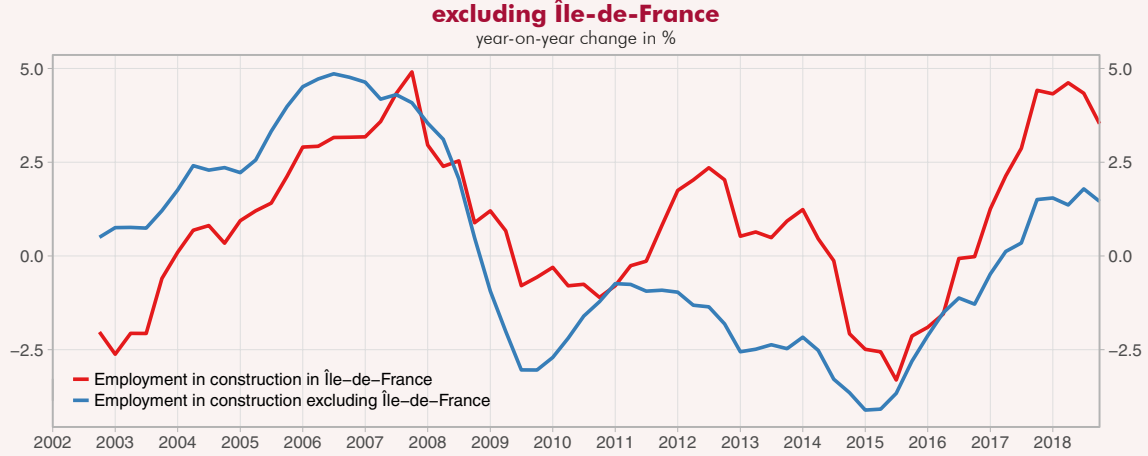
INSEE's business tendency surveys are quick and easy to use for forecasts as they provide aggregated indicators at national level, covering Metropolitan France. However, the economic outlook can differ considerably from region to region, especially concerning payroll employment. In building construction in particular, changes in the number of jobs can differ between Île-de-France and elsewhere in Metropolitan France over certain periods (*Graph 1*).

There are not many indicators adapted to local monitoring of the short-term employment outlook. Quarterly payroll employment estimates are certainly available at local level, but with a delay of one quarter after the end of the quarter under consideration. It may therefore be interesting to examine whether it is possible to produce early regional short-term indicators (business climates, balances of opinion) using responses from the monthly business tendency surveys in the building industry. However, the survey is produced at a national level and sampling does not take geographic location into account. This Focus presents results obtained from individual company responses, by applying different processing techniques to distribute their responses across the country, according to their workforce numbers. The main processing technique consisted in defining the establishment rather than the enterprise as the statistical unit, then using data on establishments from the Annual Declarations of Social Data (DADS, see *Method below*). The strong assumption was that since all the establishments that make up an enterprise have the same principal activity within the scope of the survey, they would respond in the same way as the enterprise itself, whatever their location and would therefore declare the same changing trends. In this way, if the establishment did not provide a response, it would be possible to take a company's various locations into account. Balances of opinion were calculated by geographic area, and summarised in a local business climate, a composite indicator constructed from the same balances of opinion as those used to calculate the national business climate published monthly for the building industry.

The business climate in the building industry in Île-de-France stands out, especially in periods of crisis

Business climates calculated for the different administrative regions of Metropolitan France generally follow the same trend. This is partly due to the assumption that change in the activity of the establishments of a company is the same as at company headquarters. Thus the same survey response can be used to calculate an indicator for several regions. Nevertheless, the business climate in Île-de-France differs from other business climates, especially during the economic crisis in 2008 and between 2013 and 2015. For the sake of clarity,

1 - Change in payroll employment in the construction sector in Île-de-France and in France excluding Île-de-France



Scope: Metropolitan France
Source: INSEE

the analysis is simplified by differentiating two major areas, Île-de-France and Metropolitan France excluding Île-de-France (*Graph 2*).

The business climate in the building sector in Île-de-France sometimes follows a slightly different pattern of change from that in the rest of France, suggesting a different short-term outlook in the building construction sector in the two areas. Over the period 1993-2000 in particular, the economic outlook in building in France excluding Île-de-France appears to have been more favourable than in Île-de-France. In 2001, climates in both areas began to trend downwards, which was probably associated with the stock market crash in 2001. However, Île-de-France seems to have been affected for longer than the rest of France.

From 2006, the economic climate in Metropolitan France excluding Île-de-France stabilised, whereas in Île-de-France it continued to increase until 2008. Both climates then fell dramatically with the effect of the 2008 economic crisis, with both losing virtually the same number of points. However, as the climate in Île-de-France was at a higher level at the start of the crisis, it also ended its fall at a higher level. It was also more resilient than the climate for the rest of France between 2011 and 2015, a period when both economic climates were declining. It was only from 2016 onwards that the business climate outside Île-de-France caught up with that of Île-de-France.

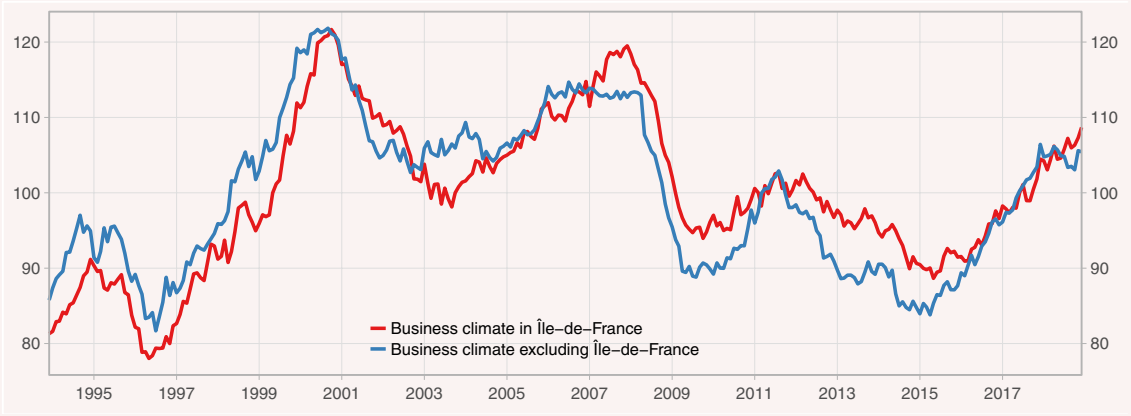
Balances of opinion on past workforce size are a good reflection of the changes in employment in building construction for both areas

After studying a composite indicator of economic activity, we consider the short-term outlook for employment outlined by our corresponding indicators.

In addition to clarity, one of the quality criteria for a balance of opinion is its suitability for the change in economic factors of interest, measured from quantitative indicators. At national level the balance of opinion in the third month of the quarter (or "month 3"[1]) on past change in workforce size taken from the business tendency survey, is therefore very closely correlated to the year-on-year change in employment in building construction. There is also a strong correlation between the two geographic areas under consideration (*Graphs 3 and 4*).

1. The balance "at month 3" is obtained by selecting only the values from the third month of each quarter. For example, the value of the "month 3" balance in Q1 2017 is the value of the monthly balance of opinion in March 2017.

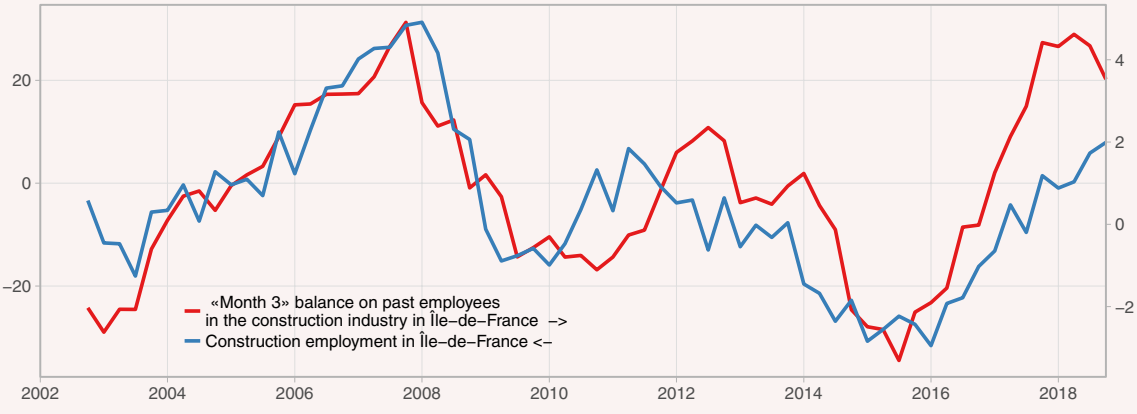
2 - Business climate indicator for the building industry in Île-de-France and in France excluding Île-de-France Business climate



Source: INSEE

3 - Year-on-year change in employment in building construction and balance of opinion "at month 3" on past workforce size in the building industry in Île-de-France

balance as %, year-on-year change as %



Source: INSEE

For Île-de-France, the balance of opinion "at month 3" on past workforce size in Île-de-France, is a fairly good reflection of year-on-year change in the number of jobs in building construction between Q3 2003 and Q2 2010. In particular, the balance illustrates the acceleration phase in employment in this sector in Île-de-France in 2007, just before the crisis. The relationship is a little less reliable thereafter: from mid-2010, the balance of opinion starts to recover while the year-on-year change in the number of jobs does not begin to pick up until the following year.

From 2016, the balance of opinion increased less quickly than the year-on-year change in employment. One possible explanation for this discrepancy is the scope of the survey, which only covers building construction activities, whereas the employment data also include civil engineering. However, work associated with Greater Paris, which has mainly been public civil engineering work, probably bolstered employment in this sector considerably in Île-de-France. In addition, DADS 2015 (see *Method*) were used for the years 2016, 2017 and 2018, as no more recent data were available when the series of economic short-term indicators by geographic area were being calculated: this could also partly explain the discrepancies.

For the rest of France, the balance of opinion on past workforce size seems to be relatively well correlated with year-on-year change in employment in building construction (*Graph 4*) in this area.

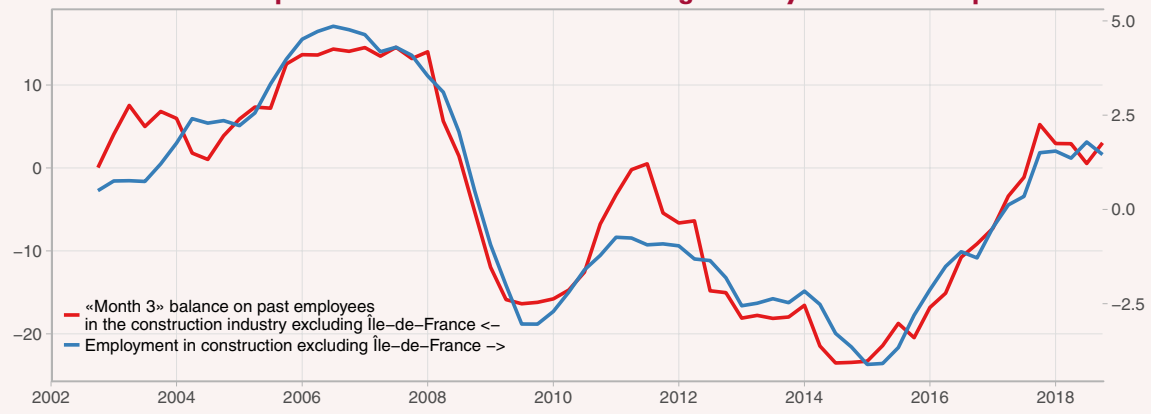
Balances of opinion on past workforce size illustrate the differences in short-term outlook in the building construction sector between Île-de-France and the rest of the country

When the balances of opinion produced for the two areas, Île-de-France and the rest of Metropolitan France, appear to be a fairly good reflection of the time series for payroll employment in building construction for each of these areas, they can be compared in more detail.

The balances of opinion on past change in workforce numbers were centred and reduced so that a comparison could be made (*Graph 5*). They were a good reflection of the respective trajectories of employment in building construction in the two geographic areas.

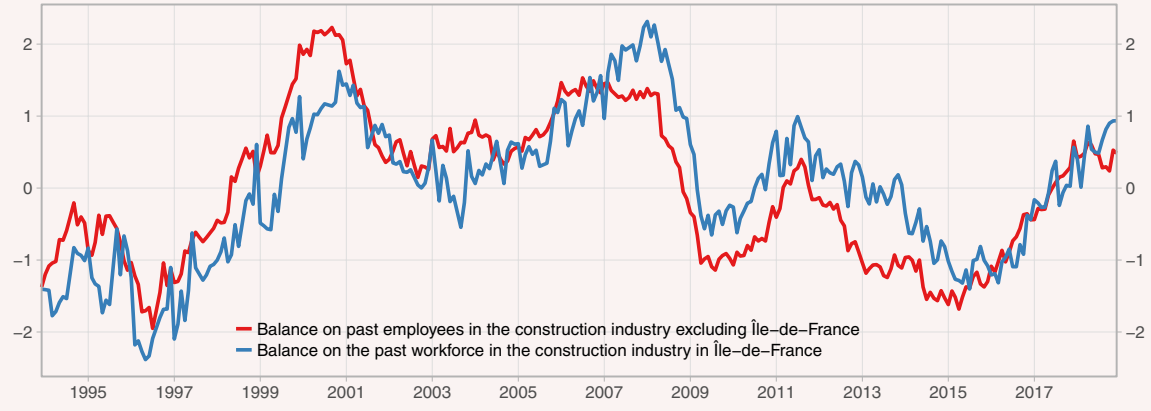
Between 2002 and 2006, the balance of opinion for Île-de-France stood below that for the rest of France. Over the same period, the number of jobs in building construction in Île-de-France increased less quickly than in the rest of France. The balance of opinion for Île-de-France overtook that for France excluding Île-de-France from the end of 2006 and this can be

4 - Year-on-year change in employment in building construction and balance of opinion "at month 3" on past workforce size in the building industry in the French provinces



Source: INSEE

5 - Balance of opinion (centred and reduced) on past workforce size in the building industry in Île-de-France and France excluding Île-de-France



Source: INSEE

seen in the quantitative employment data, although it took place one year later.

During the 2008 crisis, employment in this sector suffered less in Île-de-France than elsewhere. This difference can be explained by a more favourable economic outlook (especially with more dynamic amounts of surface areas being authorised for the construction of housing) and less recourse to temporary employment in Île-de-France. With temporary employment it is often possible to adjust employment to variations in activity, but employment excluding Île-de-France suffered more in the crisis (Roy & Satger, 2010).

In 2010, the change in employment was at its lowest following the economic crisis. Nevertheless, the drop in the number of jobs was less marked in Île-de-France than in the rest of France, and this is fairly well reflected in the balances of opinion. After this, the outlook for employment in Île-de-France became more favourable than in the rest of France between 2010 and 2015. Since 2015, however, the two centred and reduced balances have converged, with employment data showing that Île-de-France is more buoyant.

Between May 2018 and October 2018, the balance for past workforce numbers outside Île-de-France fell steadily, while the balance for Île-de-France remained encouraging. There are two possible explanations to account for this difference: on the one hand, the restriction of areas eligible for the Pinel scheme and, on the other hand, the changes to the eligibility rules for zero rate loans (PTZ) in certain areas. In fact, since January 2018, the scope for eligibility for the Pinel scheme has been reduced to areas said to be "tense", i.e. mainly areas located in Île-de-France, and the zero rate loan for new housing has been refocused on areas with the greatest tensions in terms of real estate. However, this is not exactly the divergence we observe in the available employment data. In 2018, employment did indeed increase significantly more quickly in Île-de-France than elsewhere, but the year-on-year change in employment in Île-de-France fell back in H2 2018, whereas it remained stable overall in the rest of France in 2018 (*Graph 1*). ■

Method

Using establishments (rather than legal units) as the statistical unit

In the monthly business outlook survey of the building industry, establishments are not questioned individually on their activity: only enterprises are questioned in this way as a legal unit. In general, the survey questions the legal unit that corresponds to the company headquarters, and this response therefore covers the activity of all of the company's establishments. These establishments may be located in several different regions. If the legal unit is used as the statistical unit, this will result in a concentration of all of its activity in the region where its headquarters are located. In order to take into account the full range of a company's locations, we assume that all establishments whose principal activity falls within the scope of the survey follow the same pattern of change as headquarters, i.e. they would all give the same response to the business tendency survey. This is a considerable approximation to make, but as a result it is possible to better locate company activity by distributing it further.

To simulate establishment responses in this way, we must first determine the share of employment and activity that corresponds to the different establishments of a single enterprise. The distribution key is based on payroll workforce per establishment, as provided in the data from Annual Declarations of Social Data (DADS).

Taking group-type responses into account

To promote granularity in the responses, the business tendency surveys prefer to use the legal unit as the statistical unit; however, some units respond as part of the profiled unit or group to which they belong. In this specific case, the perimeter of the unit's response is widened to all establishments of the company or the group being profiled which are not already attached to a legal unit interviewed in the survey.

Use of secondary weighting specific to each geographic area

When publishing survey results at national level, we use a weighting system (called secondary weighting) to allocate to each stratum a weight that is representative of all the enterprises that make up the stratum in the survey frame. To calculate indicators by geographic area, we must first calculate secondary weightings for each area for which we want to calculate indicators and for several periods. Here, the weightings have already been recalculated based on establishment workforce numbers, taken from DADS. ■

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INSEE (2006), "The French business survey of the situation and outlook in the building industry: methodology", methodologie, *Insee Méthodes* n°115

Roy J. et Satger O. (2010), "In Île-de-France, employment is showing better resistance to the crisis", Île-de-France à la page, INSEE, n°335. ■

Unemployment

In Q1 2019, the ILO unemployment rate decreased slightly (–0.1 points), to 8.7% of the French labour force, after dropping by 0.3 points during the previous quarter. Year-on-year, it fell by 0.5 points, following a similar downward trend to that observed since mid-2015.
Over the forecasting period to late 2019, employment is expected to continue to grow more quickly than the labour force, and the gradual decline in unemployment should be maintained. Consequently, the unemployment rate is likely to stand at 8.3% at the end of the year, 0.5 points below its late 2018 level, thereby reaching its lowest level since early 2008.

The unemployment rate fell slightly in Q1 2019

In Q1 2019, the number of unemployed fell by 21,000 (Table), taking the unemployment rate (Graph) down to 8.7% in France (excluding Mayotte), which corresponds to a drop of 0.1 points over the quarter, after –0.3 points in Q4 2018. Year-on-year, the unemployment rate fell by 0.5 points (–155,000 unemployed), at a similar pace to its average decline since the start of 2015 (at an annual rate of –0.4 points). It reached its lowest level since the start of 2009 but remains 1.5 points above its pre-crisis low point recorded in early 2008.

In Metropolitan France, the unemployment rate reached 8,4%; it also fell by 0.1 points compared with the end of 2018 and by 0.5 points year-on-year. At the same time, the halo of unemployment[1] fell sharply, both over the quarter (–80,000) and year-on-year (–89,000).

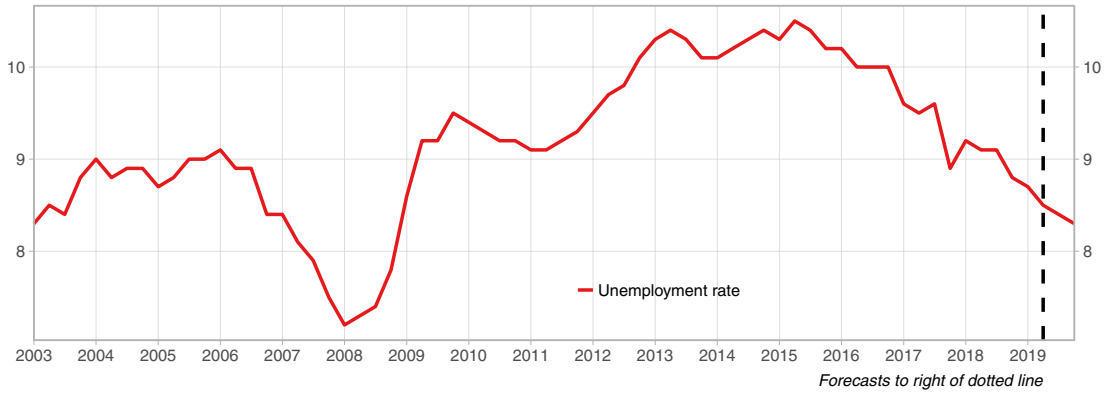
The unemployment rate should continue to fall gradually over the forecasting period

In 2018, total employment slowed down: measured at mid-quarter, it increased by 195,000 jobs after 310,000 during the previous year. Consequently, the unemployment rate fell less sharply in 2018 than in 2017: –0.1 points after –1.1 points year-on-year; –0.3 points after –0.7 points on average over the year.

In Q1 2019, employment grew strongly (+86,000); it is likely to slow down somewhat through to the end of 2019 (with around 60,000 net job creations per quarter). In addition, the labour force trend is becoming less dynamic every year (see the "Contribution of the population and of the trend labour force participation rate" line in the table below). Lastly, the ramping up of the Skills Investment Plan (Plan d'investissement dans les compétences)

1. The halo of unemployment is composed of people who are inactive according to the ILO definition, but who are in a situation relatively close to unemployment. It covers people who are seeking employment but are unavailable, and people who want to work but are not actively seeking a job, regardless of their availability.

Unemployment rate (ILO definition)
quarterly averages as a % of the labour force, CVS data



Scope: France (excluding Mayotte), population of households, people aged 15 or over
Source: INSEE, Employment Survey

is expected to result in only a limited rise in the number of beneficiaries of training and should have only a marginal impact on the slowdown in the labour force (see "Estimated effects of public policies" line). As a consequence, the expected increase in employment in 2019 (+254,000) is likely to exceed the increase in the labour force (+115,000). All in all, the unemployment rate is set to decline by 0.2 points in Q2, and then by 0.1 point per quarter through to the end of 2019, when it should stand at 8.3% of the labour force – its lowest level since the end of 2008. ■

Change in the labour force, employment and unemployment

in thousands, SA and in %

	Quarterly changes								Annual changes		
	2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Population of the 15-64 age bracket	–10	–10	–10	–10	–7	–7	–7	–7	–13	–41	–29
Population of the 15-59 age bracket	–11	–11	–11	–11	–12	–12	–12	–12	–26	–44	–49
Labour force (1)=(2)+(3)	**168**	**–15**	**48**	**–45**	**65**	**18**	**17**	**16**	**9**	**156**	**115**
including:											
(a) Contribution of the population and the trend activity rate	21	21	21	21	18	18	18	18	91	83	70
(b) Estimated effects of economic downturns	3	3	3	3	2	2	2	2	21	11	7
(c) Estimated effects of public policies	4	–1	–1	–5	1	–2	–3	–3	24	–2	–6
(d) Other short-term fluctuations (residual)	140	–38	25	–64	45	0	0	0	–127	64	45
Employment (2)	**73**	**35**	**31**	**56**	**86**	**73**	**48**	**48**	**310**	**195**	**254**
Reminder: End-of-period employment (see "Employment" sheet)	46	23	39	74	98	47	49	48	343	182	241
ILO unemployment (3)	**95**	**–50**	**17**	**-101**	**-21**	**-55**	**–31**	**–32**	**–301**	**–39**	**–139**
	Quarterly average								Average in the last quarter of the period		
ILO unemployment rate (%)	**9.2**	**9.1**	**9.1**	**8.8**	**8.7**	**8.5**	**8.4**	**8.3**	**8.9**	**8.8**	**8.3**

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 tha 1% of the active population), it is neglected here for the unemployment forcasting exercise,
- in (a), the contribution of demographics and of trend activity behaviour includes all the effects of pensions reforms up to and includint that in 2014.

Scope: France (excluding Mayotte for employment, unemployment and estimated effects of public policies)

Source: INSEE

Consumer prices

According to the provisional estimate, inflation stood at +1.0% year-on-year in May 2019. It is expected to rise to +1.4% through to December 2019, impacted by the acceleration in the prices of services (especially rents), the scheduled increase in taxation on tobacco, and energy inflation. According to the provisional estimate, inflation excluding tobacco reached 0.9% in May. Core inflation[1] is likely to rise to +1.0% through to December year on year, after +0.7% in April. As an annual average, prices should slow in 2019 (+1.2% after +1.8% in 2018).

Headline inflation is set to increase through to December 2019.

In May 2019, according to the provisional estimate, headline inflation fell to +1.0% year-on-year, after +1.3% in April (*Graph 1*). The prices of food products have slowed slightly, to +2.3%, after +2.5% in April. Tobacco prices have gathered pace, to +9.0%, after +8.1% in April. The prices of services have slackened, to +0.7%, after +1.0%. In addition, the prices of manufactured goods have continued to drop (–0.6% after –0.5%). Energy prices have slowed down (+3.4% after +4.8%).

Inflation is set to rise to +1.4% through to December 2019, primarily due to service prices dropping out of the calculation of the year-on-year figures (Table). The prices of food products are likely to slow down sharply (+1.3% year-on-year in December, against +2.3% in May). Tobacco prices should pick up markedly (+14.8%, against +9.0% in May). Energy prices are also expected to ramp up (+4.3% after +3.4%), as are the prices of services (+1.3% in December after +0.7% in May). The drop in the prices of manufactured goods is likely to slow down (–0.3% after –0.6%).

Energy inflation should increase slightly

After a sharp slowdown at the end of 2018, crude oil prices rebounded during Q1 2019. Gas prices were cut in May and June 2019, after two reductions in the regulated prices in January and April 2019. Conversely, public electricity prices increased by 5.9% in June 2019 following a period in which the regulated prices were frozen. Based on the assumption of a barrel of Brent priced at $65, energy inflation should rise slightly, to +4.3% in December 2019, after +3.4% in May.

Tobacco prices are expected to accelerate sharply

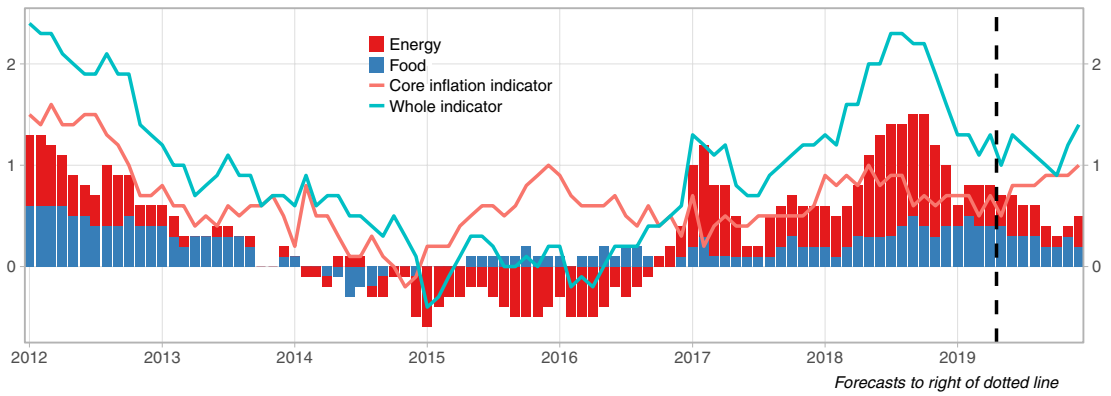
In May 2019, the increase in tobacco prices reached 9.0% year-on-year. After the rise in March 2019, a new increase in taxation is scheduled for November 2019. Assuming that manufacturers' margins remain unchanged, tobacco prices should accelerate through to December 2019, to +14.8% year-on-year.

Prices of food products are likely to slow significantly

Food inflation is expected to fall through to December 2019, to +1.3% against +2.3% in May 2019. The prices of fresh products should

1. The core inflation indicator calculated by INSEE is estimated by removing the prices of energy, fresh products and public-sector prices from the headline index, and then correcting it for tax measures and seasonal variations.

1 - Consumer prices in France



Source: INSEE

edge down considerably through to December, to –2.9%, after +2.3% in May, based on the assumption that production conditions will be normal over the summer. This drop should mainly be due to the sharp rise in prices in September 2018 (triggered by that summer's drought) dropping out of the calculation of the year-on-year figures in September 2019.

Excluding fresh products, food inflation stood at +2.3% in May 2019 and is expected to drop through to December, to +2.1%. Certain measures of the "Agriculture and Food" Law entered into force in February 2019. The loss-leader threshold was raised by 10% and special offers are now regulated. These measures contributed to increasing the prices of food products (excluding fresh food) by 0.4% in February 2019. The highest rise concerned alcoholic beverages (+0.9% over the month, Focus).

Prices of manufactured goods should continue to drop

The prices of manufactured goods should continue to drop, to –0.3% year-on-year in December 2019, after –0.6% in May.

The prices of clothing and footwear fell year-on year in May 2019 (–0.6%). Through to December 2019, this slowdown is likely to continue and should reach –0.8%. The PACTE Law[2] provides for a reduction in the sales period from the current 6 weeks to 4 weeks, among other measures. However, given that a period of six months will be required between the enactment of this law and the entry into force of this measure, the 2019 summer sales period is expected to remain unchanged and prices should not be impacted. The drop in the prices of health goods is set to continue through to December 2019 (–1.9% year-on-year, after 2.5% in May). The prices of "other manufactured products" (excluding clothing and health goods) are likely to increase slightly (+0.1% year-on-year in December, after –0.1% in May).

Services prices are expected to accelerate sharply

In June 2019, the rise in the prices of services is likely to reach 1.3% year-on-year, against 0.7% in May 2019.

The prices of transport services should bounce back to stand at +1.9% in December 2019, after –1.4% in May. This acceleration should be mainly

2. Once the PACTE Law has been enacted, the dates of the sales periods will be defined by an Order issued by the Minister for the Economy and Finance.

Consumer prices

changes as %

CPI groups* (2018 weightings)	April 2019		May 2019		June 2019		Décembre 2019		Moyennes annuelles	
	yoy	cyoy	yoy	cyoy	yoy	cyoy	yoy	cyoy	yoy	cyoy
Food (16.2 %)	**2.5**	**0.4**	**2.3**	**0.4**	**1.9**	**0.3**	**1.3**	**0.2**	**1.9**	**2.0**
including: fresh food (2.4 %)	*3.7*	*0.1*	*2.3*	*0.1*	*–0.2*	*0.0*	*–2.9*	*–0.1*	*5.2*	*1.3*
excluding: fresh food (13.8 %)	*2.3*	*0.3*	*2.3*	*0.3*	*2.2*	*0.3*	*2.1*	*0.3*	*1.3*	*2.1*
Tabacco (1.9 %)	**8.1**	**0.2**	**9.0**	**0.2**	**9.0**	**0.2**	**14.8**	**0.3**	**14.2**	**10.4**
Manufactured products (25.6 %)	**–0.5**	**–0.1**	**–0.6**	**–0.1**	**–0.4**	**–0.1**	**–0.3**	**–0.1**	**–0.2**	**–0.4**
including : clothing and footwear (4.0 %)	*–0.2*	*0.0*	*–0.6*	*0.0*	*–0.7*	*0.0*	*–0.8*	*0.0*	*0.1*	*–0.5*
medical products (4.2 %)	*–2.5*	*–0.1*	*–2.5*	*–0.1*	*–2.5*	*–0.1*	*–1.9*	*–0.1*	*–2.3*	*–2.5*
other manufactured products (17.4 %)	*–0.1*	*0.0*	*–0.1*	*0.0*	*0.1*	*0.0*	*0.1*	*0.0*	*0.2*	*0.0*
Energy (8.0 %)	**4.8**	**0.4**	**3.4**	**0.3**	**4.5**	**0.4**	**4.3**	**0.3**	**9.7**	**3.4**
including : oil products (4.3 %)	*5.7*	*0.2*	*3.4*	*0.1*	*2.4*	*0.1*	*5.4*	*0.2*	*14.7*	*2.8*
Services (48.3 %)	**1.0**	**0.5**	**0.7**	**0.3**	**1.1**	**0.5**	**1.3**	**0.6**	**1.2**	**1.0**
including : rent-water (7.5 %)	*–0.1*	*0.0*	*-0.2*	*0.0*	*0.9*	*0.1*	*1.2*	*0.1*	*0.1*	*0.5*
health services (6.0 %)	*0.1*	*0.0*	*0.1*	*0.0*	*0.1*	*0.0*	*0.5*	*0.0*	*0.9*	*0.1*
transport (2.9 %)	*0.5*	*0.0*	*-1.4*	*0.0*	*0.0*	*0.0*	*1.9*	*0.1*	*0.8*	*0.2*
communications (2.2 %)	*-3.0*	*-0.1*	*-3.4*	*-0.1*	*-3.1*	*-0.1*	*-0.6*	*0.0*	*-1.0*	*-2.3*
other services (29.8 %)	*1.8*	*0.5*	*1.5*	*0.4*	*1.8*	*0.5*	*1.6*	*0.5*	*1.8*	*1.6*
All (100 %)	**1.3**	**1.3**	**1.0**	**1.0**	**1.3**	**1.3**	**1.4**	**1.4**	**1.8**	**1.2**
All excluding energy (92.0 %)	*1.0*	*0.9*	*0.8*	*0.7*	*1.0*	*0.9*	*1.1*	*1.0*	*1.2*	*1.0*
All excluding tabacco (98.1 %)	*1.1*	*1.1*	*0.9*	*0.8*	*1.1*	*1.1*	*1.1*	*1.1*	*1.6*	*1.0*
Core inflation (60.5 %)	**0.7**	**0.4**	**0.5**	**0.3**	**0.8**	**0.5**	**1.0**	**0.6**	**0.8**	**0.8**

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

related to the prices of air transport services, which reflect the rise in Brent prices since the start of the year after a certain time lag.

The prices of communication services have been following a downward trend since 2017 due to the fierce competition between telephone operators. This trend is expected to continue throughout 2019 but should ease slightly at the end of the year. Indeed, telephone companies are likely to propose fewer special offers in the run-up to the acquisition of 5G frequencies from the State in the winter of 2019. Consequently, through to December 2019, the prices of communication services should drop by 0.6% year-on-year, after –3.4% in May.

After remaining almost unchanged through to November 2019, the prices of health services are expected to rise in December (+0.5% year-on-year, after +0.1% in May).

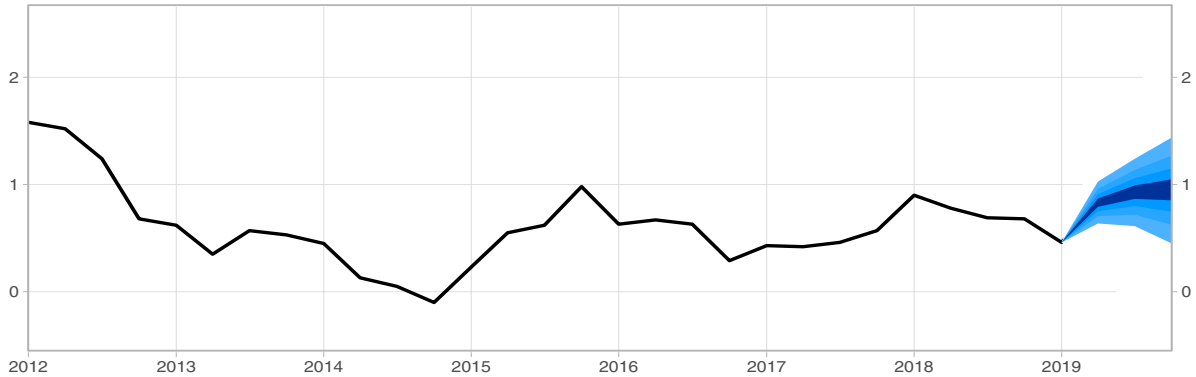
Lastly, rents look set to increase by +1.2% year-on-year in December 2019 (after –0.2% in May) as the social housing rent reductions drop out of the calculation of the year-on-year figures.

Core inflation is likely to rise

Core inflation is likely to rise slightly through to December 2019, after remaining below 1% in 2018 (*Graph 2*). It stood at +0.5% in May 2019 and is expected to rise to +1.0% in December year-on-year. The reflection of producer price rises in consumer prices and the acceleration of service prices are likely explanations for this increase. ■

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

year-on-year change in %



How to read it: the fan chars plots 80% of the likely scenarios around the basline forecast. The first and darkest band covers the likeliest scenarios around the baseline, wich 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 contrans 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. Thus, in December 2019, the underlying inflation forecast is +1.0% with a 60% probability that it will be between 0.8% and +1.2%.

Source: INSEE

Some of the measures in the "Agriculture and Food" law have caused an increase, albeit modest, in consumer prices

Following the French National Food Conference (États généraux de l'Alimentation, EGalim) organised in 2017, in autumn 2018 Parliament adopted a Law to promote balanced commercial relationships in the agricultural and food sector and healthy, sustainable food (known as the "Agriculture and Food" Law).

Several of the provisions of this law, after being detailed in the Order of 12 December 2018, came into force in the first quarter of 2019. Since 1st January 2019, promotional offers on food products have become more strictly regulated: discounts are limited to 34% of the value of the products concerned, and promotional offers can only concern 25% of the annual volume sold by each store chain. In addition, since 1st February 2019, the resale-below-cost (RBC) threshold has been raised by 10% for food products. This measure is intended to better reward farmers, even though the law does not oblige retailers to increase their purchase prices from producers.

These measures have led to an increase in consumer prices. However, the consumer price index data suggest that this impact has been relatively modest, of the order of 0.3 points on the index of prices of frequently purchased goods in hypermarkets and supermarkets and less than 0.1 points on the overall consumer price index.

The changes in the law and regulations that affect mass-market retailing and/or agri-food industry are likely to impact food product inflation

The food prices time series is regularly affected by changes in the law and regulations. Allain, Chambolle and Vergé (2008), using the example of the Galland Law, propose a number of elements for analysis concerning the effects of the law designed to regulate the development of hypermarkets and supermarkets.

Graph 1 shows, for the period 2000-2019, the differential between food product inflation and headline inflation. Certain significant atypical episodes stand out which are linked to changes to the regulations and/or other exogenous parameters. For example, between November 2000 and December 2001, food prices increased by 3.3% due to the mad cow disease crisis on the one hand, and the tightening of food hygiene controls in response to it on the other.

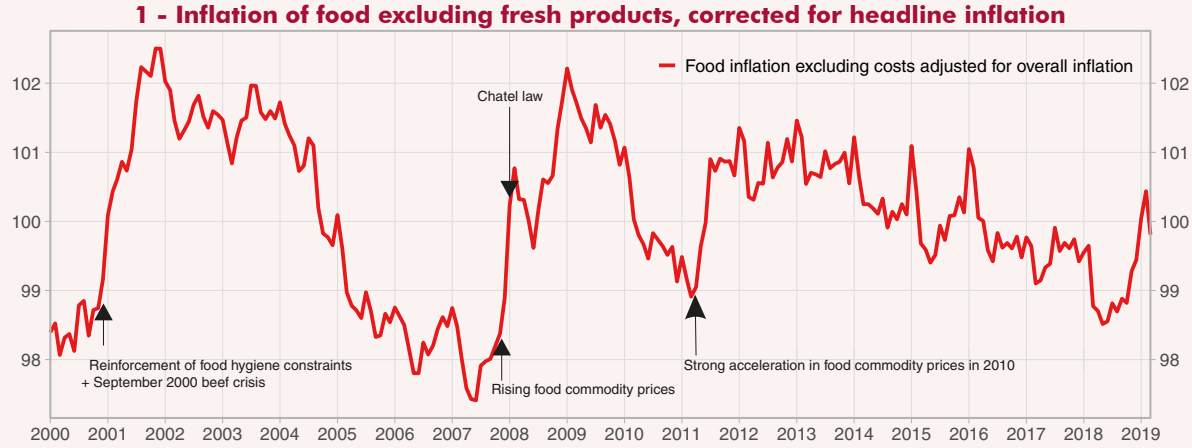
The Galland law, which came into force in 1997, is thought to have pushed up consumer prices (Boutin and Guerrero, 2008). Adjustments to the law from 2004 onwards are thought to have helped to bring them down.

At the beginning of 2008, the entry into force of the law to develop competition in the interest of consumers (known as the Chatel Law) included in the calculation of the RBC threshold so-called "back margins", namely the sums paid by suppliers to retailers for "commercial cooperation". The reference price below which it is forbidden to sell a product was therefore lowered. Thus, between February 2008 and June 2008, food prices fell by almost 1.2%. In 2010 and 2011, soaring commodity prices caused a sharp rise in the prices of food products (+1.6% year-on-year in December 2011).

Finally, between January and February 2019, food prices rose by +0.4%. This is the steepest rise since 2011 at this time of year. The usual factors entering into the formation process of these prices (prices of meat, commodities, wages) do not go all the way to explaining this increase, which is probably linked at least in part to the entry into force of the Agriculture and Food Law.

The theoretical effect of an increase in the RBC threshold on consumer prices is ambiguous.

1 - Inflation of food excluding fresh products, corrected for headline inflation



Note: ratio of the food index to the overall consumer price index, low 100 in 2015
Scope : metropolitan France
Source: INSEE, consumer price index

The resale-below-cost threshold – or effective purchase price – is the price limit below which a retailer may not sell a product purchased from a supplier. It is calculated according to the following formula:

RBC threshold = Net product price – Financial advantages (discounts, rebates) + VAT and other taxes + Price of transport

When they sell a product, retailers apply different margins: front and back margins. The front margin represents the difference between the net price on the supplier's invoice and the sale price exclusive of tax to the consumer. As for the back margin, this includes the discounts and rebates granted by the supplier on the one hand and commercial cooperation services on the other.

Raising the RBC threshold can therefore result in an increase in the price directly concerned or in a reduction of retailers' margins. For a product on which retailers allow themselves only a small margin (loss leaders), an increase in the RBC threshold is more likely to be passed on to the total price, whereas on a product with high margins, the increase can be absorbed into those margins. An intermediate scenario can also be envisaged, in which the increase in the RBC threshold is offset by an increase in prices and at the same time a contraction of margins. The increase in prices is therefore not mechanical. Furthermore, retailers could also make use of this context to increase the prices of other products not concerned by the raising of the RBC threshold.

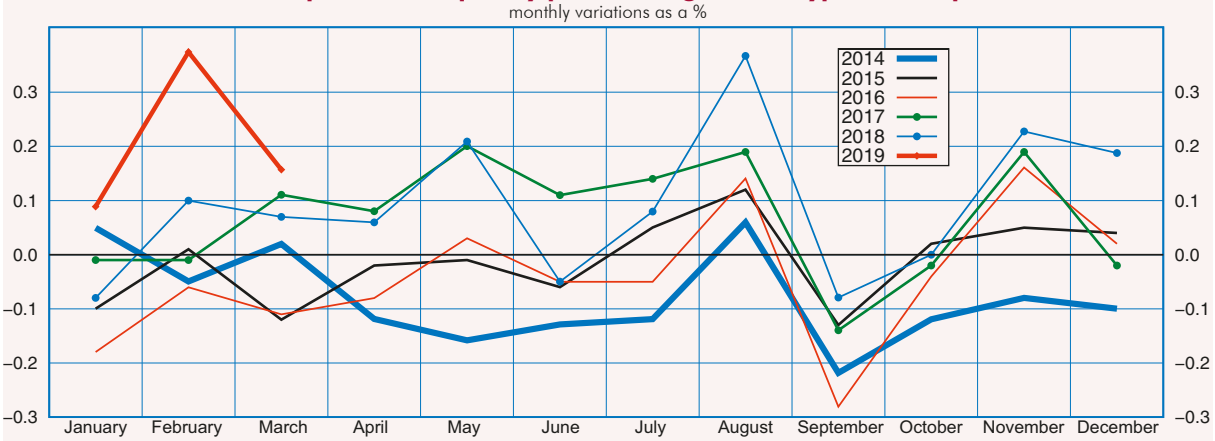
This increase in the RBC threshold is intended to generate additional turnover on certain products so that a part of it can be passed on to farmers via an increase in the net price at which retailers buy their produce. However, this increase is not mandatory and depends on the negotiation of the contracts between retailers, intermediaries and producers.

Certain products saw substantial increases in February 2019

Alongside the overall consumer price index, INSEE publishes a monthly index of fresh food prices and an index of prices of frequently purchased goods for different types of retail outlet: hypermarkets and supermarkets, large and predominantly food stores and other stores. "Large and predominantly food stores" refers to stores mainly selling food with a sales area of more than 120 m^2, excluding hard discount stores.

2 - Inflation of prices of frequently purchased goods in hyper and supermarkets

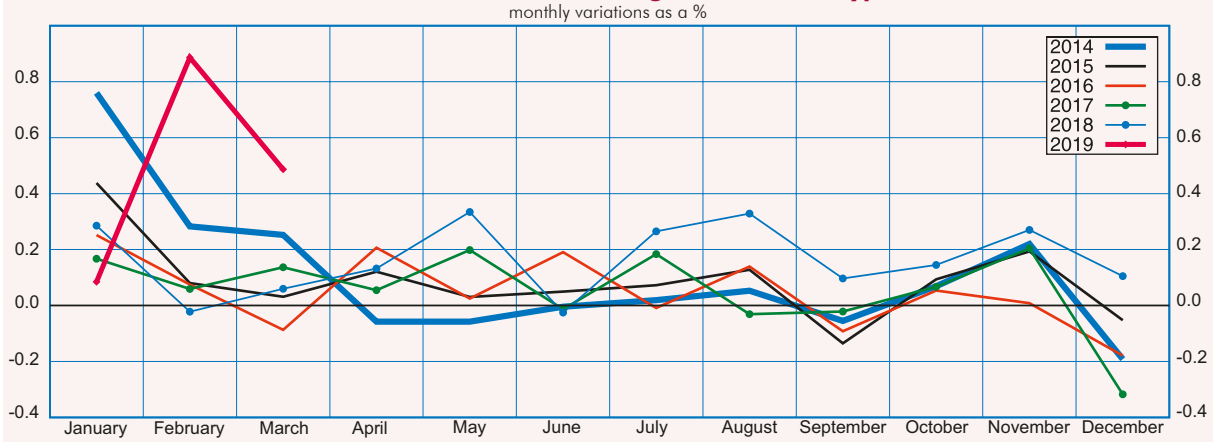
monthly variations as a %



Scope : metropolitan France, all households
Source: INSEE, consumer price index

3 - Price of alcoholic beverages, in all store types

monthly variations as a %



Source: INSEE

A distinction is made between two types of goods frequently purchased in hypermarkets and supermarkets: firstly, food excluding fresh products (83.5% of frequently purchased goods), which includes meat (24%), beverages (23%) and other food excluding fresh products (53%), excluding fruit, vegetables, fresh fish and seafood; secondly, non-durable household goods, cleaning and personal care products (16.5%). Not all goods sold in hypermarkets and supermarkets are included in the index: durables in particular are excluded. Unlike cleaning and personal care products, meat and beverage prices show marked seasonal variations.

In February 2019, the increase in the prices of frequently purchased goods in hypermarkets and supermarkets was higher than the variations observed in February in previous years, regardless of store type. Consumer prices in hypermarkets and supermarkets rose by 0.4% in February 2019 (*Graph 2*), whereas the average change in February between 2014 and 2018 was nil.

This unusual increase in prices in hypermarkets and supermarkets was mainly due to that in the prices of food excluding fresh products, which rose 0.5% in January. Specifically, beverage prices rose 0.7% in February (*Graph 3*). In particular, the prices of alcoholic beverages went up 0.9% over the month, a noticeably more marked rise than those observed in previous years in this season. Indeed, previously the biggest increase seen in February was 0.7% in 2008. This sharp increase in the prices of alcoholic beverages could be due to the fact that certain alcoholic beverages were very likely being used as loss leaders. As it is difficult to compress the margins on these faced with the increase in the RBC threshold, their prices could have gone up.

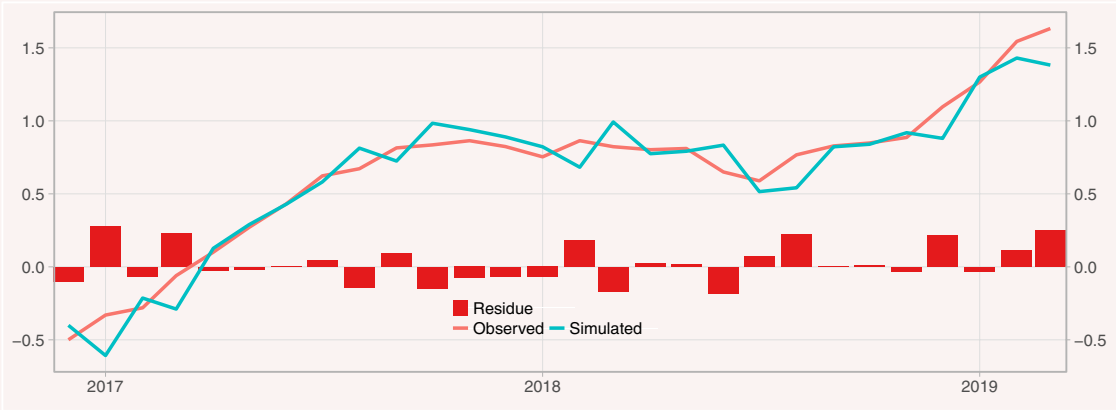
Meat prices rose 0.6% in February 2019. This increase, although seasonal, was also steeper than in previous years (the average increase since 2005 has been 0.3% in February, with the highest being +0.5% in February 2018). The prices of other food products also showed an atypical trend in February 2019, increasing by 0.3% compared to January, the biggest increase seen since 2008.

The measures of the EGalim law could well explain these atypical trends, but it is difficult to measure the exact causal impact

In order to highlight the possible effects of the measures resulting from the Food Law, a SARIMA (seasonal autoregressive integrated moving average) model was applied to series of prices of products sold in hypermarkets and supermarkets and alcoholic

4 - Prices of goods sold in hypermarkets and supermarkets

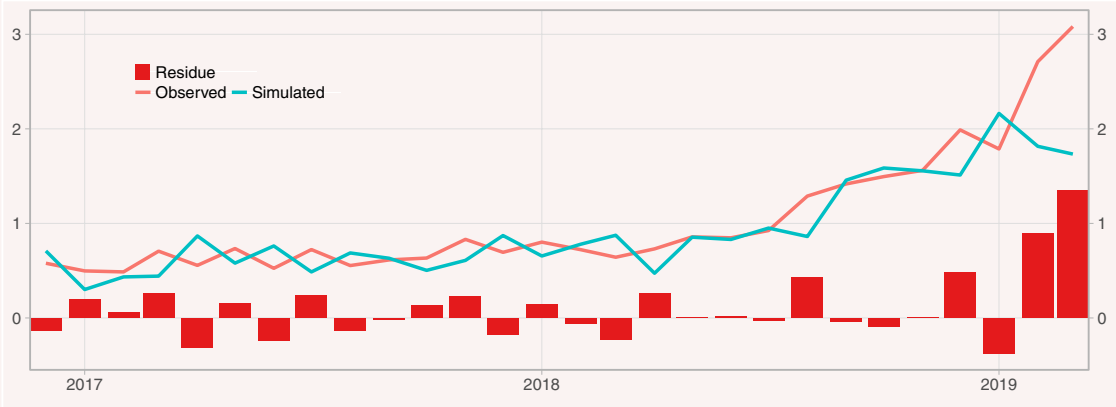
year-on-year changes as a %



Source: INSEE

5 - Prices of alcoholic beverages

year-on-year change as a %



Source: INSEE

beverages (*Annex*). This modelling shows a trend in a time series taking account of its usual seasonality and its specific dynamic and identifies the atypical variations. In other words, in the case of a consumer price series, it makes it possible to detect whether the trend in prices for a given month is noticeably different to the usual movements in that series.

Since 2017, the year-on-year change in consumer prices in hypermarkets and supermarkets is quite well explained by the model as a whole (*Graph 4*). From January 2019 onwards, it deviates from the usual seasonal trend in the series. In March 2019, this gap between the trend in prices observed and those simulated by the model was 0.3 percentage points.

Among the food products excluding fresh products, alcoholic beverages showed the most atypical trend between January and March 2019 (*Graph 5*). The gap between the year-on-year change in prices observed and those simulated reached more than 1.1 percentage points in March.

The raising of the RBC threshold and the tighter regulation of promotional offers could therefore partly explain the unusual price increases observed in the first quarter. As the prices of frequently purchased goods in hypermarkets and supermarkets represent 16% of the overall consumer price index, the effect on the monthly variation in the overall CPI would therefore seem to have been positive, but less than 0.1%. ■

Method

The models satisfy all the standard statistical tests relating to SARIMA models: the models presented are the best possible with regard to the AIC (Akaike information criterion) or BIC (Bayesian information criterion) value. Their statistical properties are presented for the price models for frequently purchased goods in hypermarkets and supermarkets and for alcoholic beverages in all types of stores. The estimation period covers the years 2005 to 2018.

Hypermarkets and supermarkets

The model is a SARIMA (1, 2, 1) (0, 0, 2) [12] whose root mean square error (RMSE) is equal to 0.15 percentage points. The model includes a lagged value, an advanced value and two differentiations in the CPI. The "2" in the second set of brackets means that the model takes account of the values (year-on-year changes) one and two years (12 and 24 months) earlier.

Alcoholic beverages

The model is a SARIMA (2, 1, 1) (1, 0, 1) [12] whose root mean square error is equal to 0.15 percentage points.

The model includes two lagged values0, an advanced value and one differentiation in the CPI. The model takes account of the values 12 months earlier. ■

Bibliography

Allain M.-L., Chambolle C. and Vergé T. (2008), Galland Law on commercial relations: to what extent does it need to be reformed? Opuscules of CEPREMAP.

Boutin X. and Guerrero G. (2008) "The Galland Law and consumer prices", Conjoncture in France, INSEE, June 2008. ■

Wages

In 2019, nominal wages picked up slightly in the market branches: +1.8% after +1.5% in 2018 for the basic monthly wage and +1.9% after +1.7% for the average wage per capita. At the start of 2019, the profile of the quarterly changes in the average wage per capita was marked by the payment, in certain enterprises, of the one-off bonus to boost purchasing power, which was one of the economic and social emergency measures adopted in December 2018. The sharp acceleration in the average wage per capita in Q1 (+1.0%) is likely to be followed by a backlash effect in Q2 (–0.4%). The average wage per capita should return to consistent growth in H2.

Due to an anticipated slowdown in prices over the year, the purchasing power of wages should perk up: in 2019, the average wage per capita is expected to grow by 0.8% in real terms (after +0.2% in 2018). It is likely to rise in H2 (+0.5%) after remaining virtually stable in H1 (+0.1%)

In general government, the index point continues to be frozen in 2019, but the application of the "Professional Career Paths, Careers and Remunerations" protocol has resumed. The nominal wage per capita in this sector should rise by 1.1% in 2019, after a nominal increase of +1.9% in 2018. The purchasing power of the average wage per capita in general government is expected to come to a standstill in 2019 (0.0 % after +0.4%).

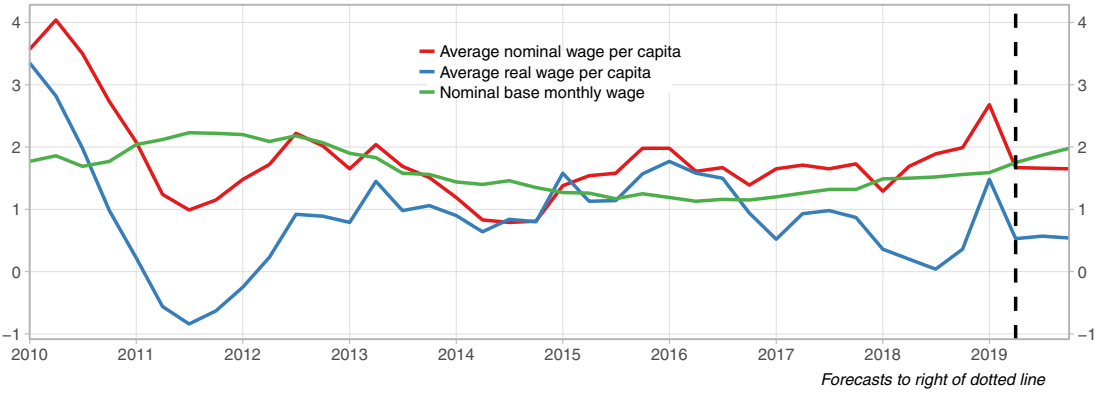
In the market sectors, nominal wages are set to pick up slightly in 2019

The minimum wage was increased by 1.5% on 1st January 2019, in the biggest single increase since July 2012. In 2019, inflation is expected to edge down somewhat while unemployment should continue to fall back and is set to stand at 8.3% of the labour force at the end of the year. Recruitment difficulties remain substantial in all sectors but have stopped increasing (*Focus*). In this context, nominal wages are likely to accelerate in 2019, but to a limited extent. The basic monthly wage looks set to rise by 0.5% per quarter throughout 2019, corresponding to a slight acceleration on an annual average basis: +1.8% in 2019 after +1.5% in 2018 (*Graph and Table*).

The average wage per capita covers a broader range of remunerations (bonuses, profit-sharing and overtime). Its profile at the start of 2019 was marked by the emergency economic and social measures adopted by Parliament in December 2018. These measures included an opportunity for companies to pay a special, one-off bonus to boost the purchasing power of employees whose annual salary for 2018 was no more than three times the minimum wage. This bonus, which had to be paid before 31 March 2019, was exempt from income tax and all forms of social security contributions and charges, up to a threshold of

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

year-on-year variation in %



Source: INSEE

€1,000. In Q1 2019, employers paid out around €2.2 billion on these bonuses, to some 4.8 million employees. Although this bonus is in no way a substitution for pay rises or bonuses stipulated in collective agreements or employment contracts, businesses could probably have paid all or part of the value of these bonuses, in one form or another, even if this measure had not been announced. This substitution effect would appear to have been around 50%. The emergency economic and social measures adopted at the end of 2018 also included the exemption of overtime from tax and social security contributions. This measure should have significantly less effect on the average wage per capita but it is expected to have an appreciable impact on household purchasing power (Household income sheet). All in all, the average wage per capita grew by 1.0% in Q1, making this the highest increase over one quarter since the start of 2010. It is then likely to fall due to a backlash effect in Q2 (–0.4%). The average wage per capita should return to more consistent growth throughout H2 2019 (+0.5% per quarter). As an annual average, it is set to accelerate slightly: +1.9% over the year as a whole, after +1.7% in 2018.

In 2019, real wages are expected to accelerate sharply, benefiting from the expected slowdown in inflation

In 2019, despite a rebound anticipated in Q2, prices[1] are likely to slow on an annual average basis: +1.1% after +1.5% in 2018. In real terms, wages should therefore accelerate sharply, under the combined effects of the slowdown in prices and the buoyancy of nominal wages: the real average wage per capita is expected to grow by 0.8% after +0.2% in 2018. After remaining virtually stable in H1 (+0.1%), the real average wage per capita is set to increase by 0.5% in H2.

In the civil service, wages are expected to slow down in 2019, in both nominal and real terms

In 2019, the application of the "Professional Career Paths, Careers and Remunerations" protocol in general government has resumed after being frozen in 2018. However, the value of the index point remains unchanged and the superficial effect of the allowance introduced in 2018 to offset the rise in the general social security contribution no longer applies. All in all, the nominal average wage per capita in general government is likely to slow: +1.1% in 2019 after +1.9% in 2018. Prices should decelerate less quickly, with the result that the purchasing power of the average wage per capita in general government is expected to come to a standstill in 2019 (0.0% in 2019 after +0.4% in 2018). ■

1. Inflation is measured here by the variation in household consumer prices in the quarterly national accounts.

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 average		
	2018				2019				2018	2018	2019	2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	H1	H2	H1	H2	2017	2018	2019
Basic monthly wage	0.4	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.5	1.8
Average wage per capita in the non-farm market branches	0.4	0.6	0.5	0.5	1.0	–0.4	0.5	0.5	1.0	1.0	0.6	1.0	1.7	1.7	1.9
Average wage per capita in general government (GG)													2.4	1.9	1.1
Household consumer price index (quarterly national accounts)	0.6	0.5	0.3	0.2	0.2	0.4	0.3	0.2	1.1	0.6	0.6	0.5	0.9	1.5	1.1
Real basic monthly wage	–0.2	–0.1	0.0	0.2	0.3	0.1	0.2	0.3	–0.3	0.2	0.4	0.5	0.4	0.0	0.7
Real average wage per capita (non-farm market branches)	–0.2	0.1	0.2	0.3	0.9	–0.8	0.2	0.3	–0.1	0.5	0.1	0.5	0.8	0.2	0.8
Real average wage per capita (GC)													1.5	0.4	0.0

Forecast

Source: INSEE, Dares

Do recruitment difficulties help to explain recent wage trends in France?

The short-term forecast for average wage increases rests in particular on the link with inflation and the unemployment rate. For several years now, the business tendency surveys have been measuring more and more striking difficulties in recruiting in most sectors. These difficulties are likely to exert upward pressure on wages. Although a correlation – albeit weaker in the recent period – has effectively been established, it would seem that taking these recruitment difficulties into account in econometric equations does not significantly improve wage forecasting: these difficulties are correlated above all with the unemployment rate, which is already used as an indicator of tension.

The short-term analysis of wages provided in INSEE's Conjoncture in France publications rests mainly on their link with inflation and the unemployment rate

The mechanisms that shape wages involve a large number of determinants, both short-term and long-term: the level of, and increase in prices, the degree of qualification of jobs, collective bargaining mechanisms, the tax and benefit system or the level of unemployment. When measuring wages as part of the forecasting exercise carried out for the Conjoncture in France (over a maximum of one year), the main factors usually taken into account are inflation and the unemployment rate, as well as apparent labour productivity and growth in economic activity.

The short-term monitoring of wages in the non-farm market sectors carried out by INSEE in each quarter relies on two wage indicators: on the one hand, the basic monthly wage measured for a constant qualification structure by the Activity and Employment Status (ACEMO) survey, and, on the other hand, the average wage per capita, which beyond the basic wage, reflects changes in qualifications and in the amount of work, as well as situation-based components such as overtime and bonuses.

Forecasting the basic monthly wage

The models used to forecast the basic monthly wage rely on the usual determinants - inflation, the unemployment rate and the minimum wage.

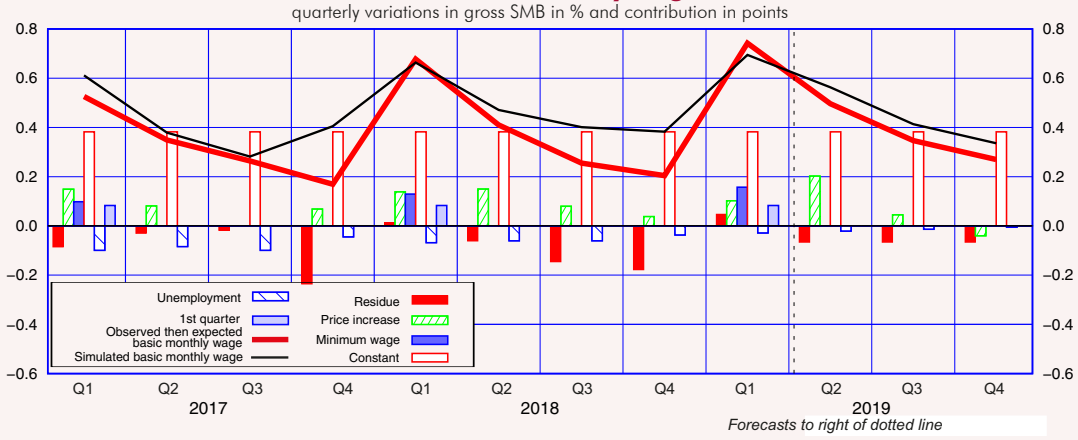
The main model used for the basic monthly wage forecasting exercise is a log-linear model based on the dependent variables in wage trends in relation to these determinants (*model 1*):

$$\begin{aligned}\Delta \ln(SMB)_t = {} & \underset{(0,0005)}{0,004} + \underset{(0,04)}{0,142}\,\Delta \ln(IPC)_t - \underset{(0,05)}{0,017}\,\Delta \ln(IPC)_{t-2} + \underset{(0,05)}{0,122}\,\Delta \ln(IPC)_{t-3} \\ & + \underset{(0,05)}{0,206}\,\Delta \ln(SMIC_{<1998\,t\,4})_{t-1} + \underset{(0,01)}{0,077}\,\Delta \ln(SMIC_{\geqslant 1998\,t\,4})_t \\ & - \underset{(0,02)}{0,078}(tcho_t - tcho^*_{moyenne\ 1991-2018}) + \underset{(0,001)}{0,003}\,T1_{<1998\,t\,4} + \underset{(0,001)}{0,001}\,T2_{<1998\,t\,4} + \underset{(0,001)}{0,003}\,T1_{\geqslant 1998\,t\,4}\end{aligned} \quad (1)$$

Estimation period: 1985-2018

1 - Contributions of the explanatory variables in the modelling of the quarterly progression of the basic monthly wage

quarterly variations in gross SMB in % and contribution in points



Scope: France excluding Mayotte, establishments with 10 employees or more in the non-farm market sectors
Note: forecasts beyond the dotted line. Over the estimation period of the model, the calibration corresponds to the residual, that is, the spread between the quarterly variations observed and predicted by the model. In forecasting the wage is obtaining by assuming a calibration equal to the average of the three last years.
Source: DARES, survey Acemo; INSEE

In this model, inflation is introduced as an explanatory variable in the current quarter t, and for the previous quarters, in order to take into account the time needed for wages to adapt to price increases. The unemployment rate (tcho) reflects the status of job market tensions. The minimum wage is integrated into the model by estimating its impact before and after the last quarter of 1998 separately, in order to take account of the change in the periodicity of the measurement of the basic monthly wage in the ACEMO survey at that date. Finally, dummies are added into the model for the first two quarters (Q1 and Q2) to neutralise the seasonality of the price and wage variables (here non-seasonally adjusted).

This model slightly overestimates the quarterly variation in the basic monthly wage over the last three years, by an average of 0.1 points per quarter (*Figure 1*).

Forecasting the average wage per capita

Insofar as it includes overtime and bonuses as well as the basic wage, the average wage per capita is more sensitive to cyclical fluctuations in economic activity. Calculated as part of the preparation of the quarterly accounts, it is corrected for seasonal variations (CSV). The exercise of analysing and forecasting the average wage per capita in INSEE's Conjoncture in France rests on the estimation of different econometric models.

One of the models used includes, as well as inflation (delayed by only one quarter, therefore assuming a rapid adjustment of wages to price rises), apparent labour productivity (PW), which links GDP to the volume of work necessary to produce it, and the unemployment rate. The effect of apparent labour productivity is evaluated separately before and after the first quarter of 2009 to take account of the greater elasticity of wages in terms of this measurement since the crisis (*model 2*):

(2)
$$\Delta \ln(SMPT_{CVS})_t = \underset{(0,001)}{0,006} + \underset{(0,09)}{0,151}\,\Delta \ln(IPC_{CVS})_{t-1} + \underset{(0,06)}{0,238}\,\Delta \ln(PW)_{t<2009\,t\,1} + \underset{(0,10)}{0,355}\,\Delta \ln(PW)_{t\geq 2009\,t\,1} - \underset{(0,03)}{0,167}\,(tcho_t - tcho^*_{moyenne\,1991-2018})$$

FORMULA

Estimation period: 1991-2017

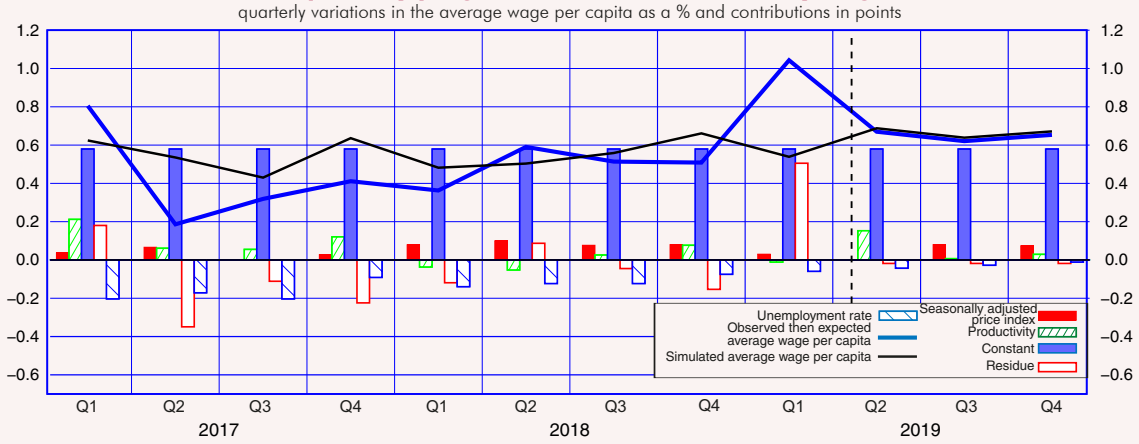
Since the beginning of 2017, this model has slightly overestimated increases in the average wage per capita (*Figure 2*).

Recruitment difficulties: a link to wages... but no new information on top of that provided by the unemployment rate

The difficulties that employers experience in hiring workers are measured on a quarterly basis in INSEE's business tendency surveys. In the same way as the unemployment rate, to which they are strongly linked (when the unemployment rate falls, recruitment difficulties increase), they constitute a relevant indicator of labour market tensions (*Figure 3*).

2 - Contributions of the explanatory variables in the modelling of the quarterly progression of the basic monthly wage

quarterly variations in the average wage per capita as a % and contributions in points



Scope: France, non-farm market sectors
Note: forecast beyond the dotted line. The interpretation of the calibration is similar to the forecasting exercise for the basic monthly wage (*Figure 1*).
Source: INSEE, quarterly national accounts

Faced with recruitment difficulties, companies may increase wage levels to retain their employees or attract new ones. In this case, the latter have increased wage bargaining power. When recruitment difficulties increase, wages generally become more buoyant (*Figure 4*). However, the rise in wages has remained contained since 2015, even though recruitment difficulties rose sharply again at the end of 2018 to reach their highest level for 10 years - a level comparable to that of 2008.

To evaluate the influence of recruitment difficulties on wages, first of all we can estimate directly the linear correlation between the average wage per capita and the difficulties experienced by employers by testing a difference in the link since 2015 (3):

(3)
$$\Delta \ln(SMPT)_t = \underset{(0,001)}{0,00015} + \underset{(0,005)}{0,0089}\, drec_{t\geqslant 2015} + \underset{(0,003)}{0,0146}\, drec_{t<2015}$$

Estimation period: 1991-2017

The two factors estimated to be associated with recruitment difficulties are positive and significant, with the one corresponding to the recent period being significantly lower than the other, which reflects a weakening of the link between wages and recruitment difficulties.

Secondly, it is useful to test whether recruitment difficulties provide any extra information on top of the usual determinants and, in particular, the unemployment rate, information which could then improve the analysis of wages.

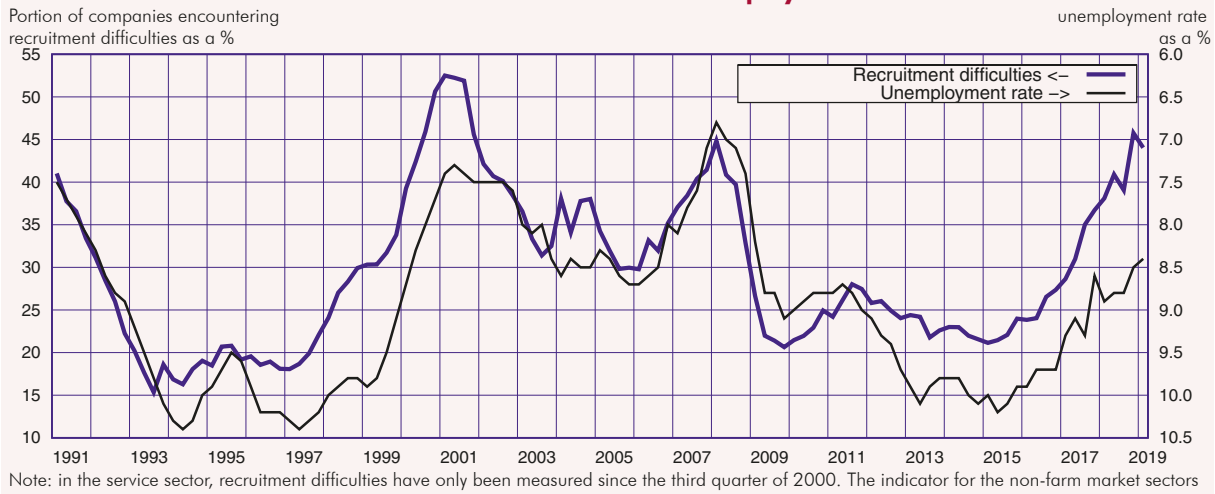
To do this, an extra variable is tested, "innovation" in recruitment difficulties, measured here as the component in recruitment difficulties that is not explained by the unemployment rate (i.e. the regression residual explaining the former by the latter)

In all the models used to forecast wages for the purposes of Conjoncture in France, the addition, among the explanatory variables, of the innovation variable on top of unemployment has not been conclusive: while the unemployment rate remains significant (at the 5% threshold) in the models where it is used, this is never the case for innovation in recruitment difficulties. In particular, for the basic monthly wage, the model presented in part 1 leads to the following estimated equation:

(4)
$$\begin{aligned}\Delta \ln(SMB)_t = {} & \underset{(0,0005)}{0,004} + \underset{(0,04)}{0,139}\,\Delta \ln(IPC)_t - \underset{(0,05)}{0,018}\,\Delta \ln(IPC)_{t-2} + \underset{(0,05)}{0,106}\,\Delta \ln(IPC)_{t-3} \\ & + \underset{(0,05)}{0,102}\,\Delta \ln(SMIC_{<1998t4})_{t-1} + \underset{(0,01)}{0,078}\,\Delta \ln(SMIC_{\geqslant 1998t4})_t \\ & - \underset{(0,02)}{0,080}\,(tcho_t - tcho^*_{moyenne\,1991-2018}) + \underset{(0,001)}{0,003}\,T1_{<1998t4} + \underset{(0,001)}{0,001}\,T2_{<1998t4} + \underset{(0,0006)}{0,003}\,T1_{\geqslant 1998t4} - \underset{(0,03)}{0,005}\,innovationDR\end{aligned}$$

Estimation period: 1985-2017

3 - Recruitment difficulties and unemployment rate

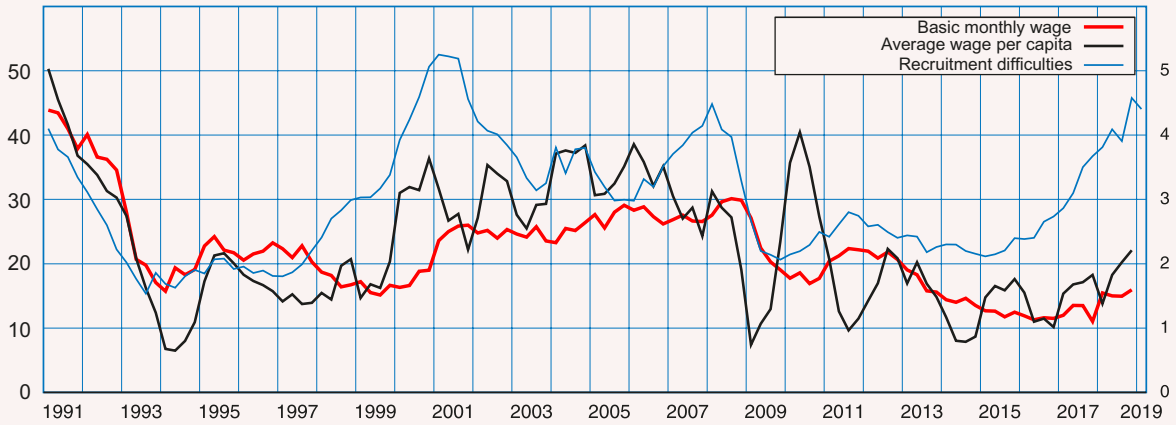


Note: in the service sector, recruitment difficulties have only been measured since the third quarter of 2000. The indicator for the non-farm market sectors over the period 1991-2000 was therefore obtained by backcasting based on the business tendency surveys for the building sector and industry. The unemployment rate scale is reversed.
Source: INSEE, Labour force and business tendency surveys

Thus, although recruitment difficulties are manifestly correlated with increases in wages, they do not provide any extra information on top of the unemployment rate which could improve the short-term analysis. This diagnosis remains valid when this analysis is applied to all the main sectors of activity and to each occupational category. ■

4 - Recruitment difficulties and year-on-year wage increases

recruitment difficulties as a %/year-on-year wage increase as a %



Scope: France for the average wage per capita; France excluding Mayotte for the basic monthly wage and Metropolitan France for recruitment difficulties; non-farm market sectors, restricted to establishments with 10 employees or more for the basic monthly wage

Source: INSEE, business tendency surveys and national accounts base 2014; DARES, ACEMO survey

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V. Passeron and F. Romans, (2002), "Forecasting wage trends in France", *Conjoncture in France* March, INSEE. ■

Household income

Household income should pick up in 2019 (+3.4% after +2.7% in 2018), sustained by both a reduction in tax and social contributions and the buoyancy of social benefits. Particularly buoyant at the end of 2018 and then at the beginning of 2019 under the effect of the urgent economic and social measures taken, the purchasing power of households' gross disposable income (GDI) is expected to fall back temporarily as an after-effect of that, before starting to gather pace again during H2. Altogether on average over the year it should accelerate sharply in 2019 to reach +2.3% (i.e. +1.8% per consumption unit, or CU) after +1.2% in 2018 (or +0.7% per CU). It would seem to have been sustained in particular by the increase in incomes in Q1 and by the slowing of consumer prices over the entire year (+1.1% after +1.5%).

Earned income is expected to slow slightly in 2019

In 2019, households' earned income is expected to slow slightly (+2.3% after +2.5% in 2018; Table 1) in line with the wage bill (+2.5% after +2.9%). In the non-farm market sectors, the slightly faster increase in the average wage per capita in 2019 (+1.9% after +1.7% in 2018; *Graph*) is expected to be counteracted by a slowdown in salaried employment (+1.2% after +1.7%in 2018). The operating income of sole proprietors is expected to bounce back (+0.8% after –0.3%). At the beginning of 2019, as a result of the payment by certain companies of a tax and social contribution-exempt exceptional bonus, wages paid to households accelerated sharply (+1.1% in Q1 after +0.6%, *Table 2*). They are expected to be sluggish in Q2 (+0.1%) before returning to something closer to their trend growth rate (+0.6% per quarter).

1 - Household gross disposable income

in %

	Quarterly changes												Annual changes		
	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Gross disposable income (100%)	0.7	0.6	0.5	1.0	–0.1	1.3	0.7	1.3	1.0	0.2	0.5	1.0	2.2	2.7	3.4
including:															
Earned income (72%)	1.1	0.7	0.7	0.7	0.7	0.6	0.5	0.5	1.0	0.1	0.6	0.6	2.9	2.5	2.3
Gross wages and salaries (64%)	1.1	0.7	0.7	0.8	0.8	0.7	0.5	0.6	1.1	0.1	0.6	0.6	3.1	2.9	2.5
GOS of sale proprietors (8%)*	0.9	0.6	0.6	0.2	–0.4	–0.4	–0.2	0.0	0.7	0.3	0.2	0.1	1.4	–0.3	0.8
Social benefits in cash (36%)	0.4	0.3	0.5	0.6	0.4	0.8	0.5	0.7	0.9	0.5	0.5	0.7	1.5	2.3	2.7
GOS of "pure" households (14%)	0.8	0.7	0.7	0.7	0.4	0.6	0.5	0.8	0.7	0.8	0.4	0.3	2.5	2.3	2.6
Property income (6%)	–1.5	0.1	1.2	2.1	3.1	2.3	1.5	0.8	0.1	1.5	0.5	0.2	–2.4	8.3	3.5
Social contributions and taxes (–28%)	1.0	0.7	1.5	0.0	3.3	–1.5	0.0	–2.0	0.5	0.6	0.6	–1.2	2.7	2.5	–0.9
Contributions of households (–11%)	1.0	0.7	0.9	0.7	–7.6	–0.9	0.4	–2.9	–0.5	0.4	0.6	0.6	3.2	–7.7	–2.0
Income and wealth tax (including CSG and CRDS) (–16%)	1.1	0.6	1.9	–0.6	10.9	–1.8	–0.2	–1.5	1.2	0.7	0.6	–2.2	2.4	9.6	–0.3
Household consumer prices (quarterly national accounts)	**0.5**	**–0.1**	**0.0**	**0.4**	**0.6**	**0.5**	**0.3**	**0.2**	**0.2**	**0.4**	**0.3**	**0.2**	**0.9**	**1.5**	**1.1**
Purchasing power of gross disposable income	**0.2**	**0.6**	**0.5**	**0.6**	**–0.7**	**0.9**	**0.3**	**1.1**	**0.9**	**–0.2**	**0.2**	**0.8**	**1.4**	**1.2**	**2.3**
Household purchasing power by consumption	**0.0**	**0.5**	**0.3**	**0.4**	**–0.8**	**0.7**	**0.2**	**1.0**	**0.7**	**–0.3**	**0.1**	**0.7**	**0.8**	**0.7**	**1.8**

Forecast

How to read it: the figures in parentheses give the structure of the year 2017.

* The gross operating surplus of "pure households" corresponds to the output of housing services, less the intemediate consumption required to generate this output (particularly financial services related to loans) and taxes (land tax). This output corresponds to the rents which properly awners receive from their tenants, or could receive if their property was rented ("imputed rents").

Source: INSEE

The gross operating surplus of pure households[1]1 is expected to accelerate a little in 2019 (+2.6% after +2.3%). Net property income, however, is likely to slow markedly in 2019 (+3.5% after +8.3% in 2018), after the introduction in 2018 of the single flat-rate withholding tax and particularly buoyant dividend payments. Nevertheless, it is probably still being sustained by the good results of 2018, which should encourage companies to increase their distribution of dividends (*Focus: Forecast of dividends paid to households*). In Q4, income is expected to slow due to a fall in income from life insurance.

Social benefits are expected to be up in 2019

In 2019, social benefits in cash are expected to increase sharply (+2.7% after +2.3%). They are thought to be sustained by the sharp acceleration in social assistance benefits (7.9% in 2019 after +1.0%). In Q1, they increased by +5.4%, under the effect of the increase in the individual activity premium bonus and the redefinition of eligibility for this bonus; they are expected to slow mid-year (+0.2% per quarter), before accelerating slightly in Q4 due to the increase in the amount of adult disability allowance due on 1st November 2019 (there was already an increase at the end of 2018). Social Security benefits are expected to maintain their momentum (+2.2% as in 2018; *Table 3*), in spite of the smaller increase in most such benefits (+0.3% rather than in line with inflation excluding tobacco). The rise in "Other social insurance benefits" is also expected to slow (+2.1% after +2.8%).

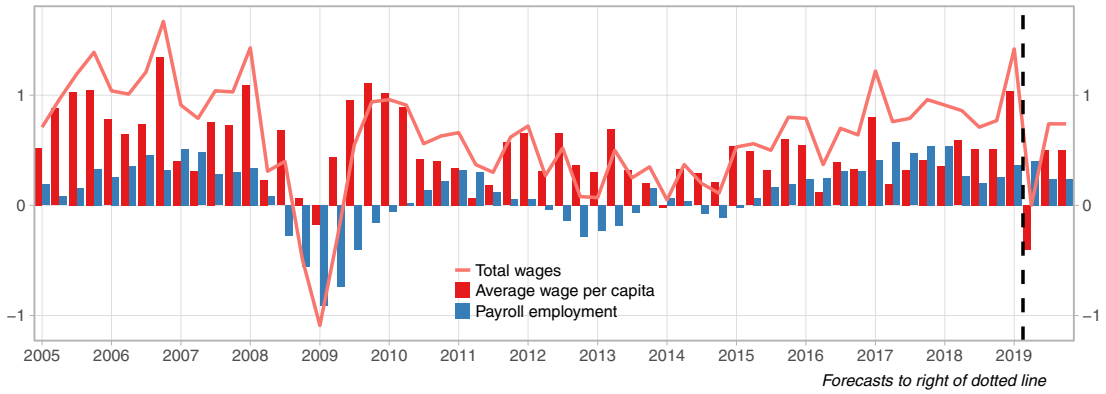
Tax and social contributions are likely to see a slight downturn in 2019

Over 2019 as a whole, households' tax and social contributions are expected to fall (−0.9% after +2.5%): after a weak rebound at the beginning of the year, they are expected to keep rising at a moderate pace in Q2 and Q3, before stalling at the end of the year. In

1. The GOS of pure households corresponds to output of housing services minus the intermediate consumption required for that output (in particular financial services related to borrowing) and taxes (land tax). Output corresponds to the rents private property owners receive from their tenants or could receive if they rented out their property ("imputed rents").

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

quarterly variations in %



Source: INSEE

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

Quarterly changes (T/T−1)

	Quarterly changes												Annual changes		
	2017				2018				2019						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Non-financial enterprises (64%)	1.2	0.8	0.8	1.0	1.0	0.9	0.7	0.89	1.4	–0.1	0.7	0.7	3.4	3.6	3.2
Financial corporations (4%)	0.7	0.9	0.1	0.3	0.1	0.3	0.8	–1.1	1.3	0.0	0.8	0.8	3.2	1.0	1.6
General government (22%)	1.0	0.6	0.4	0.3	0.7	0.2	0.1	0.2	0.2	0.4	0.4	0.4	2.7	1.6	1.1
Households excluding sole proprietors (2%)	0.3	–0.4	–0.5	–0.2	0.8	0.3	–0.9	–0.4	0.4	0.2	0.2	0.1	–0.5	–0.1	–0.1
Total gross wages received by households (100%)	**1.1**	**0.7**	**0.7**	**0.8**	**0.8**	**0.7**	**0.5**	**0.6**	**1.1**	**0.1**	**0.6**	**0.6**	**3.1**	**2.9**	**2.5**
including: Non-agricultural market sectors (71%)	1.2	0.8	0.8	1.0	0.9	0.9	0.7	0.8	1.4	0.0	0.7	0.7	3.4	3.4	3.2

Forecast

How to read it: the figures in parentheses give the structure of the year 2017

Source: INSEE

2019, social contributions paid by households are expected to continue their downward trend: −2.0% after −7.7%. At the beginning of 2019, they continued to fall due to the exemption of employees from social contributions on overtime pay, which came into force on 1st January 2019; they are expected to resume a pace closer to their trend over the rest of the year. Meanwhile, taxes on income and wealth (including the general social contribution (CSG)) are set to be virtually stable in 2019 (–0.3% after +9.6%). The slight increase seen in Q1 was a result of the accounting after-effect of the reduction in local residence tax at the end of 2018 (*Focus in the 2018 issue of Conjoncture in France: the accounting treatment of the reductions in residence tax in the quarterly national accounts*), although this was countered to some extent by the reinstatement of the old CSG rate for some pensioners (this reinstatement was recorded, in accordance with national accounting standards, at the date when this measure came into effect – namely at the beginning of January and not at the time of the retroactive adjustment carried out in the spring). Taxes on income and wealth are expected to return to a growth rate closer to their trend[2]2 in Q2 and Q3, before falling back in Q4 under the effect of the ongoing gradual reduction of local residence tax.

The purchasing power of GDI should accelerate sharply in 2019: +2.3% (i.e. +1.8% per consumption unit)

In 2019, households' nominal gross disposable income (GDI) is expected to increase much faster (+3.4% after +2.7%), under the effect, among other things, of the fall in tax and social contributions and the increase in social benefits. Boosted at the beginning of 2019 by the granting of exceptional bonuses, earned income is nonetheless likely to slow a little over the year. At the same time, consumer prices are also likely to slow on average over the year (+1.1% after +1.5%), with the result that the increase in the purchasing power of GDI is expected to accelerate markedly: +2.3% after +1.2%. Adjusted to an individual level to take account of demographic changes, purchasing power per consumption unit is expected to rise by +1.8% in 2019, after +0.7% in 2018.

The sub-annual profile of purchasing power is expected to track that of gross disposable income and prices: purchasing power increased sharply in Q1 2019 along with GDI; it is expected to fall back temporarily as an after-effect of that in Q2, prices being sustained, furthermore, by the increase in the price of tobacco in March. Purchasing power is then expected to be more vigorous in Q4 due to the continued reduction of local residence tax. ■

2. The introduction of the pay-as-you-earn system on 1st January 2019 remains neutral over the year after correction for seasonal variations (see Focus in the December 2018 issue of *Conjoncture in France*).

3 - Social transfers received and paid by houshold

	Quarterly variations												Annual variations		
	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Social cash benefits received by households (100%)	**0.4**	**0.3**	**0.5**	**0.6**	**0.4**	**0.8**	**0.5**	**0.7**	**0.9**	**0.5**	**0.5**	**0.7**	**1.5**	**2.3**	**2.7**
Social Security benefits in cash (72%)	0.3	0.4	0.4	0.6	0.4	0.9	0.6	0.5	0.5	0.5	0.5	0.8	1.4	2.2	2.2
Other social insurance benefits (19%)	0.4	0.2	1.0	0.8	0.6	0.8	0.6	0.6	0.5	0.3	0.4	0.5	1.5	2.8	2.1
Social assistance benefits in cash (9%)	0.5	0.2	0.2	0.0	0.0	0.3	0.1	2.4	5.4	0.2	0.2	0.7	2.1	1.0	7.9
Total social contribution burden by households (100%)	**1.0**	**0.7**	**0.9**	**0.7**	**–7.6**	**–0.9**	**0.4**	**–2.9**	**–0.5**	**0.4**	**0.6**	**0.6**	**3.2**	**–7.7**	**–2.0**
Employers contributions[1](79%)	1.3	0.8	1.0	0.8	–9.3	0.6	0.5	–3.9	–0.9	0.4	0.6	0.6	3.9	–8.3	–2.6
Contributions of households (21%)	–0.6	0.2	0.4	0.1	–0.4	–7.1	0.2	1.0	0.9	0.4	0.4	0.4	–0.1	–5.0	0.5

forecast

How to read it: the figures in parentheses give the structure of the year 2018

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

Forecasting dividends paid to households

Dividends paid to households represent approximately 3% of gross disposable income (GDI). This proportion has seen a trend increase over several decades, but it is proving to be more and more volatile. This Focus presents the methodology used in Conjoncture in France to forecast changes in the amounts of dividends paid to households, based on an error correction model. In the long term, the trend in dividends at aggregate level is explained by the gross operating surplus (GOS) of companies. In the short term, beyond GOS, the overall trend is relatively well forecast using the variations in the dividends paid only by the companies listed on the CAC40. It can also depend on exogenous parameters, relating to tax in particular. In 2018, dividends paid to households rose sharply, and this growth contributed +0.5 percentage points to the increase in GDI. For 2019, the model predicts an increase of 8%, representing a contribution of +0.2 points to growth in GDI.

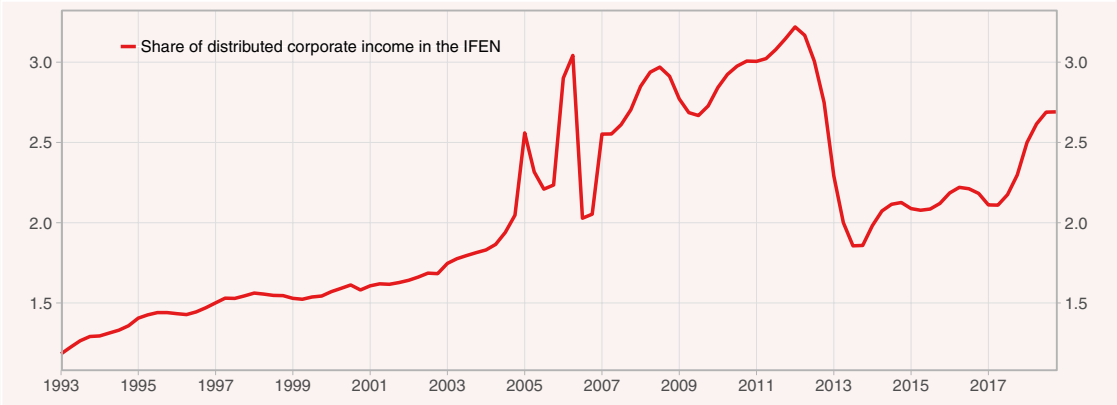
The share of dividends in household income has seen a trend growth since the 1960s

When households make the financial or natural assets they own (land, subsoil assets, etc.) available to other institutional units, they receive income from property. A part of that income is paid in the form of dividends, which include all kinds of distribution of company profits to holders of property title in them. The particularity of dividends is that they do not correspond to a fixed or predefined income[1]. Whilst over the last 30 years the share of dividends paid to households in gross disposable income has more than doubled (*Graph 1*), reaching 2.7% in the last quarter of 2018, that of net interest (on deposits or debt securities) and that of investment income attributed to policyholders, such as from life insurance, has fallen (*Graph 2*). At the end of 2018, the share of net interest was virtually nil (compared to 1.0% in 1998) and that of investment income attributed to policyholders amounted to 3.3% (compared to 5.7% in 1998).

1. Dividends (coded D42 in the national accounting classification) also include shares distributed to shareholders, income paid to government entities by public enterprises with a legal personality, and finally income generated by non-observed activities and transferred to the owners of the enterprises taking part in these activities on their own behalf.

1 - Trend in the share of dividends paid to households in gross disposable income

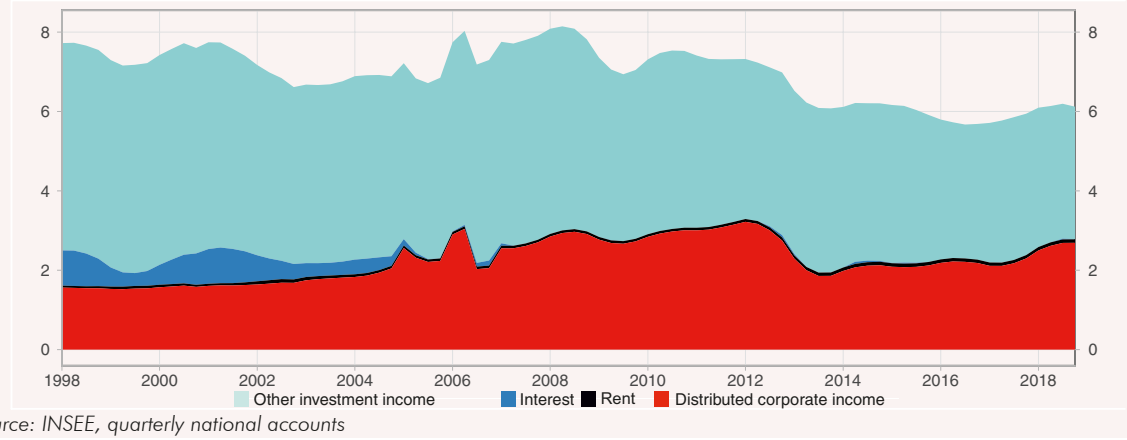
in %



Source: INSEE, quarterly national accounts

2 - Share of property income in households' GDI

in %



Source: INSEE, quarterly national accounts

From the point of view of companies, dividends constitute one of the methods of distribution of gross operating surplus (GOS), that is, value added minus the compensation of employees and "other taxes on production". GOS is also partly allocated to the payment of interest on any previously incurred debt, to the payment of tax and to certain other transactions. The rest of GOS constitutes the enterprise's savings intended for use, for example, for self-financing. Between 1990 and 2005, the share of dividends in GOS was relatively stable. In other words, growth in dividends followed that of GOS (*Graph 3*). From 2008, the economic crisis led companies to increase their savings in order to reduce their debt, leading to a fall in the share of dividends in GOS, accentuated by the tax measures taken in 2012-2013.

A more volatile trend in dividends in the recent period

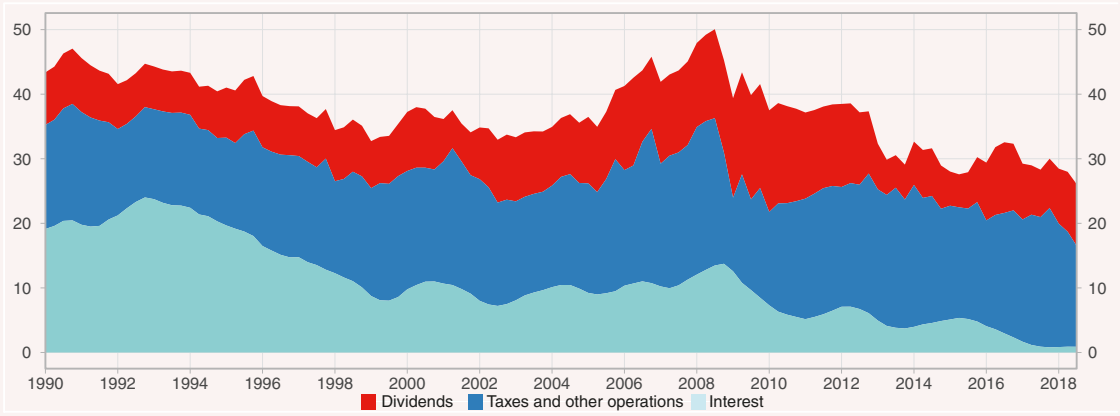
Since 2005, the trend in dividends has become slightly dissociated from that of GOS and the volatility has tended to increase (*Graph 4*). First of all, the economic crisis of 2008 affected enterprises' earnings and dividends more than other operations, where dividends bore the brunt of unfavourable trade-offs. Conversely, during periods of recovery, growth in dividends was more vigorous than that of income and other expenditure. Next, a number of exogenous shocks such as tax measures concerning property income also contributed to this volatility, for example in 2005 with the abolition of the tax credit on dividends. In 2012-2013, several measures concerning dividends were adopted as part of an alignment of the taxation of capital with that of labour. The flat-rate withholding tax (PFL) was cut and the deductible part of the general social contribution (CSG) was reduced. This meant that the share of dividends paid to households in their gross disposable income fell to a level below 2% in 2013 after reaching its record high of 3.2% in 2011. Conversely, in 2018, dividends surged strongly after a year 2017 characterised by good economic results and no doubt also in connection with the introduction of the single flat-rate withholding tax (PFU).

Dividends that are volatile, but close to those paid by large French companies

French households also receive dividends from foreign companies. This is why the dividends received by households differ slightly from the dividends paid by French companies. Nonetheless, these two series of dividends are very closely correlated (coefficient close to 0.7). In addition, the dividend payment behaviour of French CAC 40 companies seems to reflect quite well

3 - Share of interest, dividends and taxes in companies' GOS

annual variations in %



Source: INSEE, quarterly national accountsE

4 - Trend in dividends and GOS

annual % changes

Source: INSEE, quarterly national accounts

the short-term fluctuations in the payments made by all French companies. This approximation (*Graph 5*) remained valid when the various exogenous shocks mentioned above occurred, and in particular when dividend payments fell in 2009 after the crisis and when they rose in 2018. Thus, the CAC40 dividends can therefore be useful in forecasting the dividends received by households.

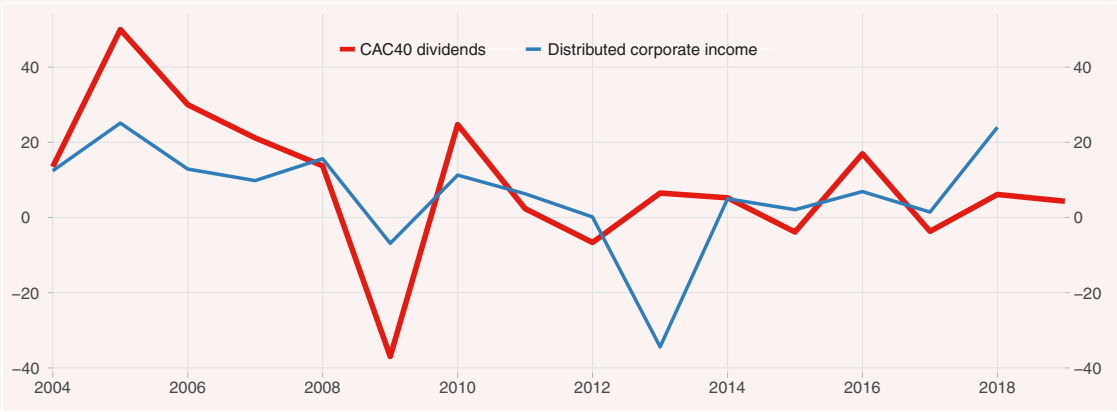
Estimates of dividends for 2019

All these elements are used to deduce an error correction equation to estimate dividends paid to households (*Method*). As mentioned above, the trend in dividends paid by companies follows that of GOS over the long term. In addition, a break occurred in the trend in 2013 under the effect of tax measures. Finally, short-term variations are partly determined by those in the dividends of CAC40 companies as well as, to a lesser degree, those in GOS (*Graph 6*).

In 2018, the annual growth in dividends predicted by the model was 12%. The gap between the trend in dividends forecast by the model and the particularly buoyant increase observed (+24%) is no doubt due once again to a tax scheme, in this case the single flat-rate tax (PFU), which by reducing the tax payable, led to a substantial unleashing of dividend payouts. In 2019, this process is assumed to be largely over and the absence of any new tax measures on dividends means it can be assumed that they will return to a trend in line with their usual determinants. Dividends paid to households are therefore expected to rise by 8% in 2019. The share of dividends in GDI being about 2.6%, the contribution of dividends to GDI growth in 2019 is estimated at +0.2 percentage points, after +0.5 points in 2018. ■

5 - Correlation of the trends in dividends

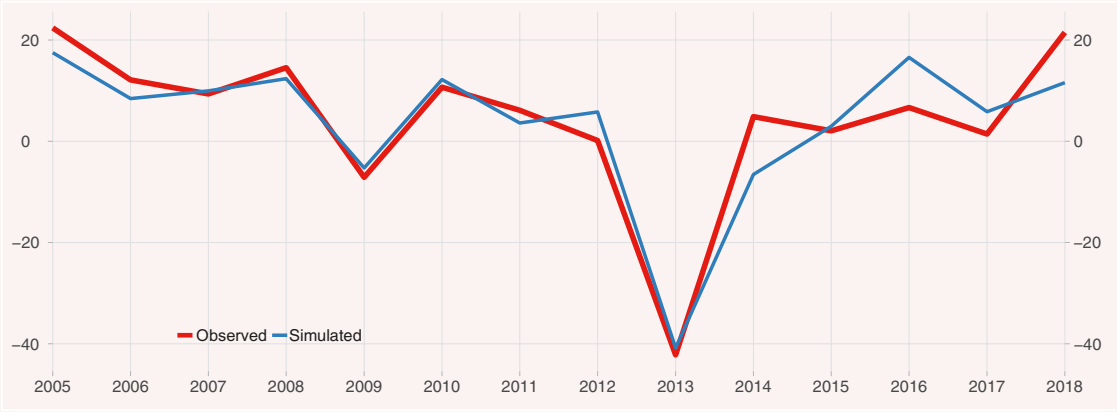
annual variation in %



Source: INSEE, quarterly national accounts, Zonebourse.com

6 - Annual variation in dividends paid to households and forecast by the error correction model

annual variation in %



Source: INSEE, quarterly national accounts, Zonebourse.com

Method

The model used to forecast dividends paid is an error correction model. The existence of a cointegrating relationship between dividends paid to households and companies' GOS suggests a simple long-term relationship. This long-term relationship, however, was interrupted due to a change in tax regime in 2013, modelled by the introduction of an indicator variable with a value of 1 when the observation date is after 2013. A GOS interaction variable was tested from 2013 onwards, then removed as it did not appear to be significant. In addition, in the long run, companies' dividend payment behaviour has changed to favour higher savings and self-financing. The increase in the share of dividends in GOS is captured by a trend over the entire period from 2003 to 2018. The short-term relationship is determined by variations in the dividends paid by the CAC40 companies and by variations in GOS. The equation for annual data since 2003 is therefore (*Graph 6*):

$$\Delta d42_t = 1{,}5 + 0{,}77\,\Delta ebe_{t-1} + 0{,}25\,\Delta cac40_t - 0{,}75 \times (d42_{t-1} - 0{,}93\,ebe_{t-2} - 0{,}04 \times T + 0{,}50 \times I_{t>2013}) + \epsilon_t$$

d42 (or cac40) is the logarithm of dividends paid annually to households (or paid by CAC40 companies), ebe is the gross operating surplus of French resident non-financial corporations. All the coefficients are significant at the 5% threshold.

The pull-back force of the long-term relationship reflects the speed of adjustment of dividends when these diverge from the long-term trend defined by GOS. Its high value (0.75) means that the gap between the short-term fluctuations in dividends and their long-term determinants is to a large extent eliminated within one year, reflecting companies' capacity to adjust their dividends to shocks. For example, the sharp rise in dividends in 2016, linked to companies' good results, was followed by a return to normal in 2017. The long-term elasticity of dividends to GOS is virtually unitary (0,93). The R^2 of the short-term relationship, used for forecasting purposes, stands at 0.94. The equation predicts an increase of 11.6% in dividends in 2018 and 7.9% in 2019. ■

Household consumption and investment

In Q1 2019, household consumption expenditure gathered pace slightly (+0.4%, after +0.3%). Indeed, consumption of services remained buoyant (+0.6% after +0.6%) and consumption of goods stabilised (0.0% after –0.2%), sustained in particular by automobile consumption.
In Q2 2019, household consumption is expected to increase by 0.3%. Consumption of goods is expected to rise very little (+0.1% after 0.0%), whilst that of services is expected to slow slightly (+0.4% after +0.6%). Consumption in Q2 2019 is expected to be driven mainly by energy consumption.
In H2 2019, household consumption should remain more or less steady following on from the beginning of the year and then increase by +0.5% in Q3 and +0.4% in Q4. Consumption of goods should pick up markedly (+0.6% in Q3 then +0.4% in Q4) and that of services should continue rising, by +0.4% per quarter. On average over the year, household consumption is expected to increase by +1.3% in 2019, more than in 2018 (+0.9%). This acceleration is expected to be less marked than that of purchasing power. The savings ratio reached the high level of 15.3% in Q1. Though it is expected to drop during the year, it should increase on average over the year.
After seeing an exceptional level of growth in 2017, household investment slowed considerably in 2018 (+2.0% after +6.6%) as sales of new-build housing stabilised. In 2019, it is expected to fall by 0.3%.

Consumption increased in Q1 2019

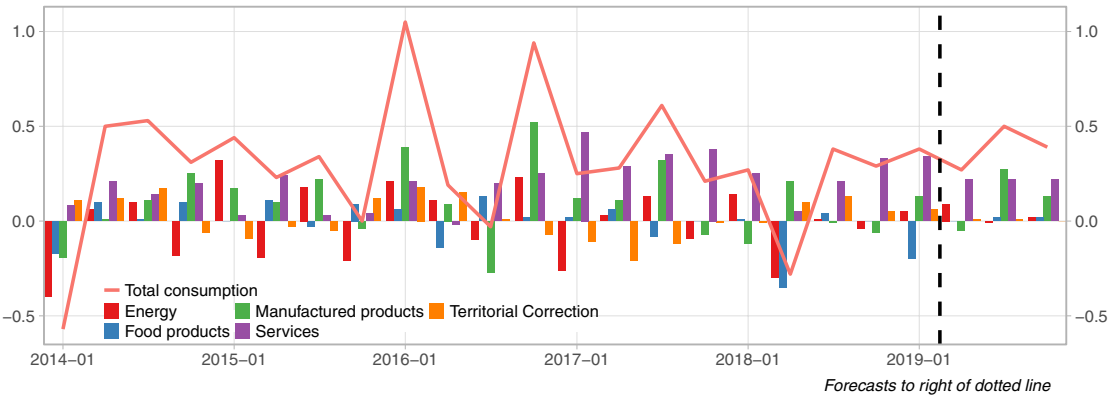
In Q1 2019, total household consumption accelerated very slightly compared to the previous quarter (+0.4% after +0.3%, *Graph 1 and Table*). Indeed, consumption of goods remained stable (0.0% after –0.2%) and consumption of services rose at the same pace as in the previous quarter (+0.6%).

Consumption of manufactured goods bounced back; consumption of consumer durables in particular increased substantially (+0.6% after –0.5%), driven by the rebound in automobile consumption and the buoyancy of spending on household durables, in spite of a slight dip in consumption of other consumer durables. Consumption of clothing and textiles picked up sharply (+0.9% after +0.1%) and that of other manufactured goods bounced back (+0.5% after –0.1%). Household energy consumption also picked up again (+0.7% after –0.4%), driven by the increase in spending on fuel, although gas and electricity consumption remained virtually stable. On the other hand, food consumption fell slightly (–1.1% after 0.0%).

Spending on services increased at the same rate as in the previous quarter (+0.6%). Consumption of transport and accommodation and food services slowed slightly (+0.3% after +1.1% and +0.9% after +1.3% respectively), but consumption of leisure services picked up a little (+0.6% after +0.4%). In addition, consumption of services was boosted by the increase in household

1 - Contributions of the various items to quarterly household consumption

quarterly variations in %, contributions in points



Source: INSEE

consumption of housing services (+0.6% after +0.4%), a consequence of the reduction in housing benefits in Q1.

Through to the end of 2019, consumption is expected to increase at the same pace overall

In Q2 2019, total household consumption is expected to rise once again, by 0.3%. Indeed, households are expected to smooth the impact of purchasing power fluctuations on their consumption. Consumption of goods is barely expected to rise (Report) (+0.1% after 0.0%) and consumption of services is expected to slow a little (+0.4% after +0.6%). The dip in the consumption of consumer durables (–0.3% after +0.6%) is expected to weigh particularly on household consumption of goods in Q2. In particular, car purchases are likely to fall considerably, while purchases of household durables and the consumption of other durables are expected to rise. Consumption of clothing and textiles is expected to fall back and that of other manufactured goods to slow. On the other hand, energy consumption is expected to rise again in Q2, with the increase in spending on gas and electricity offsetting the reduction in fuel consumption. Consumption of foodstuffs is expected to stabilise in spring (0.0%), after a marked drop in Q1. Overall, consumption of manufactured goods is expected to drop, due notably to the downturn in spending on goods produced by the automotive and agri-food industries. In services, consumption is expected to slow slightly in Q2 2019. In particular, spending on housing services is expected to return to its trend rate and no longer be the driver of household consumption of services (+0.3% after +0.6%).

In Q2 2019, household consumption is expected to continue increasing, by +0.5% in Q3 and +0.4% in Q4. Among goods, consumption of manufactured goods is expected to bounce back markedly in Q3, enabling overall consumption to accelerate slightly. In particular, vehicle purchases are expected to pick up strongly. On the other hand, energy consumption is expected to fall very slightly, led by the fall in household spending on gas and electricity, in spite of a stabilisation of fuel expenditure. Consumption of foodstuffs is likely to be relatively stable (+0.1% per quarter). Total consumption of goods is therefore expected to pick up considerably in Q3 (+0.6% after +0.1%) before slowing to +0.4% in Q4. Among services, both spending on transport services and consumption of accommodation and food services, as well as leisure services, are expected to remain sustained. All in all, consumption of services should continue to rise, by +0.4% in Q3 and Q4 2019. On average over the year, household consumption is expected to rise by +1.3% in 2019, after +0.9% in 2018.

The savings ratio is expected to remain steady at a high level in 2019

In Q1 2019, purchasing power increased by +0.9%, most notably under the effect of the emergency economic and social measures taken. It is expected to slip back in Q2 (–0.2%) before gradually picking up again at the end of the year. With household consumption rising by 0.3%

1 - Household consumption and investment expenditure

in %

	Quarterly changes								Annual changes		
	2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Total household consumption expenditure (1)+(2)+(3)	**0.3**	**–0.3**	**0.4**	**0.3**	**0.4**	**0.3**	**0.5**	**0.4**	**1.6**	**0.9**	**1.3**
Services (1)	**0.5**	**0.1**	**0.4**	**0.6**	**0.6**	**0.4**	**0.4**	**0.4**	**2.4**	**1.9**	**1.9**
Goods (2)	**0.1**	**–0.9**	**0.1**	**–0.2**	**0.0**	**0.1**	**0.6**	**0.4**	**1.4**	**–0.4**	**0.1**
including									0.4	–1.4	–1.4
Food	**0.1**	**–2.0**	**0.2**	**0.0**	**–1.1**	**0.0**	**0.1**	**0.1**	**0**	**0**	**0**
Agriculture goods (AZ)	0.3	–2.1	–1.8	–0.3	–0.8	2.1	0.3	0.2	–1.3	–3.0	–0.8
Agri-food products (C1)	0.0	–1.9	0.6	0.1	–1.1	–0.4	0.1	0.1	0.7	–1.1	–1.5
Energy	**1.7**	**–3.6**	**0.2**	**–0.4**	**0.7**	**1.1**	**–0.2**	**0.2**	**–0.6**	**–1.0**	**0.3**
Energy, water and waste (DE)	2.6	–6.4	1.7	–0.9	0.2	2.5	–0.3	0.3	–1.2	–0.8	0.4
Coke and refined petroleum (C2)	0.6	0.1	–1.6	0.1	1.2	–0.5	0.0	0.1	0.2	–1.2	0.1
Engineered goods (C3 à C5)	**–0.5**	**1.0**	**0.0**	**–0.3**	**0.6**	**–0.2**	**1.3**	**0.6**	**2.9**	**0.7**	**1.3**
Manufactured goods (C1 à C5)	**–0.2**	**–0.2**	**0.1**	**–0.1**	**0.0**	**–0.3**	**0.7**	**0.4**	**1.9**	**–0.1**	**0.1**
Territorial correction (3) = (4) - (5)	**0.6**	**–6.4**	**–8.9**	**–3.7**	**–4.5**	**–0.6**	**–0.4**	**–0.2**	**30.9**	**–1.5**	**–13.7**
Imports of touristic services (4)	1.0	2.4	1.2	0.1	1.3	0.5	0.7	0.9	–0.3	5.2	3.6
Exports of touristic services (5)	0.8	–0.5	–1.9	–1.0	–0.3	0.2	0.4	0.6	7.9	3.0	–1.7
Investment expenditure	**0.1**	**0.7**	**0.3**	**–0.3**	**0.0**	**–0.3**	**–0.2**	**–0.1**	**6.6**	**2.0**	**–0.3**

forecast

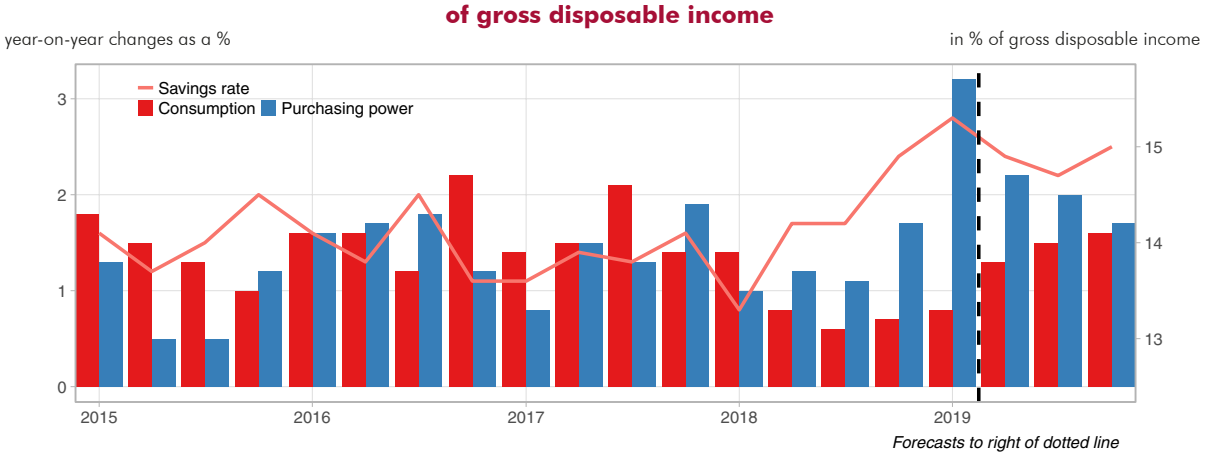
Source: INSEE

to 0.5% per quarter in 2019, the savings ratio increased to 15.3% in Q1; it is expected to fall slightly in Q2 and should stand at about 15.0% at the end of the year, thereby enabling households to smooth their consumption (*report: What is the link between purchasing power and household consumption in France today?*). Over the year 2019 as a whole, the savings ratio is likely to be higher than in the previous year (15.0% after 14.2% in 2018).

Household investment is expected to fall in 2019

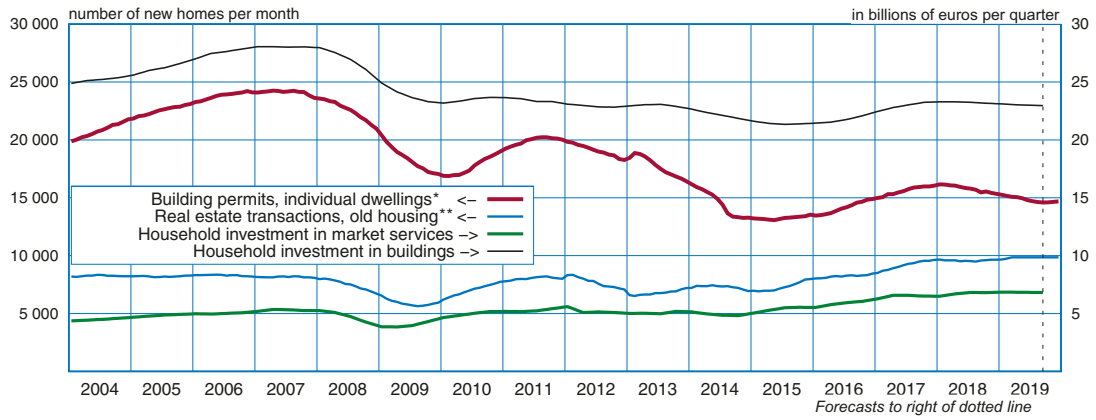
In Q4 2018, household investment fell for the first time since Q3 2015, which explains a distinct slowdown over 2018 as a whole (+2.0% after +6.6% in 2017). In Q1 2019, household investment stabilised (0.0%), but it is expected to dip again from Q2 2019 onwards. Indeed, single-dwelling production is expected to fall again and major home maintenance work, which increased in Q1, will most likely fall over the rest of the year. In addition, the number of real estate transactions involving older properties is expected to remain stable and household investment in market services is not expected to increase further. Overall in 2019, household investment is expected to fall by 0.3%. ■

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



Source: INSEE

3 - Household investment on construction and housing starts



* GFCF: gross fixed capital formation
** EAD+: estimated actual dates
Source: INSEE, SDES

Enterprises' earnings

In 2018, the margin rate of non-financial corporations (NFCs) fell slightly, reaching 31.2% as an annual average after 31.8% in 2017. Productivity gains slowed and terms of trade once again affected enterprises' margin rate.
In 2019, the margin rate looks set to improve significantly and should rise to 32.8%, with a one-off boost from the transformation of the competitiveness and employment tax credit (CICE) into an exemption from employer contributions in Q1.

The margin rate fell slightly in 2018

On average in 2018, the margin rate of NFCs fell slightly, to 31.2% of value added after 31.8% in 2017 (*Graph 1*). Productivity gains only partly made up for the rise in real wages (*Graph 2*) and the continuing deterioration in the terms of trade, especially via the rise in oil prices.

Although stable at the beginning of the year, the margin rate fell by 0.5 points in Q2 2018 to reach 30.9% (Table). This drop is attributable to a relative buoyancy of real wages. The margin rate then increased by +0.2 points in Q3 and by +0.4 points in Q4, due to the effect of productivity gains and improved terms of trade. In industry it was higher, picking up after Q2 (*Graph 3*).

The margin rate should increases strongly in H1 2019 then decline slightly

The margin rate is likely to increase in 2019, reaching 32.8% as an annual average. At the beginning of 2019, the competitiveness and employment tax credit (CICE) was transformed into an exemption from employer contributions. In effect, a 6-point reduction in sickness contributions has replaced the CICE (which also has a rate of 6 points) while enterprises are also benefitting from the CICE for 2018 wages, which is paid out in 2019. This transitional double payment should temporarily buoy up the increase in their margin rate in Q1[1]. In addition, the effect of productivity gains on the margin rate will probably be slightly positive in 2019 as an annual average (+0.3 points). However, the contribution made by

1. In Q1 2020, the absence of CICE for 2019 wages should result in a similar shock downwards on the margin rate of NFCs.

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

in % and in points

	Quarterly changes												Annual changes		
	2017				2018				2019						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Margin rate (in level)	**31.6**	**31.9**	**31.9**	**31.6**	**31.4**	**30.9**	**31.1**	**31.5**	**32.6**	**33.1**	**32.9**	**32.4**	**31.8**	**31.2**	**32.8**
Variation in margin rate	**0.2**	**0.3**	**–0.1**	**–0.2**	**–0.2**	**–0.5**	**0.2**	**0.4**	**1.1**	**0.4**	**–0.2**	**–0.5**	**0.1**	**–0.5**	**1.5**
Contributions to the variation margin rate															
Productivity gains	0.5	0.2	0.2	0.3	–0.1	–0.2	0.1	0.2	0.2	–0.1	0.1	0.1	0.9	0.2	0.3
Real wage per capita	–0.2	–0.2	–0.2	0.0	0.2	–0.1	–0.1	–0.3	–0.6	0.6	–0.1	–0.2	–0.4	–0.2	–0.6
Employer contribution ratio	0.0	0.0	0.0	–0.1	0.0	0.0	0.0	0.1	1.1	0.0	0.0	0.0	0.1	–0.1	1.2
Ratio of the value-added price to the consumer price	–0.3	0.2	0.0	–0.3	–0.3	–0.2	0.1	0.1	0.3	–0.1	0.0	0.0	–0.5	–0.5	0.3
Other factors	0.1	0.0	–0.1	–0.1	0.0	0.0	0.1	0.2	0.1	0.1	–0.1	–0.3	0.1	0.0	0.2

forecast

How to read it: : the margin rate(TM)measure the share of value-added which remunerates capital. Its varation 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]

$$TM = \frac{EBE}{VA} \approx 1 - \frac{WL}{YP_{va}} + autres\ facteurs = 1 - \frac{L}{Y}\frac{W}{SMPT}\frac{SMPT}{P_t}\frac{P_t}{P_{va}} + autres\ facteurs$$

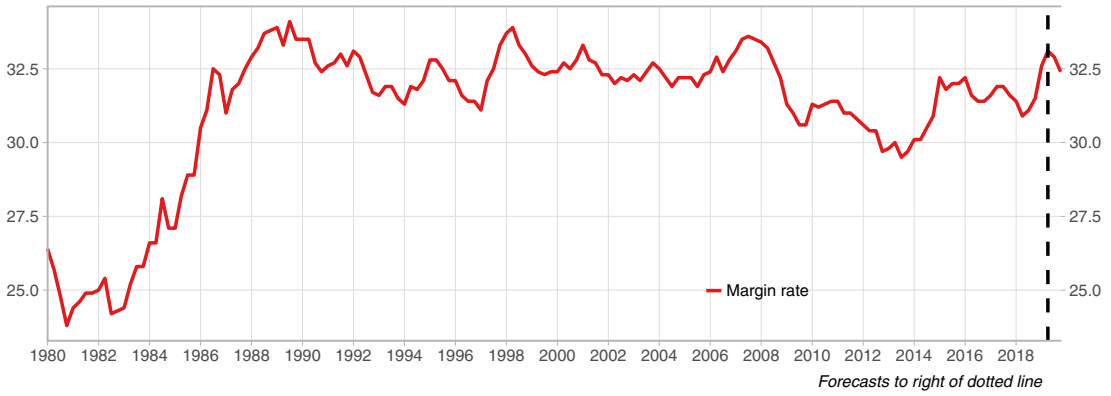
1. The CICE reduces companies' corporation tax, but in the national accounts it is recorded as a subsisty to companies, as recommented in the latest version of the European System of Account (SEC 2010).

Source: INSEE

real wages is negative in Q1 (–0.6 points), due to the payment of the special bonus for purchasing power (Wages sheet). In Q2, the backlash for real wages is expected to contribute positively to the margin rate. It is then likely to decrease slightly by the end of the year. ■

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

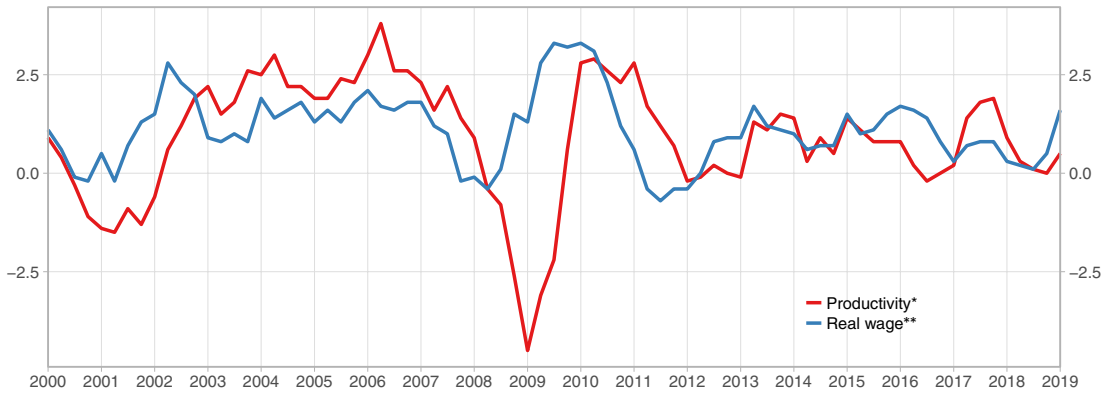
as a % of value added



Source: INSEE

2 -Productivity and real wages

year-on-year changes in %



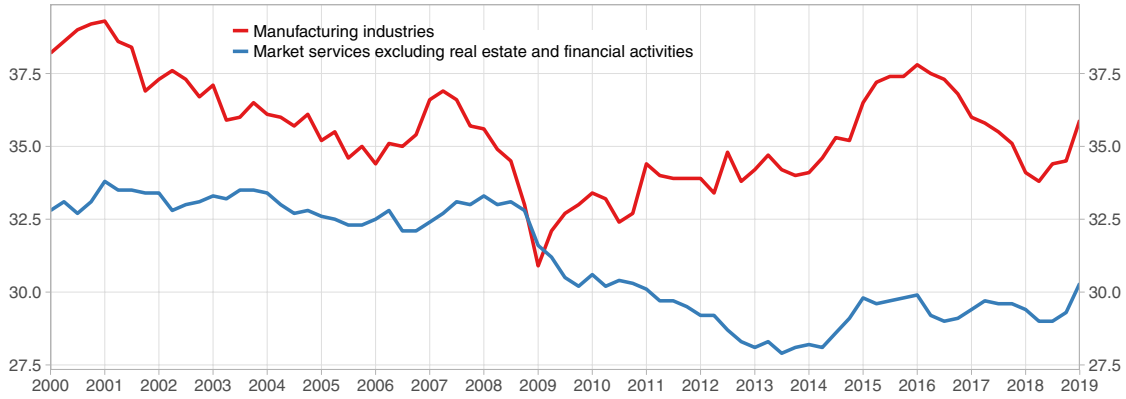
Source: INSEE

* Productivity: value added (in volume) of NFCs in relation to paid employment of NFCs

** Real wage: average wage per capita in relation to household consumption prices

3 - Margin rate in industry and services

year-on-year changes in %



Source: INSEE

Corporate investment and inventory

Investment by non-financial enterprises (NFEs) remained vigorous in Q1 (+0.7% after +0.8% at the end of 2018), after a very buoyant 2018 overall (+3.9% as an annual average). However, investment in services stalled at the start of 2019. According to the business outlook surveys, pressures on production equipment are still high but easing slightly. In Q2, corporate investment is likely to be sustained by a rebound in investment in services and should pick up slightly (+0.8%). It should then slow gradually over the course of H2 (+0.5% then +0.4% per quarter). The investment rate should continue to rise, although not as rapidly as in 2018.
In Q1 2019, changes in inventories made a positive contribution to growth (+0.3 percentage GDP points), due mainly to changes in inventories of refined petroleum products. Across the whole of 2019, the contribution of inventories to growth is expected to be slightly negative.

Corporate investment slowed very slightly in Q1 2019

In Q1 2019, investment by non-financial enterprises (NFEs) slowed very slightly, to +0.7% after +0.8% in Q4 2018 (Table 1). Their investment in services slipped back (–0.1%) for the first time in two years, mainly because of a downturn in spending on information technology. Conversely, investment in manufactured goods was buoyant (+2.0%), driven by the purchase of automobiles. The automotive market has returned to normal after being disrupted last autumn by the new antipollution standard WLTP (Worldwide Harmonised Light Vehicle Test Procedure). Investment in construction slowed (+0.3% after +0.7%) with the downturn in investment in building construction. Since NFE investment rose in value less quickly than value added in Q1 2019, the NFE investment rate declined slightly (*Graph 1*).

Corporate investment should remain buoyant in Q2 2019 then gradually slow

According to the April 2019 business tendency survey on investment in industry, business managers expect to increase their investment expenditure on tangible assets and software significantly in 2019. However, the balance of opinion on planned investments for the next half-year has fallen back sharply, to below its long-term average.

Pressures on production capacity remain strong, but are relaxing a little. According to the quarterly business outlook survey in industry, the production capacity utilisation rate, which stood at 84.4% in April 2019, is continuing its gradual decline after reaching a 10-year high in January 2018. Production bottlenecks have eased slightly since the start of the year, while still continuing to nudge record levels (*Graph 2*). In the service sector, the balance of opinion on investment forecasts fell back in April and May but remained above its long-term average.

Corporate financing terms should remain favourable in 2019. The temporary dual benefit of the competitiveness and employment tax credit (CICE) on wages paid in 2018 and its transformation into an exemption from employer contributions is expected to sustain companies' margin rate and self-financing ratio. The self-financing ratio of NFEs is expected to exceed 99% in H1 2019 then decrease gradually in H2. In addition, real interest rates should remain low until the end of 2019.

NFEs' investment expenditure is therefore expected to retain its momentum: it should be dynamic in Q2 2019 (+0.8%), then decelerate in H2 (+0.5% then +0.4%). NFE investment should therefore grow by +3.3% in 2019, a slowdown compared with 2018 (+3.9%). Their investment

Investment by non-financial enterprise (NFEs)

at chain-link previous year prices, SA-WDA

	Quarterly changes												Annual changes		
	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	T2	T3	T4			
Manufactured products (%)	3.1	0.0	2.0	2.1	–2.2	1.4	1.5	–0.5	2.0	0.9	0.3	0.2	3.1	2.0	3.7
Construction (%)	1.3	1.6	1.2	0.4	0.6	1.7	0.2	0.7	0.3	–0.3	0.0	0.1	4.5	3.5	1.2
Other (%)	3.8	0.8	1.4	1.5	1.2	1.0	1.9	1.8	–0.1	1.3	1.0	0.8	6.8	5.5	4.2
All non-financial enterprises (100 %)	**3.0**	**0.7**	**1.5**	**1.4**	**–0.1**	**1.3**	**1.3**	**0.8**	**0.7**	**0.8**	**0.5**	**0.4**	**5.0**	**3.9**	**3.3**

forecast

Source: INSEE

rate is expected to continue to increase, although at a much more moderate pace than in 2018.

Investment in manufactured goods is expected to return to moderate growth

NFE investment in manufactured goods should continue to increase during 2019 but at an increasingly slow pace. Investment in transport equipment is expected to return to a moderate pace of growth after the disruptions at the end of 2018, linked with the change in the test procedure for the approval of new vehicles (WLTP). All in all, NFE investment in manufactured goods should increase by 3.7% in 2019, a more vigorous rise than in 2018 (+2.0%).

Investment in construction is likely to fall back in Q2 2019

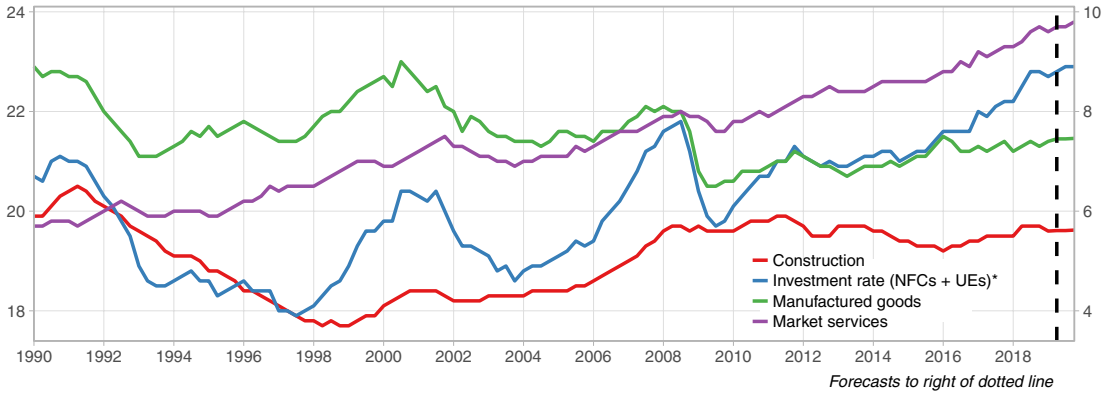
Corporate investment in construction is likely to decline in Q2 2019 (–0.3%) then remain almost unchanged in H2 (+0.0% then +0.1%). At the beginning of 2019, non-residential building starts were falling back slightly, while major maintenance work, apart from housing, remained sluggish. However, civil engineering firms remain confident about their business prospects. Investment in civil engineering is likely to see a one-off slowdown in Q2 but then regain momentum. Growth in NFE investment in construction should stand at +1.2% in 2019, after a rise of +3.5% in 2018 as an annual average.

Investment in services should recover its vigour

NFE investment in services stalled at the start of 2019 after a dynamic 2018 (+5.5%). Across 2019, this expenditure is nevertheless expected to remain vigorous (+4.2%), driven by a growing trend towards spending on IT services and research and development. Investment in services should rebound in Q2 2019 (+1.3%) then slow in H2 (+1.0% in Q3 then +0.8% in Q4).

1 - Investment rate of SNF by type of product

in % of added value



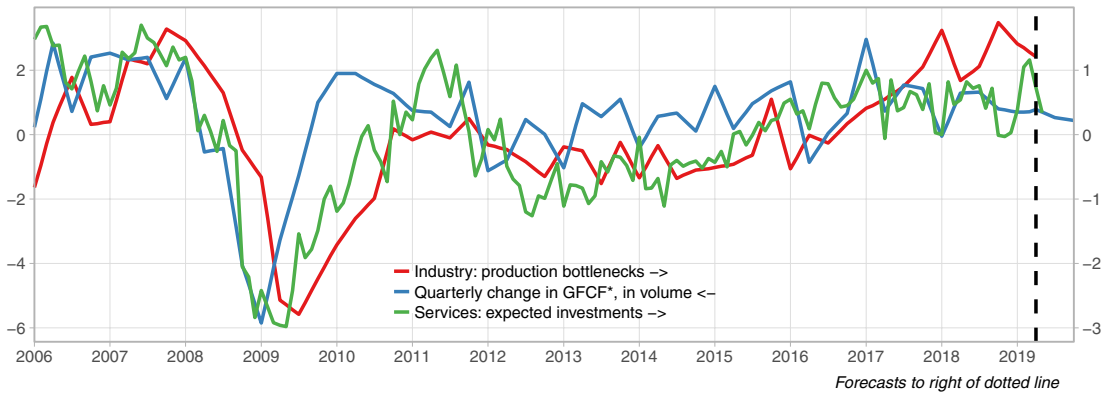
* Non-financial enterprises: non-financial corporations (NFCs) and unincorporated enterprises (UEs)

Source: INSEE, quarterly national accounts

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

in %

centered and reduced indications (levels)



* GFCF: Gross fixed capital formation

Source: INSEE, monthly survey in services and industry, quarterly national accounts

On average over 2019, the contribution of changes in inventories to growth is expected to be slightly negative

In Q1 2019, the contribution of changes in inventories to GDP growth was clearly positive (+0.3 GDP percentage points, *Table 2*). The drastic fall in exports of refined products and the ramping up of imports of these same products contributed to a large increase in inventories of this type of product. Naval deliveries did not have a significant effect on changes in inventories at the beginning of the year, as in the last quarter of 2018 they were followed by the delivery of an ocean liner and then another at the beginning of 2019.

In Q2 2019, in the absence of any large new naval deliveries, changes in inventories of transport equipment should increase. However, this increase is likely to be offset by changes in inventories of manufactured goods excluding transport equipment, and thus the total contribution of inventory change to growth is likely to be zero. It is expected to be slightly negative in Q3, while in Q4, the concentration of aeronautical deliveries is likely to result in a negative total contribution of inventory change (−0.1 points). For 2019 as a whole, this contribution is expected to be slightly negative, after a more strongly negative 2018. ■

2 - Contribution of inventory changes to growth

in GDP points

	Quarterly changes												Annual changes		
	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Agricultural products	**0.1**	**0.0**	**–0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.2**	**–0.1**	**0.1**
Manufactured products	**0.8**	**–0.5**	**0.3**	**–0.2**	**0.1**	**0.2**	**–0.5**	**–0.3**	**0.2**	**0.0**	**–0.1**	**–0.2**	**0.0**	**–0.2**	**–0.3**
Agrifood products	–0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0				–0.1	0.0	
Coke and refined petroleum product	0.1	0.0	–0.1	0.0	0.0	0.0	0.0	–0.1	0.2				–0.1	0.0	
Machinery and equipment goods	–0.1	0.1	0.0	–0.1	0.1	0.0	0.0	0.1	–0.1				0.0	0.0	
Transport equipment	0.5	–0.4	0.3	–0.1	0.0	0.0	–0.2	–0.2	0.0				0.2	–0.1	
Other industrial goods	0.3	–0.2	0.0	–0.1	0.0	0.1	–0.2	–0.1	0.0				–0.1	–0.3	
Energy, water and waste	**–0.1**	**–0.1**	**0.0**	**0.2**	**0.0**	**–0.1**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**
Others (construction, services)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
TOTAL[1]	**0.8**	**–0.6**	**0.2**	**–0.1**	**0.1**	**0.1**	**–0.4**	**–0.2**	**0.3**	**0.0**	**–0.1**	**–0.1**	**0.2**	**–0.3**	**–0.1**

forecast

1. changes in inventories include acquisitions net of sales f valuables

Source: INSEE

What are the economic objectives of industrial investment in France and in Europe, according to the business tendency surveys?

INSEE's business tendency survey on investments in industry gives a picture of the long-term evolution of economic motivations for industrial investment: increasing production capacities, attempting to boost productivity or replacing obsolete or dated assets. In France as in other European nations, the share of investment dedicated to replacing old equipment has been increasing over the long term, while investment in improving productivity is shrinking. The proportion of investment devoted to production capacity fluctuates with the economic cycle. In France this share has been picking up since 2013, but remains below the level reported by German industrial firms.

Expanding capacity, productivity, replacing existing equipment: what are the economic motivations which drive investment?

Corporate investment encompasses all purchases or modifications of assets intended to improve their productive capabilities. The economic motivations behind such investments can be grouped into three main categories: increasing production capacities, attempting to boost productivity or replacing obsolete or dated assets.

Investment in production capacities aims to increase total output, making more of an existing product or else introducing new products. This allows for an increase in output, and potentially the creation of new jobs. Investment in productivity is aimed primarily at bringing down production overheads or introducing new techniques in order to make production more efficient. It aims to boost productivity, but not necessarily employment. Finally, some investments are required to deal with the obsolescence or ageing of existing assets, corresponding to the concept of consumption of fixed capital as used in the national accounts.

In theory, most capacity investments occur during the expansion phases of the economic cycle and when businesses are not constrained by demand. Investments in productive capacity and replacing existing equipment are less sensitive to the economic cycle; nonetheless, they evolve in parallel with transformations in production capacities linked to technological innovation.

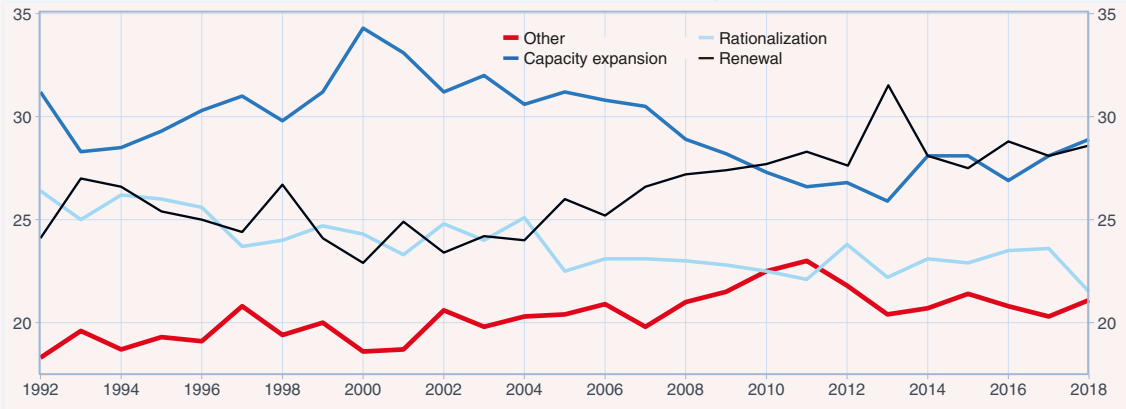
The INSEE business tendency survey on industrial investments provides a picture of the long-term evolution of economic motivations for industrial investment, based on the declarations of businesses in this sector. Since this survey is part of a harmonised system of European surveys overseen by the European Commission's Directorate General for Economic and Financial Affairs (DG-ECFIN), we can compare the French results with those from our European neighbours. However, this European system does not impose a unified definition of what constitutes investment. In France the survey focuses primarily on physical assets, with software the only intangible asset taken into consideration (see *Source and Methodology*)

In the French industrial sector, a growing share of investment is devoted to replacing existing equipment

According to the INSEE business tendency survey on industrial investments, the proportion of overall industrial investment devoted to replacing existing capital assets has been growing almost continuously since the year 2000, after shrinking slightly in the latter half of the 1990s (*Graph 1*). This proportion shrank from 25% of total investment in 1995 to 23% in 2000, before growing to approximately 30% in 2018. The growing share of replacement investment since 2000 could reflect a decrease in the average

1 - Economic objectives of industrial investment in France

as a % of total investment in the manufacturing sector



Note: these data are supplied to the DG-ECFIN, and may differ slightly from the data published on the INSEE website (see 'Source and Methodology' for further details of how these data series are constructed).

Source: INSEE

lifespan of businesses' productive assets, particularly due to the structural effects of capital stocks. Over the long term, the investment rate in intangible assets has increased at the expense of assets in the categories "other civil engineering works" and 'other machinery and equipment' (INSEE, 2017). But assets such as software programmes have a relatively short lifespan: the life expectancy of a programme is 5 years in the national accounts, compared with 60 years for civil engineering works and around 15 years for equipment.

Conversely, the proportion of investment devoted to streamlining or modernising production facilities, i.e. cutting costs or improving productivity, has been falling continuously since 1992. It fell by 5 points between 1992 and 2018. In particular, the share of investment devoted to automating manufacturing processes fell sharply until 2011. On the other hand, investment aimed at improving energy efficiency grew in the period to 2011.

The share of investment devoted to expanding capacity has been growing since 2013

According to the responses to the tendency survey, the share of industrial investment devoted to expanding production capacities peaked in 2000 after a decade of growth, before shrinking from 2000 to 2004. Meanwhile, output from the industrial branch grew significantly in volume terms between 1994 and 2001, then shrank in 2002 and 2003 as a result of the deterioration in the global outlook. The proportion of investment devoted to improving capacities then remained broadly stable until 2007, despite the upturn in industrial output from 2004 onwards. As a result of the 2008 crisis, industrial output dropped and the share of investment devoted to expanding productive capacities also shrank sharply. Industrial output picked up in 2010, albeit only briefly, and began a more sustained comeback in 2013. Capacity investment continued its downward trend until 2013, before picking up again. In 2018 it has returned to its 2008 level. According to the expectations of business leaders surveyed in April 2019, this share should see another slight increase in 2019 (INSEE, 2019).

The questionnaire used in this INSEE survey serves to break down capacity investment into different sub-categories: investment devoted to increasing output of existing products, or investment related to the introduction of new products. Capacity expansion to produce existing products is correlated to the economic cycle in the manner described above (*Graph 2*). The share of investment related to the introduction of new products, which is probably more sensitive to changes in technology, does not appear to be correlated with the economic cycle. The latter share shrank gradually between 1991 and 2018 (−2 points). It accounts for a larger share of the investments made by companies with 500 or more employees, where it is in decline. Its share is smaller but generally stable in companies with fewer than 500 employees.

Finally, other economic objectives – such as improving safety or working conditions, or protecting the environment – have come to occupy a growing share of the investments declared by businesses in the industrial branch (+3 points between 1991 and 2018).

Trends which can also be observed in other European nations

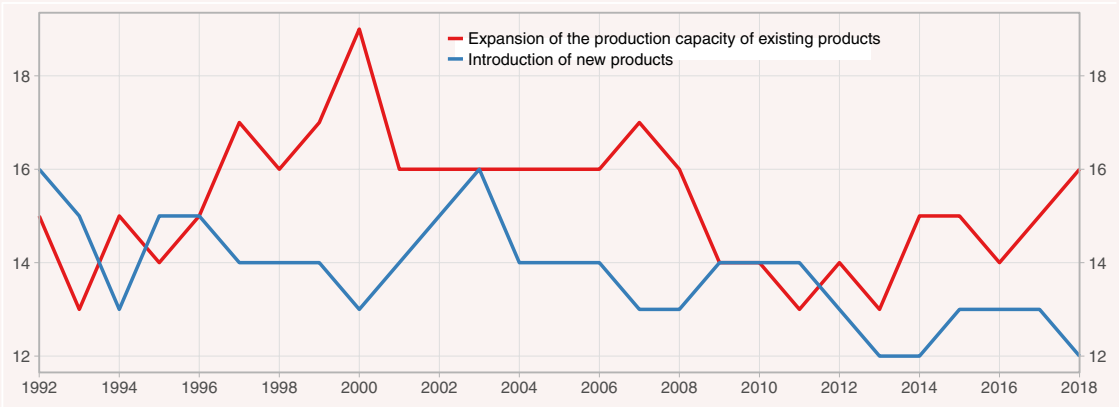
In France, the UK and Spain, the investment rate in the industrial branch has increased since the turn of the millennium.

The trends observed in France (an increase in replacement investment and a decline in investment in production capacities) can be found in several other European countries. Between 2000 and 2018 the proportion of investment devoted to replacing existing capacities also increased in the United Kingdom and Spain (*Table*). This increase was less pronounced in Germany, but can still be detected over the long term.

The proportion of investment devoted to production capacities fell between 2000 and 2018 in Germany, the UK and Italy. In Spain it increased over the same period.

2 - Share of investment in industrial production capacity in France

as a % of total investment in the manufacturing sector



Source: INSEE

The decline in the proportion of investments devoted to improving productivity has been much more pronounced in Germany than it is in France. In the 1990s this share was bigger in Germany than in France (around 30%, compared with just over 25% in France), but by 2018 the share of productivity investment stood at 13% in Germany and 22% in France.

Investment in production capacity is more often prioritised by German industrial firms

Germany differs from France in terms of the large proportion of industrial investment devoted to expanding production capacities, especially in the years 2005 to 2016 (*Graph 3*). In Germany, the share of capacity investment boomed between 2005 and 2008, rising by 12 points, in line with the dynamic performance of the industrial branch. The share of capacity investment then dropped off severely during the crisis, but rapidly bounced back and remained several percentage points above the share in France, which continued to fall until 2013. Between 2013 and 2016, the share of capacity investment remained much more dynamic in Germany than in France, but more recently (in 2017 and 2018) it has fallen at the expense of 'other' economic objectives (safety, regulations and environmental considerations, for example). ■

Rate of investment and breakdown of industrial investments by economic purpose for selected European countries

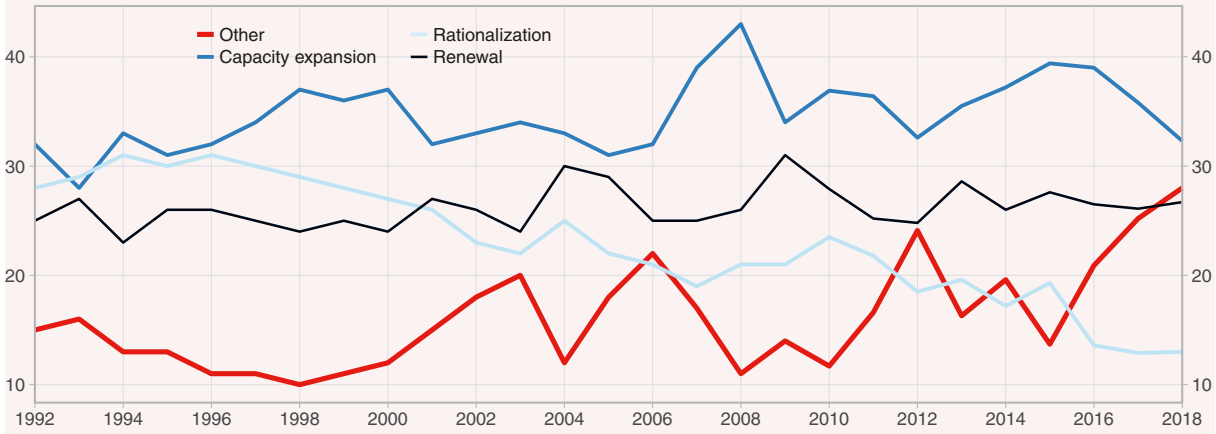
in%

	France	Allemagne	Royaume-Uni	Espagne	Italie
Average 2000-2003					
Rate of investment in the industrial branch	*25*	*24*	*19*	*21*	*27*
Breakdown of investments in the manufacturing sector					
Renewing existing capacities	24	27	36	17	38
Expanding capacities	33	35	31	40	28
Streamlining	24	23	17	27	22
Other	19	16	16	16	12
Average 2015-2018					
*Rate of investment in the industrial branch**	*29*	*21*	*22*	*27*	*26*
Breakdown of investments in the manufacturing sector					
Renewing existing capacities	28	27	42	20	36
Expanding capacities	28	36	33	32	30
Streamlining	23	14	8	28	21
Other	21	22	18	20	13

Note: to a certain extent the differences in the investment rate between countries can be explained by differences in the way certain items of investment expenditure are entered into the national accounts, particularly investment in software.
* average 2015-2017
Sources: Eurostat (national accounts), DG-ECFIN

3 - Economic objectives of industrial investment in Germany

as a % of total investment in the manufacturing sector



Source: DG-ECFIN,

Source and Methodology

The business tendency survey on investments in industry is a quarterly survey conducted by INSEE which reaches around 3500 businesses in the industrial branch. The rate of response is around 65%. It is primarily concerned with physical assets (machines, equipment and construction); in terms of intangible investments, only software is taken into account. Twice yearly, in April and October, businesses are also surveyed on the economic motivations behind their investment decisions (multiple responses are allowed):

"For each motivation, please indicate whether you have made or plan to make investments for which this is the principal motivation:

- Replacing old equipment, maintenance,

- Modernisation, streamlining (in order to reduce production costs or improve productivity)

- Expanding your capacity to produce existing products

- Introducing new products,

- Other purposes: safety, the environment, working conditions…

Are the modernisation investments you have made or are planning to make primarily aimed at:

- automating existing manufacturing processes

- introducing new manufacturing techniques,

- making energy savings."

When multiple primary motivations are cited, they are weighted to obtain a total of 100. For example, if a company reports two principal motivations then each will be assigned a weighting of 50%. Businesses are surveyed in April on their investments in the previous year and the current year, and in October on the current year and the year ahead. The results presented here correspond to the responses received in October regarding investments in the current year made by businesses in the manufacturing sector.

The INSEE investment survey is part of a harmonised system of European surveys overseen by the European Commission's Directorate General for Economic and Financial Affairs (DG-ECFIN). This allows us to compare the French results with those from business tendency surveys for industry conducted by our European neighbours. In October they also include a question on the economic objective of investments, with four major motivations: "replacement", "expanding production capacities", "streamlining" and "other". However, the national surveys differ in terms of the way the questions are worded, as well as the number of questions and the way they are administered. The survey methods, weighting systems and sample sizes also vary from one country to the next. Finally, there is no unified definition of what constitutes investment. As such, quantitative comparisons between countries need to be approached with a certain degree of caution. Nevertheless, the year-on-year trends can still be analysed pertinently. ■

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International Development

Oil and raw materials

In 2019, the market is approaching equilibrium

The price of Brent rose almost continuously, from $53 to over $68 per barrel, between the beginning of January and the end of March 2019. Its average price throughout Q1 2019 stood at $63. According to the International Energy Agency (IEA), supply decreased (with the entry into force of OPEC production quotas) and demand accelerated (driven mainly by the emerging countries). Crude oil stocks increased again in Q1.
In Q2, the physical market looks likely to be slightly in deficit. Thereafter, in H2 2019, it should return to a slight surplus, and close to equilibrium.
Supply is expected to increase, driven by the OPEC countries and the United States, while demand should slow after a brisk H1. However, this forecast is subject to several uncertainties that could affect prices, especially strict compliance or non-compliance with production quotas in H2 2019, and a possible increase in geopolitical tensions in the Middle East. The conventional assumption is that the price of Brent will stabilise at around $65 per barrel through to the end of 2019.
In Q1 2019, commodity prices in euros rose by +3.2%.

In Q1, the average price of Brent stood at $63 per barrel

In Q1 2019, following an almost continuous upward trend of between $53 and $68, the average price of oil stood at $63 per barrel of Brent (*Graph 1*) – down 7% compared with Q4 2018 ($69) and 6% compared with Q1 2018 ($67). Nevertheless, the price of Brent bounced back between January and March, rising from $53 to over $68. Crude oil stocks in the United States increased again. Over the forecasting period, the price of oil has been conventionally set at $65 per barrel.

Demand is expected to slow through to the end of 2019

After declining in Q4 2018, world demand bounced back in Q1 2019. Demand from non-OECD countries gathered pace, especially India, the Middle East, Brazil and Russia. Demand from the United States and Europe was vigorous.

In Q2 2019, global demand looks set to soar, driven mainly by the United States and China, but also by Asian OECD members and Europe. Demand from non-OECD countries should edge down. In H2 2019, demand is likely to slow due to the United States and Asian OECD members.

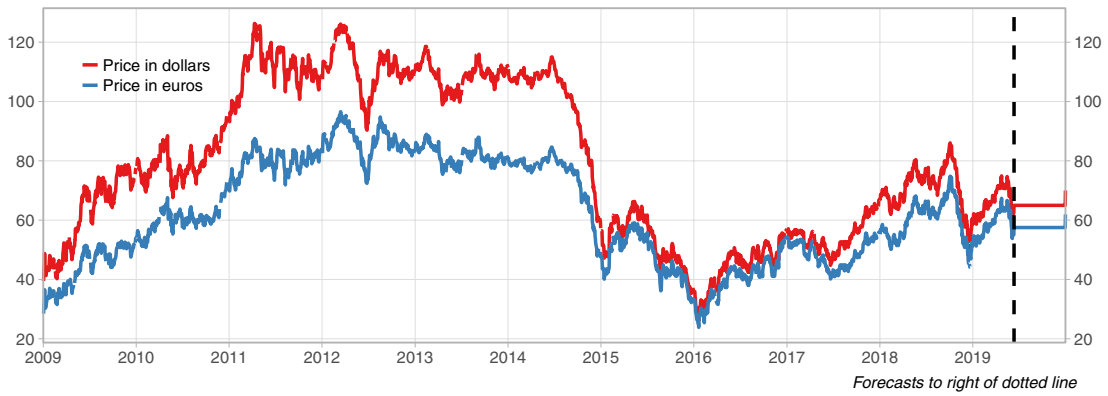
All in all, demand in 2019 is expected to increase by 0.9 million barrels per day (Mbpd), after +0.4 Mbpd in 2018 and + 1.4 Mbpd in 2017 (seasonally adjusted data).

Supply is set to pick up in H2

In Q1 2019, global supply shrank significantly, primarily due to the reduction in OPEC output (*Graph 2*), after the new agreement which entered into in force on 1st January. Several of these countries – Saudi Arabia, Kuwait, the Emirates and Angola – even reduced their

1 - Price of Brent in euros and in dollars

monetary unit per barrel



Source : Commodity Research Bureau

output more than required under the agreement. Conversely, Iraq produced 4.7 Mbpd, which is still above the limit set by the original agreement. Iranian output plummeted by 0.3 Mbpd, with the implementation of oil sanctions in November. Venezuelan output also tumbled: –0.2 Mbpd in Q1. Libyan output fell. In the United States, output rose again. Nonetheless, the new rig count has been declining since October 2018.

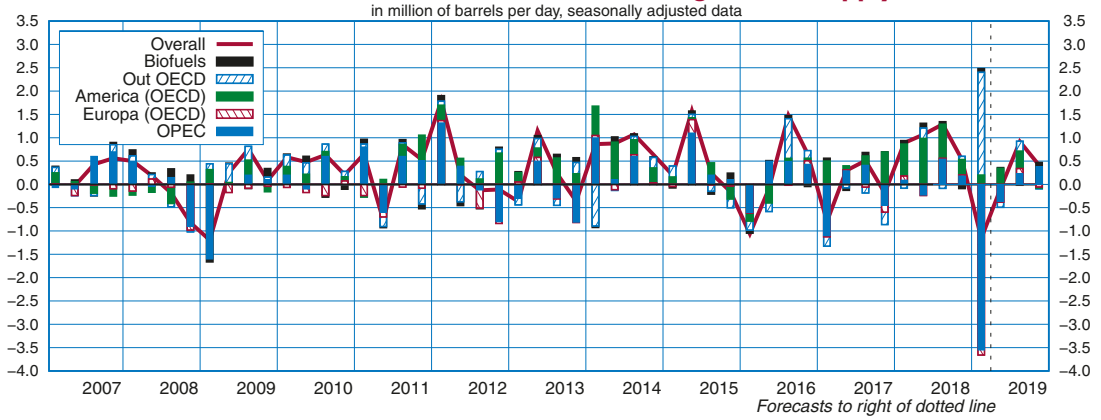
In Q2 2019, OPEC output is expected to rise again. Saudi Arabia is likely to continue its efforts to reduce its output. Libyan output could be affected by Field Marshal Haftar's recent attack on Tripoli. Iraqi output should be down, but it is still likely to be above the agreed production limit. In Iran, output would appear to have suffered from the ending of exemptions from US sanctions for certain countries in the month of May and is set to be in continuous decline. Venezuelan output is expected to tumble again and should also be hit by the US embargo on oil, which entered into force at the end of April. According to the IEA, Russia also looks likely to reduce its output, whereas American output should rise. Production reached a record level in mid-May.

In H2 2019, OPEC and US outputs are both expected to rise again. Consequently, global supply should accelerate.

All in all, world output looks set to be down until mid-2019 before rising through to the end of the year. As demand is expected to accelerate in H1 before slowing in H2, the market should be in deficit until mid-2019 and then in surplus until the end of the year (*Graph 3*).

2 - Main contributors to the variation in global oil supply

in million of barrels per day, seasonally adjusted data

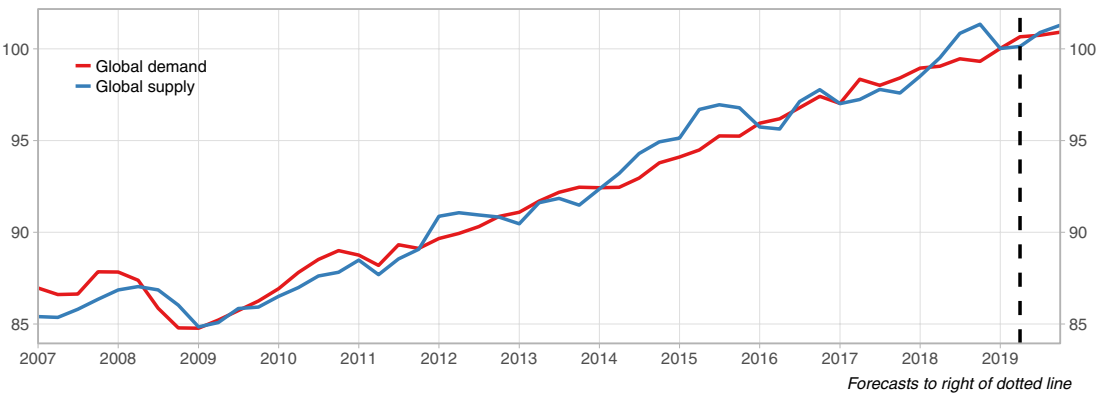


N.B. Qatar left OPEC in Q1 2019, which explains the magnitude of OPEC's negative contribution; Qatari output has been transferred into the "non-OECD" category.

Source: AIE, INSEE

3 - World oil market

in millions of barrels per day



Source: AIE, INSEE

Stocks increase again

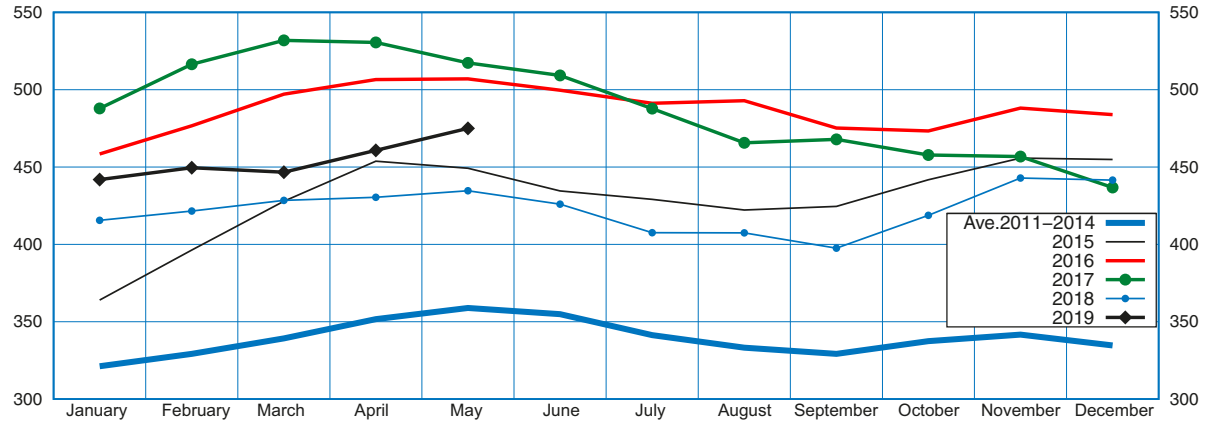
Crude oil stocks in the United States have increased again, to 476 million barrels at the end of May (Graph 4) – the highest level since August 2017. This was higher than the April 2018 level, and remains well above the average for 2011-2014 (+32%). Upward pressure on prices could therefore be curbed by this high level of trade reserves.

Commodity prices are creeping up

In Q1 2019, the prices of all commodities expressed in euros increased (+3.2%, Graph 5). Cereal prices dropped slightly in Q1 (–0.3%), as did the prices of textile fibres (–0.2%). Overall, the prices of agricultural commodities rose (+3.9%), as did the prices of industrial commodities (+5.1%). Iron ore and scrap steel prices soared (+14.4%) after the Brazilian mining disaster. ■

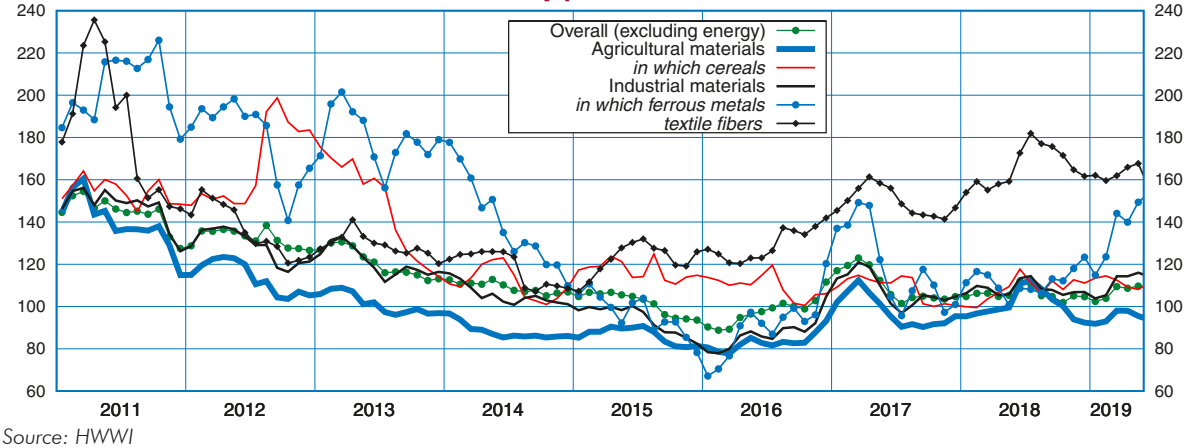
4 - US commercial crude oil inventories

in millions of barrels



Source: DoE

5 - Commodity price indices in euros



Source: HWWI

Financial markets

Monetary policies normalisation are placed on hold

In the context of a slowdown in the global economy, the rhetoric of the main central banks has changed substantially in recent months. The US Federal Reserve (Fed) claims it is being "patient", plans to stop reducing its balance sheet in September 2019 and has declared its readiness to respond to the trade tensions. The European Central Bank (ECB) will be launching its Targeted Long-Term Refinancing Operations (TLTRO) programme in September 2019, whilst core inflation in the Eurozone remains below its target level. Neither the Fed nor the ECB envisage raising their rates before mid-2020.
Outstanding loans continue to increase throughout the Eurozone, despite persistent disparities. They are rising sharply in France and Germany but continue to decline in Italy and in Spain. In France, outstanding loans remain more dynamic than in the other major European partner countries, with lower interest rates for households, in particular.
The euro exchange rate forecast assumptions are fixed at 1.13 dollars, 0.88 pounds sterling and 125 yen. The real effective exchange rate for French exporters is expected to stabilise in Q2 2019 and then appreciate slightly in Q3.

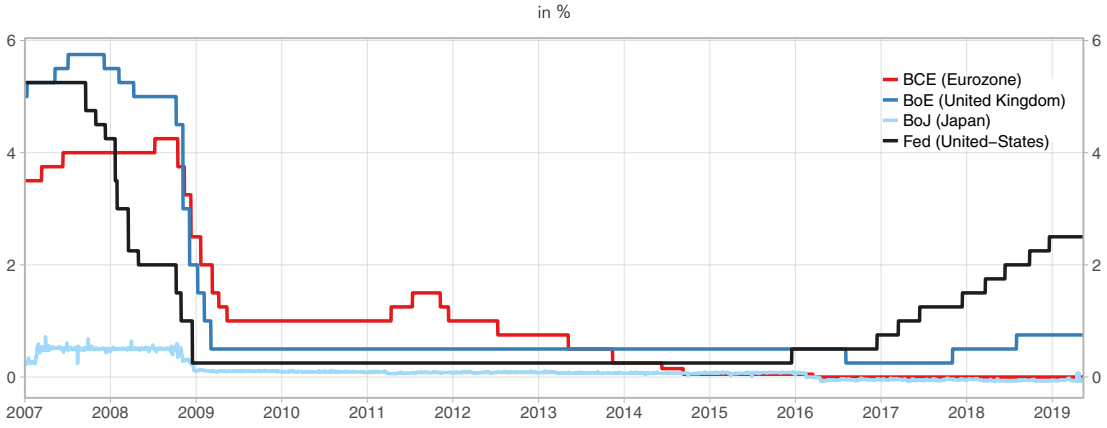
The Fed has put the normalisation of its monetary policy on hold

At the last three meetings of its monetary policy committee (FOMC), on 30 January, 20 March and 1st May, the Fed left its base interest rate unchanged at 2.5% (*Graph 1*), in accordance with its declaration to remain "patient" vis-à-vis the normalisation of its monetary policy, provided that inflation appears relatively stable. In early June, the Fed declared that it was considering reducing this rate in future, in response to the global trade tensions. No change in the rate is now anticipated in 2019, despite a slight drop in the unemployment rate in the United States, which is still below the usual estimates of the structural rate, and core inflation around 2%.

The Fed continued to reduce its balance sheet in Q2 2019, at the rate of around 1% per month. However, there are plans to end this reduction in September if, as anticipated, activity in the US economy slows down towards the end of the year.

The stabilisation of the US rate is generating flows of capital into certain emerging countries with the aim of obtaining higher returns. This is proving

1 - Base rates of the main central banks



Source: Fed, ECB, BoJ, BoE

more beneficial to certain countries than others, particularly the most politically and economically stable nations. These incoming flows have led to the appreciation of certain currencies, including the Brazilian real at the end of March. Conversely, Argentina and Turkey – in the grip of economic difficulties – are deriving little or no benefit from the effects of this stabilisation of the US rate.

The ECB pursues its accommodating monetary policy

During the meeting of 6 June 2019, the ECB extended the deadline for the next rise in its base interest rates, which should not occur before mid-2020, at the earliest. Consequently, as during its meeting on 10 April, the ECB decided to refrain from modifying its rates.

The stoppage of the asset-purchase programme in January 2019 has contributed to the stability of the size of the ECB balance sheet in H1 2019. However, this balance sheet should start to increase in H2 with the launch of the new Targeted Long Term Refinancing Operations (TLTRO) programme. This policy can be explained essentially by the fact that inflation (headline and core) remains below the 2% target level in the Eurozone. In addition, the ECB, like the Fed, is still paying close attention to short-term changes in the economy before deciding on its future policy.

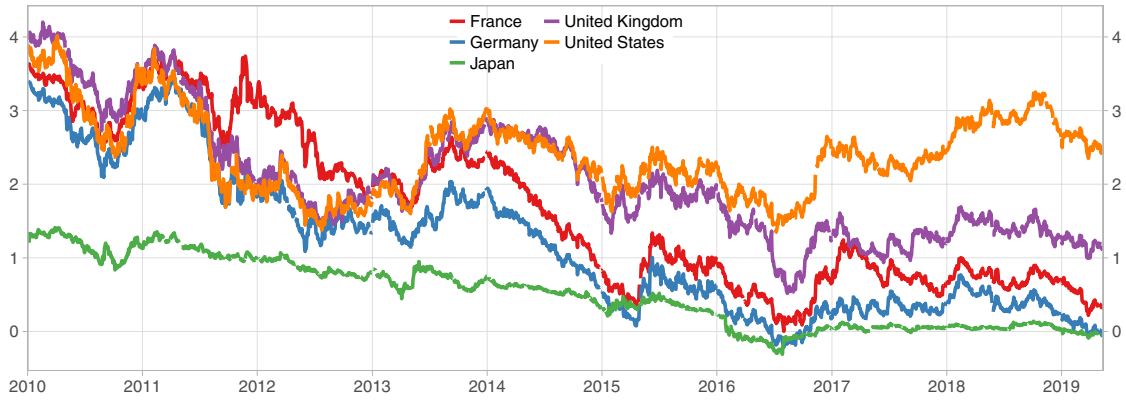
US and European sovereign yields fell in H1 2019

The decline in US and European sovereign yields, observed since mid-March, can be mainly explained by the implementation of a more accommodating monetary policy than expected in the United States (*Graph 2*), especially with the assumption of a possible future reduction in interest rates.

The Italian yield stabilised at around 2.6% on average in April and May, due to uncertainties over the sustainability of Italian public finance, in sharp contrast to the declining German and French yields (*Graph 3*). The probable implementation of the excessive public deficit procedure could trigger a new increase in the Italian spread.

2 - Ten-year sovereign bond yieds in the advanced countries

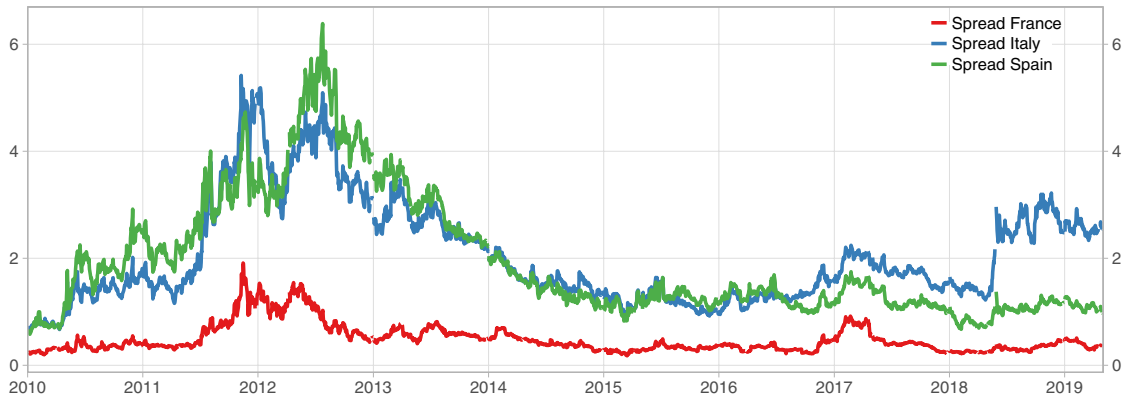
in %



Source: DataInsight

3 - Ten-year sovereign bond yield spreads against the Bund

in % points



N.B. The Bund is the German ten-year sovereign bond yield

Source: DataInsight

Prospects remain favourable for the credit markets, despite disparities

In April 2019, the growth rate of outstanding corporate loans year-on-year remained buoyant in France (+6.9%) and in Germany (+6.6%). Conversely, outstanding corporate loans have continued to fall in Spain (–1.3% in April, *Graph 4*). In Italy, outstanding loans have fallen again (–0.5%). In addition, while the average interest rate for corporate loans stabilised in March – at 1.3% in Germany and between 1.4% and 1.5% in France and Italy – the Spanish rate exceeded 1.8% (after 1.7% in February). For Q2 2019, the European banks anticipate a slight tightening of credit terms and a slackening of demand for credit in the Eurozone.

France once again stands out from its main European partners due to the buoyancy of its household credit and corporate lending (+5.9% year-on-year for households in April 2019, compared with +3.4% in the Eurozone) and a lower rate for new loans than in the rest of the Eurozone.

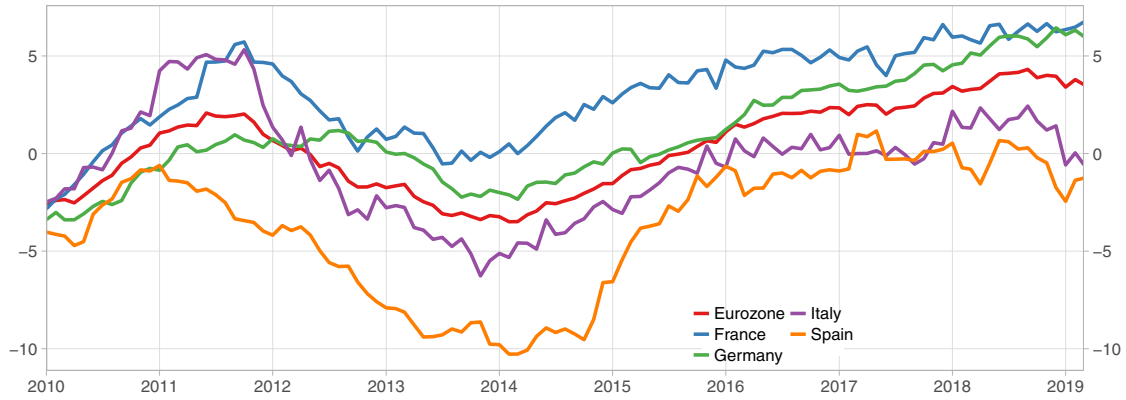
Stock markets returned to historically high levels in early spring

Stock market indices in the advanced countries bounced back between January and April 2019 (*Graph 5*). This rise stemmed from the Fed and the BCE adopting a more accommodating rhetoric than in the past and US activity being more vigorous than anticipated. However, this stock-market rebound has been interrupted by the resurgence of trade tensions between the United States and China since May 2019.

After the rise in the Brazilian index due to the optimism of investors and after the implementation of President Bolsonaro's first measures, the publication of unfavourable economic indicators and the slow pace of reforms have caused the index to edge down slightly. The Argentine index remains highly volatile and in sharp decline. Indeed, despite the release of IMF aid, Argentina remains in economic difficulty with high inflation and weak growth in the context of heightened political uncertainty in the run-up to the October elections.

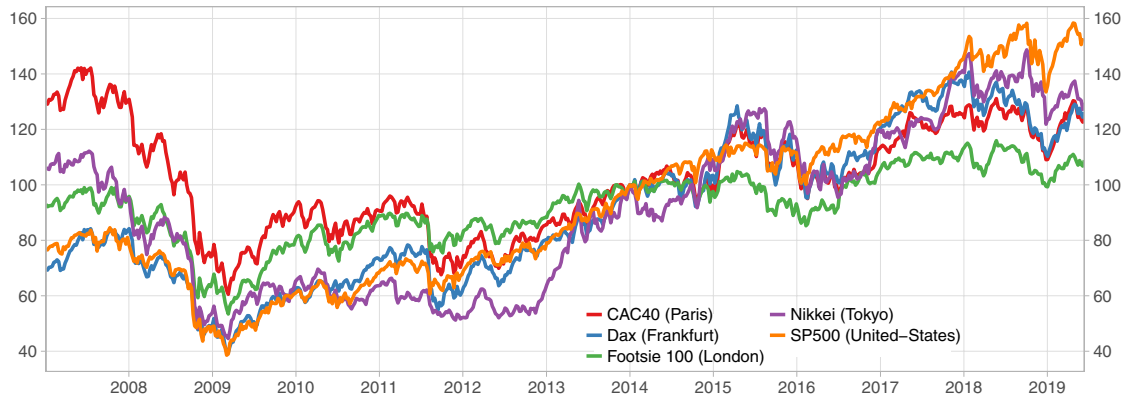
4 - Outstanding corporate loans in the Eurozone

year-on-year changes in %



Source: ECB, Banque de France

5 -Stock market indices of the advanced countries



Source: DataInsight

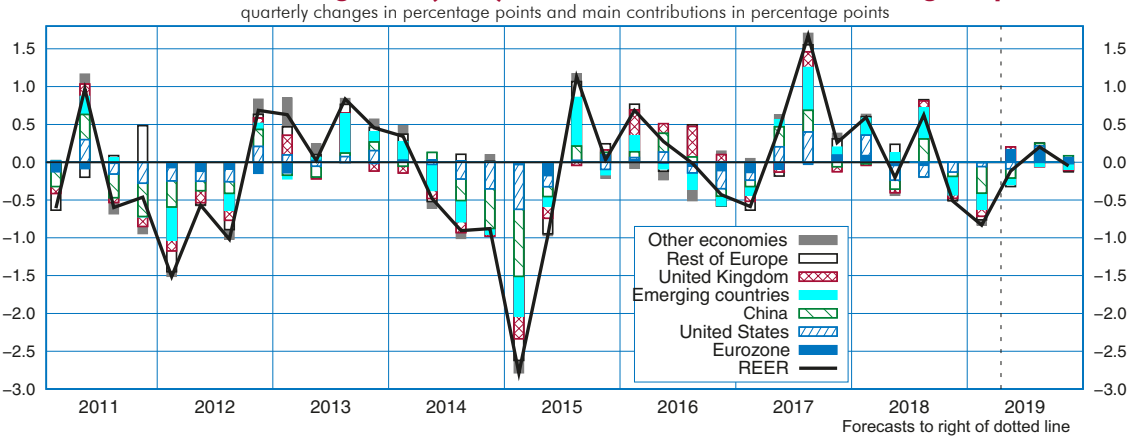
The French real effective exchange rate (REER) depreciated slightly in early 2019

At the end of February 2019, the euro/dollar exchange rate started a continuous decline before stabilising at around $1.12 to the euro. This is explained mainly by the BCE maintaining a very flexible monetary policy with the implementation of the new TLTRO programme, while the Fed continues to reduce its balance sheet. However, the uncertainties in Europe have faded a little in line with the European election results and the continuation of Brexit negotiations, while they are increasing in the United States due to the new trade tensions with China. In early June the euro/dollar exchange rate increased slightly at $1.13 to the euro, the assumption adopted here.The pound sterling and the yen are expected to remain stable at £0.88 and 125 yen to one euro respectively.

The French real effective exchange rate (REER) depreciated in Q4 2018 (–0.5%) and in Q1 2019 (–0.8%). It is expected to stabilise in Q2 2019, and to appreciate slightly in Q3 2019, before stabilising again in Q4 due to inflation gaps (*Graph 6*). ■

6 - Real effective exchange rate (REER) in France and its main contributing components

quarterly changes in percentage points and main contributions in percentage points



Source: Banque de France, National statistical institutes, INSEE calculations

Eurozone

Foreign trade is expected to slow down activity

In Q1 2019, activity regained momentum in the Eurozone (+0.4%) after a slowdown in H2 2018 (+0.1% in Q3 and +0.2% in Q4 2018). Inventory hampered growth less than in Q4 2018. Italy recovered from a technical recession and German growth returned to a rate similar to its early 2018 level, after the industrial difficulties which marred H2 2018. In the spring of 2019, the majority of surveys reflected another downward trend. Activity, driven by fiscal stimuli, looks set to grow by 0.3% in the spring and maintain this rate through to the end of the year. After 2017 – a year of record growth since 2007 (+2.5%) – Eurozone GDP increased by +1.9% in 2018. This rate is expected to slow down again in 2019, to +1.2%, despite an upturn in the purchasing power of income (+2.2% after +1.8% in 2018). However, the relatively modest increase in the labour force should see unemployment continue to fall, reaching 7.4% by mid-2019.

In early 2019, improvements in Italy and Germany

In Q1 2019, activity gathered pace in the Eurozone with +0.4% (*Table*), against +0.3% forecast in the March edition of Conjoncture in France. German industrial difficulties, which hampered activity considerably in H2 2018, seem to be improving. Consequently, Germany has seen a return to growth (+0.4% after +0.0%). Thanks to foreign trade, and the decline in imports in particular, Italy has recovered from a technical recession (+0.1% after –0.1%). At the same time, French growth stood at +0.3%, continuing at the average rate observed since early 2018. Finally, Spanish output picked up slightly (+0.7% after +0.6%). In the spring of 2019, the majority of surveys reflected another downward trend. Growth is expected to stand at +0.3% in Q2, benefiting from the fiscal stimuli introduced since the beginning of the year. It looks set to maintain this rate in H2 2019 (*Graph 1*).

Employment prospects are also generally down in the surveys. Employment is likely to grow at a slightly slower pace than activity. Unemployment should continue to fall slowly – to 7.4% in the Eurozone by the end of 2019 – despite an increase in the number of unemployed Italians.

Private consumption should benefit from an acceleration in purchasing power

Nominal wages are expected to maintain their dynamic pace (+0.5% per quarter from Q2 onwards), in line with German wages, in particular. In addition, the implementation of the "citizens' income" began in Italy in Q2, and significant fiscal stimuli are in place in Germany, whilst French households are benefiting from the emergency measures announced in December 2018: household income in the Eurozone should therefore be dynamic. Based on the assumption of a barrel of Brent priced at $65 through to the end of 2019, headline inflation is likely to edge down to 1.3% at the end of 2019. Core inflation should rise to +1.3%. All in all, purchasing power is expected to accelerate again in 2019 as an annual average (+2.2% after +1.8% in 2018 and +1.5% in 2017, *Graph 2*).

However, private consumption looks set to be slightly less buoyant than purchasing power (between +0.3% and +0.4% per quarter): the household savings ratio in the Eurozone is expected to gain 0.54 points to reach 12.5% at the end of the year. On an annual average basis,

Gross domestic product and main aggregates of Eurozone economies

quarter-on-quarter and year-on-year changes in %

	2017		2018				2019				2017	2018	2019
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Zone euro	0.7	0.7	0.4	0.4	0.1	0.2	0.4	0.3	0.3	0.3	2.5	1.9	1.2
France	0.6	0.7	0.3	0.2	0.3	0.4	0.3	0.3	0.3	0.3	2.4	1.7	1.3
Germany	0.6	0.5	0.4	0.5	–0.2	0.0	0.4	0.2	0.2	0.2	2.5	1.5	0.8
Spain	0.6	0.7	0.6	0.6	0.5	0.6	0.7	0.6	0.6	0.6	3.0	2.6	2.5
Italy	0.4	0.4	0.2	0.0	–0.1	–0.1	0.1	0.2	0.1	0.1	1.8	0.7	0.2
Household purchasing power in the Eurozone (yearon-year changes)	1.4	1.4	1.3	1.7	2.1	1.9	1.4	1.5	1.3	1.3	1.5	1.8	1.4
ILO unemployment rate in the Eurozone	9.0	8.7	8.5	8.3	8.0	7.9	7.8	7.6	7.5	7.4	9.1	8.2	7.5

forecast

Source: Eurostat, National statistical institutes statistiques, INSEE forecast

private consumption should barely accelerate in 2019 (+1.4% after +1.3% in 2018).

Brisk investment in equipment and construction

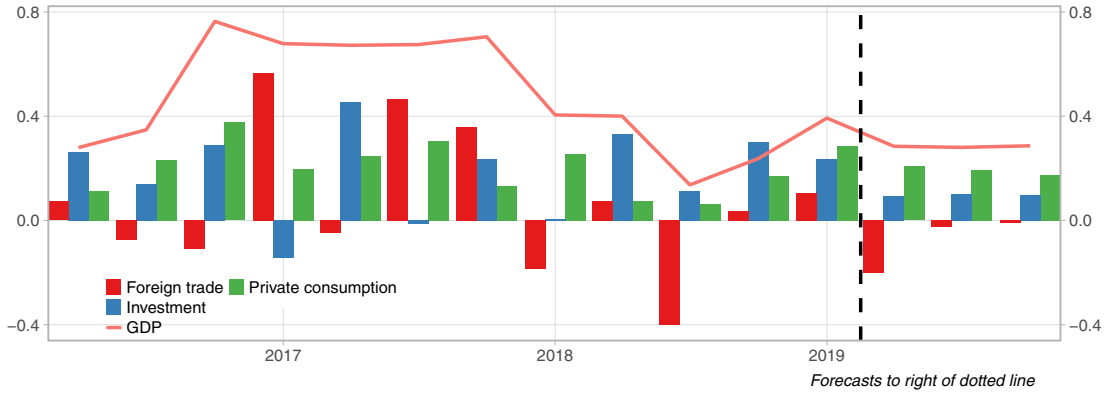
In Q1 2019, investment in the construction sector picked up again (+1.5% after +0.9%). Overall, it looks set to remain dynamic in the Eurozone (around +0.5% per quarter): the construction sector stands out for the buoyancy of its business tendency surveys and the generally vigorous building permit trend in the Eurozone.

As an annual average, investment in construction should accelerate slightly in 2019 (+3.5% after +3.1% in 2018).

Equipment investment is expected to maintain an average rate of +0.4% per quarter, after +1.2% in Q1 2019. In particular, it is being driven by the momentum built up in France, as expressed by business leaders in the business tendency surveys. However, surveys in the manufacturing sector paint a gloomy picture in Germany. All in all, throughout the year, it looks likely to slow down to +3.2%, after +4.4% in 2018.

1 - Foreign trade is expected to slow down activity

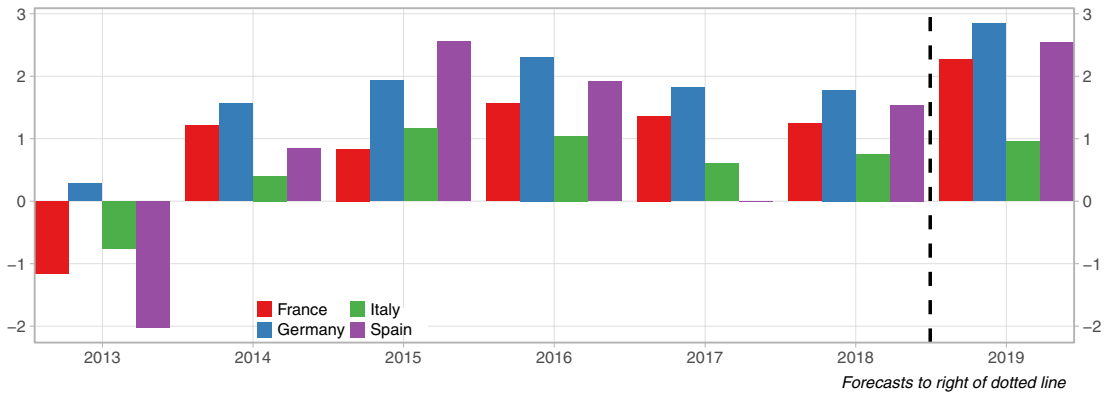
quarterly change in GDP in % and contributions in points



Source: Eurostat, INSEE forecast

2 - Imports, being more dynamic than exports, should hamper growth

annual variation in %



Source: Destatis, INE, INSEE, Istat

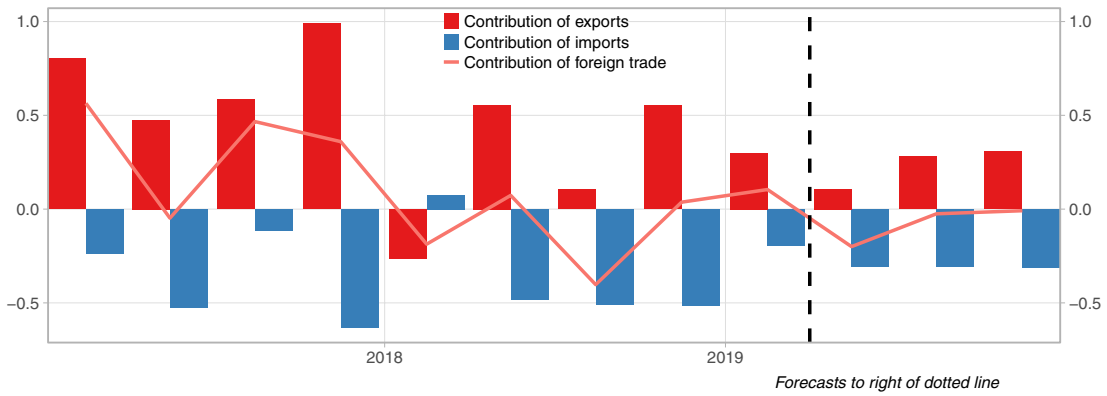
In 2019, foreign trade is expected to hamper growth

In Q1 2019, exports slackened (+0.6% after +1.2%) after a very vigorous end to 2018 in France, in view of the transport equipment sales. Exports are likely to accelerate a little during H2 2019 (+0.6% per quarter). The less dynamic world trade situation is not expected to interrupt the vigorous growth of Dutch exports, for example. All in all, Eurozone exports should lose momentum (+2.5% in 2019 after +3.2% in 2018).

Imports also weakened in Q1 2019 (+0.4% after +1.2%). Over the coming quarters, they are likely to be more dynamic than exports (+0.7% per quarter) in response to domestic demand, in a context of consumption sustained by rising purchasing power. On an annual basis, imports are expected to increase slightly more quickly in 2019 (+3.3%) than in 2018 (+3.2%). All in all, foreign trade is likely to make a negative contribution in 2019 (*Graph 3*, –0.2 points after +0.1 point in 2018). ■

3 -Imports, being more dynamic than exports, should hamper growth

breakdown of the contribution of foreign trade (in points) to the quarterly growth of Eurozone GDP (as a %)



Source: Destatis, INE, INSEE, Istat

Germany

Domestic demand rescues growth

In Germany, activity bounced back in Q1 2019 (+0.4%) after a lacklustre H2 2018. Domestic demand contributed +0.8 points to this recovery: household consumption soared, boosted by fiscal measures, and investment remained buoyant. For the first time since the end of 2017, foreign trade buoyed up growth (+0.2 points in Q1). In spite of high income and solid employment stimulating private consumption, activity is expected to grow only by +0.2% per quarter to the end of 2019, theatened by international uncertainties.

Private consumption should sustain activity

German activity picked up at the start of 2019 (+0.4%), after a difficult end to 2018. Domestic demand buoyed up growth, driven by fiscal measures (increase in family allowances, tax reductions for low and medium wage-earners, adjustment of health insurance contributions, wage rise in the civil service). Recruitment difficulties remain significant but their easing hints at a slight downturn in wages (+0.8% in Q2, followed by +0.5% in Q3 and Q4), whilst the employment situation should remain favourable, with the unemployment rate below 3.0%. Private consumption, buoyed up by substantial income, is expected to remain vigorous through to the end of the year (+0.4% in Q2, followed by +0.3% per quarter; Graph), and looks set to be one of the main factors driving growth in 2019 (contribution of +0.9 points).

Investment: construction remains dynamic but equipment investment falters

Despite a drop in the number of building permits, construction investment should remain buoyant in 2019. Positive surveys point towards solid growth, at around +0.6% per quarter (after +1.9% in Q1). However, equipment investment is likely to suffer from low investor morale, a drop in production capacity utilisation rates and a nosedive in orders for manufactured goods. Consequently, after stagnating in Q2, it is expected to grow by only +0.2% per quarter through to the end of 2019.

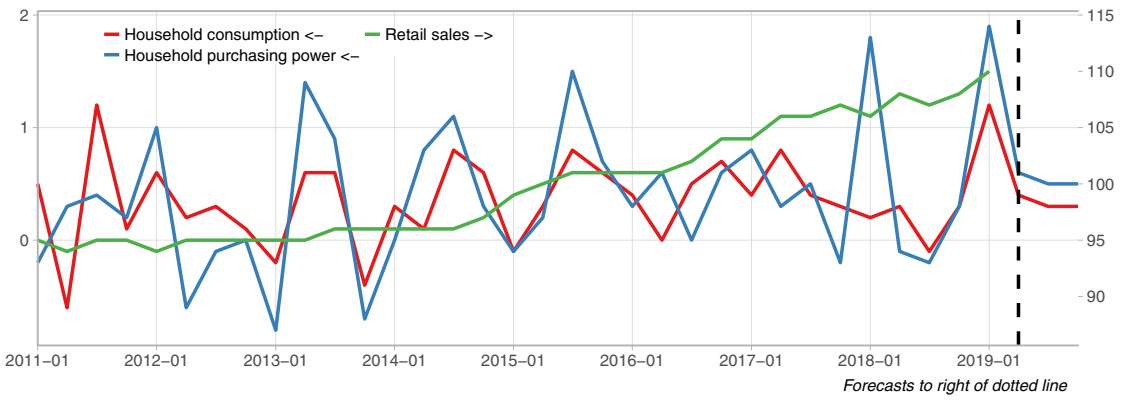
Exports face growing threats

German exports gathered pace in Q1 2019 (+1.0% after +0.6%). The threats of new increases in US customs duties and the fragile state of world trade are expected to weigh down on exports: after a stagnation in Q2, they should increase moderately in H2 (+0.6% then +0.4%). In the autumn, they are also likely to be impacted by the introduction of new motor vehicle testing requirements in September, in line with the WLTP emission standards. With imports boosted by strong domestic demand, foreign trade is likely to hamper activity again in 2019 (–0.6 points, after –0.4 points in 2018).

All in all, German activity should continue to grow at a moderate rate through to the end of 2019 (+0.2% per quarter). Annual growth is likely to slow down once again, to +0.8%, after +1.5% in 2018. ■

Household consumption looks set to perk up in 2019

quarterly variations in %, index based on 100 in 2015



Source: Destatis, Eurostat, INSEE forecast

Italy

Pianissimo

In Q1 2019, Italian activity bounced back, to +0.1%, after a half-year of technical recession in 2018. Foreign trade, with a significant decline in imports, was mainly responsible for this recovery. In Q2, growth is expected to accelerate again (+0.2%), buoyed by the "citizens' income". However, with a lukewarm business climate, activity is likely to slow down in H2 (+0.1% per quarter). As an annual average, GDP looks set to decelerate again in 2019 (+0.2% after +0.7% in 2018), hampered by the marked slowdown in domestic demand.

Private consumption should maintain a moderate pace

Nominal wages would appear to have accelerated in Q1 (+0.5%). They are expected to slow slightly in Q2 and then maintain this pace through to the end of 2019 (+0.4% per quarter). With recruitment prospects deteriorating, growth in employment is likely to be sluggish throughout the year, while the labour force is expected to increase as a result of people registering for the citizens' income. By the end of 2019, the unemployment rate should stand at 11.0% (against 10.6% one year earlier).

Household consumption increased marginally in Q1 2019 (+0.1%). It is likely to speed up slightly in Q2 (+0.3%) with the implementation of the citizens' income, which is expected to bolster household purchasing power. Nevertheless, private consumption should return to a rate of +0.1% per quarter in H2. It looks set to grow by +0.6% throughout 2019 as a whole.

Equipment investment is flagging but construction is faring better

Industrialists' confidence continued to wane at the start of the year. Equipment investment plummeted in Q1 2019 (–2.2% after +0.9%). It is expected to pick up timidly in Q2 (+0.3%), in line with the surveys on manufacturing orders, and should maintain this rate through to the end of 2019. Over the year, equipment investment is likely to decline in 2019 (–1.7%).

Investment in construction would appear to have surged at the start of the year (+2.6% after 0.4% at the end of 2018). The rebuilding of the Morandi bridge in Genoa and the government's plan to "kick-start construction projects" should boost the momentum of investment in construction for the rest of the year (+0.5% per quarter). As an annual average, growth in investment in construction should reach its highest level in over a decade (+4.5%, *Graph*).

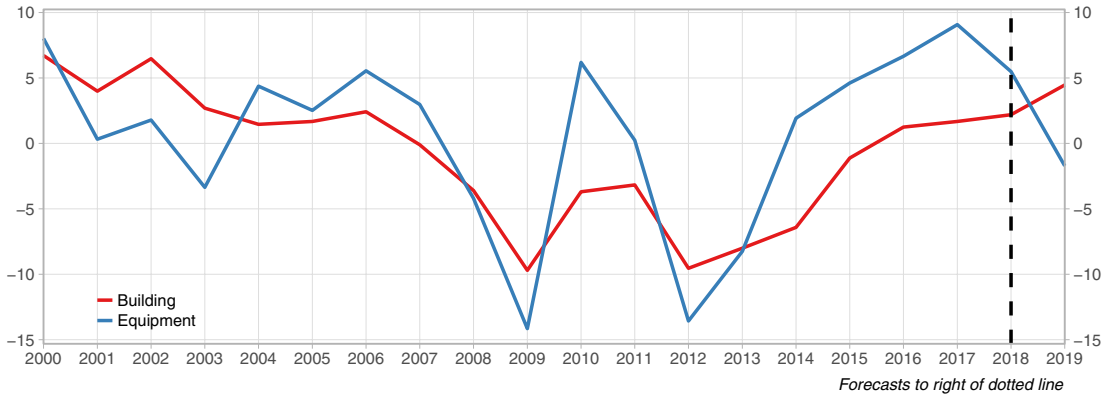
Foreign trade is likely to slow down during the year but should contribute positively to growth again

For the third consecutive quarter, foreign trade made a positive contribution to growth at the start of 2019 (+0.5 points). Imports declined whereas exports increased (–1.5% and +0.2% respectively). With the upswing in private consumption, imports are expected to bounce back in Q2 (+1.3%), in line with exports (+0.9%).

With orders declining, exports should slow down from the summer onwards (+0.5% per quarter). Imports also look likely to decelerate (+0.7% per quarter in H2) due to the slowdown in domestic demand. All in all over the year, foreign trade should contribute positively to growth again in 2019 (+0.5 points). ■

Investment in construction returns to its pre-crisis growth rate

annual % change



Source: Istat, INSEE forecast

Spain

Still top of the major Eurozone countries

In Q1 2019, Spanish growth accelerated slightly, to +0.7% after +0.6%, thanks to an upswing in investments. Foreign trade once again contributed to growth. Activity should grow by +0.6% per quarter through to the end of the year. Driven by both domestic demand and foreign trade, growth is expected to reach +2.5% in 2019 (Graph).

Purchasing power is likely to drive private consumption

Spanish household consumption slowed in Q1 2019 (+0.3% after +0.4%). Nominal wages picked up moderately, despite a 22% rise in the minimum wage. They should continue to increase at a steady pace throughout the year (+0.5% per quarter). As an annual average, nominal wages are expected to rise at a faster rate than inflation in 2019, enabling real wages to increase for the first time since 2015.

With recruitments diminishing, employment is likely to slow during the year, but should remain buoyant (+0.6% in Q2, followed by +0.5% and +0.4% at the end of 2019). The unemployment rate should drop to 12.4% by the end of the year, i.e. two points lower than in 2018. Driven by relatively dynamic purchasing power, private consumption is expected to a maintain a vigorous pace throughout the year (+0.6% in Q2 followed by +0.5% per quarter). All in all, it should increase by 1.8% in 2019.

Investment is expected to remain brisk

In Q1 2019, equipment investment bounced back (+3.8% after –2.7%). In reaction, it is likely to decelerate in Q2 (+0.9%), before regaining momentum in H2 2019 (+1.5% per quarter).

Investment in construction slowed down in Q1 (+0.6% after +1.3%). With the number of building permits continuing to rise, investment in construction looks set to remain steady throughout the year (+0.6% per quarter).

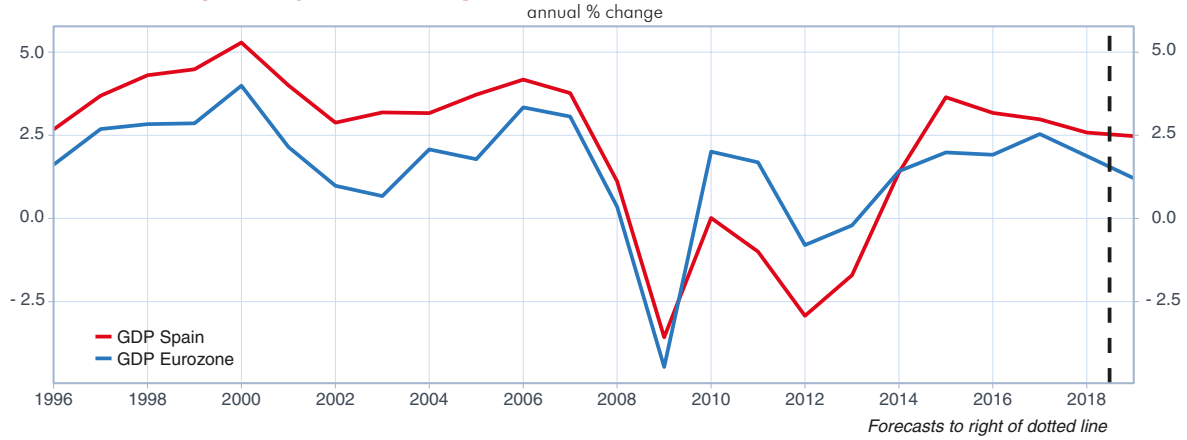
All in all, investment accelerated in Q1 (+1.5%). It should slacken slightly in the spring (+0.6%), before increasing again in H2 (+0.9% per quarter).

Foreign trade is expected to boost growth in 2019

While exports tumbled in Q1 2019 (–0.5%), imports declined even further (–1.1%). In line with exports (+1.0%), imports are likely to bounce back (+0.8%) in Q2, driven by private consumption. In H2, both imports and exports are expected to slow down in a highly uncertain world trade context.

All in all, foreign trade should make a positive contribution to growth once again in 2019 (+0.4 points after –0.3 points in 2018). ■

Spanish growth is likely to withstand the slowdown in the Eurozone



Source: Eurostat, INSEE forecast

United Kingdom

Stockpiling in anticipation of Brexit

In early 2019, British activity accelerated (+0.5% after +0.2%), driven by household consumption. In Q2, activity is set to come to standstill in reaction (+0.0%). Assuming the ratification of a Brexit agreement on 31 October, GDP should accelerate in the summer (+0.4%), bolstered again by Brexit-related anticipation effects, before decelerating at the end of 2019 (+0.1%). On average in 2019, British growth is expected to remain moderate (+1.5%, after +1.4% in 2018).

Households seemingly anticipating an inflation hike

At the start of 2019, household consumption picked up strongly (+0.7% after +0.3%), boosted by the increase in purchasing power. Households would also appear to have over-consumed in anticipation of an inflation hike: with Brexit initially expected on 29 March 2019, they would seem to have been anticipating the impact of an increase in customs duties on prices. In Q2, their spending looks likely decelerate due to a backlash effect (+0.2%) but should regain a little momentum in Q3 (+0.4%), with the return of inflation expectations linked to Brexit, now planned for 31 October 2019. However, the acceleration in consumption is expected to remain restrained in light of the buoyancy of purchasing power, with households having already over-consumed at the beginning of the year. Consequently, the savings ratio is likely to increase (4.7% in Q3 against 4.1% one year earlier). In reaction, consumption should slacken again at the end of 2019 (+0.2%).

Corporate investment picked up temporarily

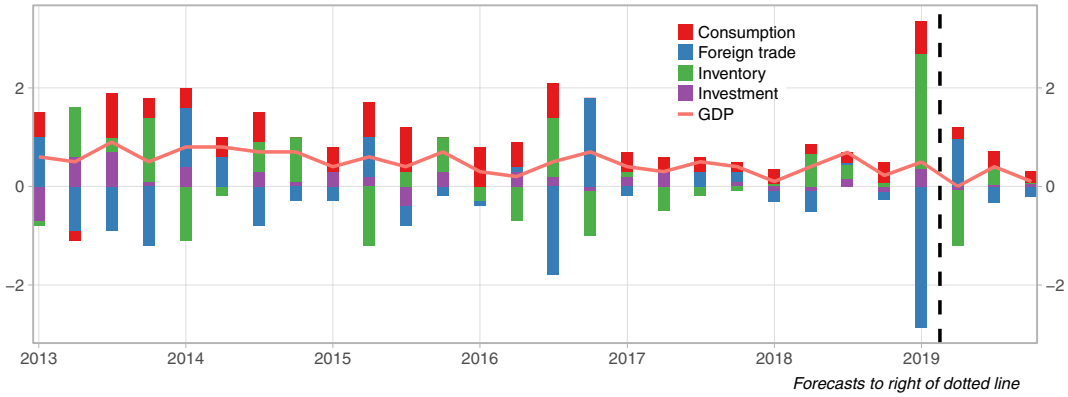
After declining for four quarters, corporate investment picked up slightly at the start of 2019 (+0.5%) but remains hampered by the Brexit waiting game: investment intentions remain very low in Bank of England surveys. Corporate investment is likely to decline in Q2 and should come to a standstill in the summer. However, it is expected to bounce back in Q4 (+0.5%), assuming that the European Union and the United Kingdom ratify an agreement on Brexit, approving a transitional period in which the United Kingdom would continue to benefit from the Single Market through to the end of 2020.

In early 2019, the sharp rise in imports led to massive stockpiling

At the start of 2019, foreign trade reduced growth by 3.0 points in accounting terms: exports came to a standstill (+1.5% after +1.6%), but imports surged (+10.8% after +2.1%), in anticipation of price rises and the possibility of Brexit-related disruptions to supply chains (*Focus*). As a consequence, enterprises exhibited a strong stockpiling tendency at the start of 2019 (*Graph*), contributing 2.3 points to GDP growth in Q1. Imports are expected to decline in the spring (–5.0%) after the stockpiling behaviour in Q1, before bouncing back in the summer, buoyed by new anticipations in the run-up to Brexit. In Q4, imports should not be negatively impacted (+0.2%), remaining consistent with British activity losing momentum. Exports should decrease slightly in Q4 (–0.5%) after accelerating temporarily in Q3, with foreign enterprises making advance purchases prior to possible increases in customs duties ■

After increasing their product inventories in Q1, enterprises are expected to sell off their stocks in Q2

quarterly variations in GDP (%) and contributions in points



Source: ONS, INSEE forecast

Planning for Brexit is providing a temporary boost to British imports

Initially scheduled to take effect on 29th March 2019, the departure of the United Kingdom from the European Union (EU) has been delayed until 31st October 2019, with no guarantee that a trade agreement will be reached by that deadline. While trade between the United Kingdom and its partners is expected to suffer as a result of Brexit, regardless of the outcome of negotiations, Brexit appears to have affected trade before even taking effect. Probably acting in anticipation of the Brexit deadline set at the end of Q1 2019, British businesses in the manufacturing sector expanded their inventory with massive purchases from other European countries, bolstering French exports in particular.

In late 2018 and early 2019, British businesses accumulated substantial inventory of imported products in preparation for Brexit

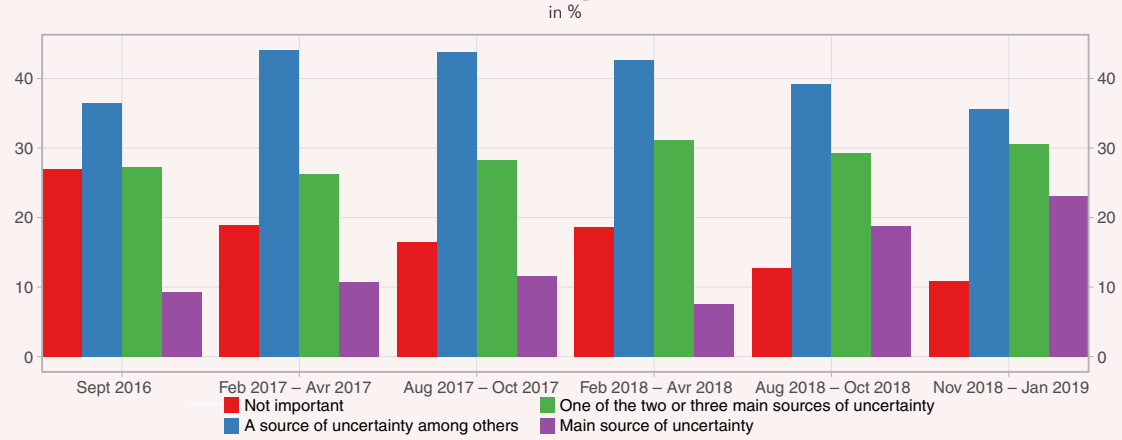
As the deadline of 29th March 2019 approached, initially set as the date on which the United Kingdom would leave the European Union, more and more British businesses reported that Brexit was a major source of uncertainty in the surveys conducted by the Bank of England (*Graph 1*).

Anticipating an increase in customs duties and potential disruption to supply chains in the event of a no-deal Brexit, more than half of the businesses surveyed decided to increase their inventory levels. This was the response most frequently reported by businesses in the survey on Brexit preparations conducted in January by the Bank of England. In particular, according to the Markit institute, the balances of opinion of purchasing managers in the manufacturing sector regarding existing inventory of inputs and finished products leapt up in Q1 2019 (*Graph 2*).

The stocks estimated in the national accounts therefore rose sharply in Q1 2019: inventory change contributed approximately 2.3 points to the increase in British GDP, the highest level seen since Q2 2012, just before the Olympic Games in London.

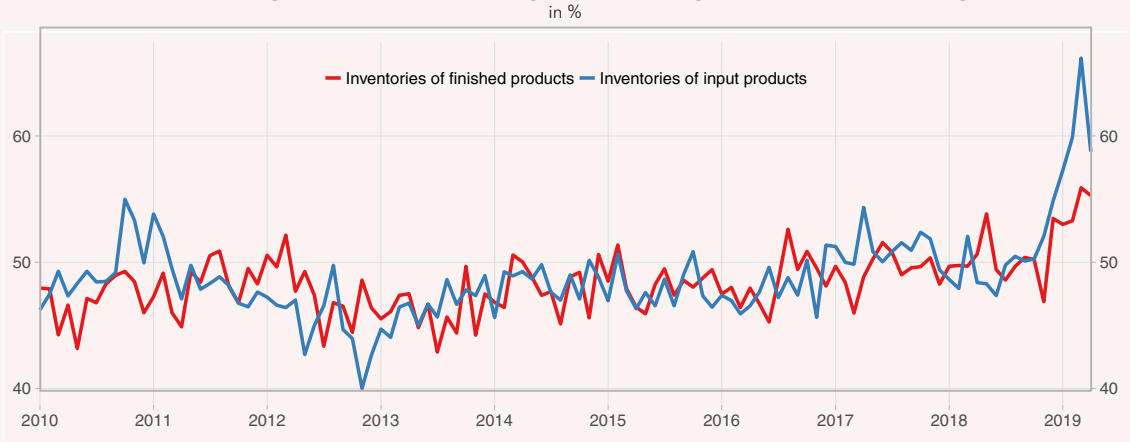
Meanwhile in early 2019, British imports of goods and services in volume as measured in the national accounts picked up pace considerably, growing by +10.8% compared with the preceding quarter. This

1 - More than half of British businesses considered Brexit to be a major source of uncertainty in January 2019



Note: responses to the question 'To what extent has the referendum on the United Kingdom leaving the EU affected the level of uncertainty facing your business? Please select one answer only."
Source: The Bank of Enaland's 'Decision Maker Panel'

2- In early 2019, businesses reported a sharp increase in inventory



Source: Markit

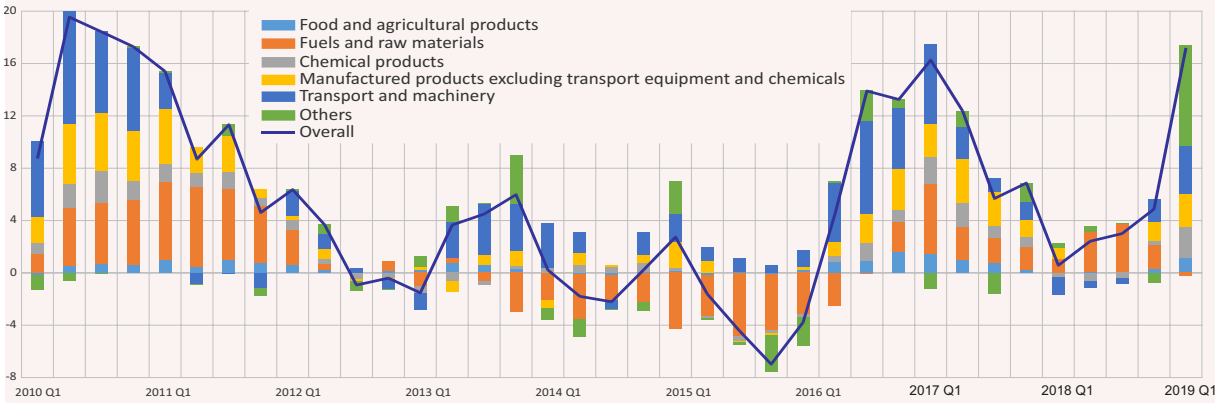
was the biggest jump recorded since 1981. According to Her Majesty's Revenue and Customs, imports of goods in value terms also picked up pace to grow by +17.2% year on year in Q1 2019, up from +4.9% in late 2018 (*Graph 3*). This is the strongest rate of growth recorded since early 2017, when imports in value were boosted by the depreciation of the pound following the referendum result. This acceleration, which has affected trade with the EU and the rest of the world, has been driven largely by stockable goods such as chemical products (+2.3 points), other manufactured goods (+6.2 points) and food products (+1.2 points).

Conversely, the United Kingdom's exports saw no exceptional increase over the same period.

All of the United Kingdom's trading partners benefited from the exceptional increase in British imports in Q1 2019

As the fourth biggest supplier of UK imports (*Table 1*), the USA looks to have been the primary beneficiary of these Brexit anticipation effects (*Graph 4*). In early 2019, US exports to the United Kingdom increased by 49.6% year on year, with British companies increasing their inventory of American products before potential increases in customs duties and resulting disruptions to supply chains. Indeed, Brexit would not only affect customs duties between the United Kingdom and EU member states. By leaving the EU, the United Kingdom would no longer be covered by the preferential terms of trade negotiated by the EU with the rest of the world. The effects of Brexit therefore seem to have extended to trade between the United Kingdom and trading partners outside the EU such as the USA and China. These countries seem to be benefiting from the same anticipation effects as EU member states. Moreover, it is possible that other anticipation effects unrelated to Brexit were also at play in this period, particularly the escalation of the trade war between China and the USA.

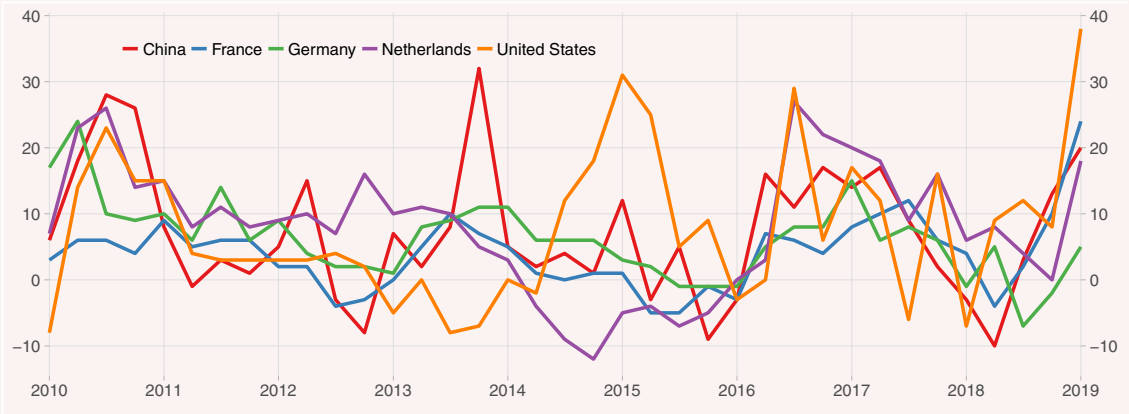
3 - British imports grew considerably in early 2019



Source: Markit

4 - Imports to the United Kingdom from principal trading partners

in %



Source: Markit

Table 1- The United Kingdom's main suppliers in 2018

	Country's share of British imports by value in 2018 (in %)
Germany	13.9
China	9.0
Netherlands	8.6
United-States	8.6
France	5.8
Belgium	5.5
Norway	4.1
Italy	3.9
Spain	3.4
Ireland	2.9

Source: Office for National Statistics (ONS), British customs

France, as the fifth largest supplier to the UK, also benefited from the dynamism of British imports in Q1 2019 (+23.3%, *Graph 5*). In particular, deliveries of chemical and pharmaceutical products (+3.4 points) and other manufacturing products (+18.0 points) have played a significant role in this increase. Food and agricultural goods also contributed +2.0 points to the growth of French exports to the United Kingdom.

Chinese exports to the United Kingdom also enjoyed a substantial boost in early 2019: they accelerated by +19.8% year on year, their most dynamic performance since 2013 (*Graph 4*).

The Netherlands, third largest supplier to the United Kingdom, have also benefited from the apparent effects of Brexit planning: in Q1, British imports of Dutch products grew by 17.7% compared with the previous year, when Dutch trade with the UK had actually been shrinking since 2017. Deliveries of chemical products (+14.8 points) and other manufactured products (+4.3 points) have made the greatest contribution to this upturn.

For Italy and Spain, respectively the 7th and 9th largest suppliers to the United Kingdom, effects of Brexit have been significant since Q4 2018 (+12.1% for Spain and +8,5% for Italy). In Q1 2019, British imports increase at a similar pace.

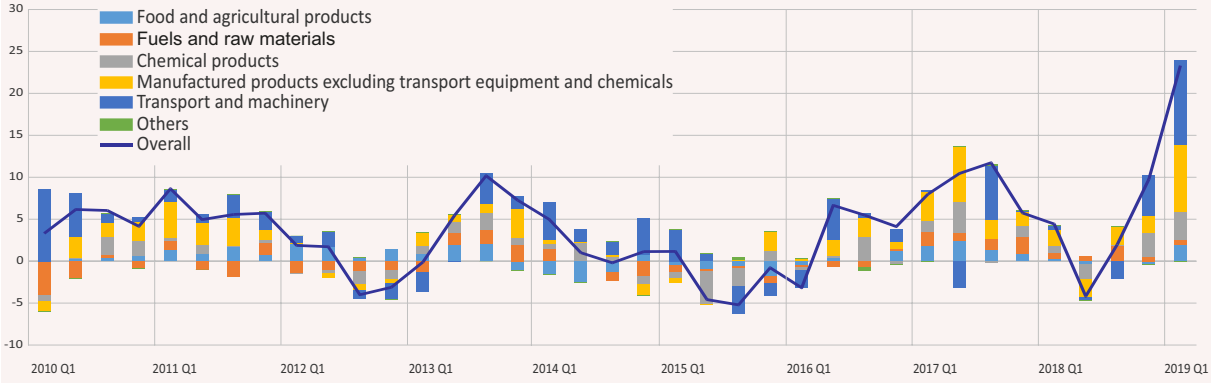
Other countries have benefited less from the acceleration of British imports in Q1 2019. Germany, second largest supplier of the United Kingdom, saw only a slight rebound in its cross-channel exports in Q1 2019, although the uncertainty surrounding Brexit does seem to have contributed to the recovery of German trade with the United Kingdom. After a tough end to 2018 for the automobile sector (adapting to new anti-pollution regulations) and the chemical industry (problems navigating on the Rhine), German exports to the United Kingdom saw a modest rebound in early 2019: they grew by 4.7% compared with the previous years, after shrinking in two successive quarters, by 7.1% then 1.8%, according to UK customs figures. This increase was primarily driven by imports of manufactured goods (+1.9 points) and chemical products (+1.6 points).

Belgian exports to the UK also increased by just 5.1% year on year to Q1 2019.

In response to concerns about Brexit and its consequences for trade flows and supply chains to production facilities, British businesses therefore appear to have opted for a strategy of massive inventory accumulation. In early 2019 they significantly ramped up their purchasing of manufactured goods, particularly transport equipment and chemical products, from multiple partners simultaneously. In reaction, they are expected to sell off their stocks in Q2 2019 and these variations should contribute –1.1 points to the GDP growth. In April, imports of goods in value decreased by 9.9% compared to March. ■

5 - Evolution of French exports to the United Kingdom

in %



Source: Markit

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United States

US activity is expected to slow down

In Q1 2019, activity in the United States accelerated (+0.8% after +0.5%), driven by foreign trade but also by public consumption and investment. However, private consumption decelerated (+0.3% after +0.6%). Activity is likely to slow down in Q2 (+0.4%) but looks set to remain vigorous through to the end of the year. As an annual average, growth is expected to reach 2.5% in 2019 – slightly down on 2018 (+2.9%). It should be driven primarily by domestic demand, whereas foreign trade is likely to hold back activity.

Activity is set to slow slightly in 2019

In Q1, activity in the United States accelerated (+0.8% after +0.5%), driven by foreign trade (contribution of +0.2 points). For the spring, the indicators derived from surveys have slipped back in all sectors. Growth is expected to decline to +0.4%, held back by the downturn in exports.

In H2, growth should remain relatively high (+0.5% per quarter), driven by vigorous domestic demand. As an annual average, activity is likely to slow down slightly in 2019 (+2.5% after +2.9% in 2018).

Private consumption should bounce back, buoyed by wages

Private consumption slowed again in Q1 (+0.3% after +0.6%), partly due to the shutdown of certain federal administrations (*see Focus in the March 2019 Conjoncture in France*). Wages are expected to remain dynamic, buoyed by labour market tensions and unemployment standing at its lowest level since 1969. Household consumption looks set to accelerate in Q2 (+0.8%) and should remain vigorous thereafter (+0.5% per quarter). As an annual average, it is likely to slow down slightly (+2.4% after +2.6% in 2018). The savings ratio should drop to 6.4%, after 6.7% in 2018.

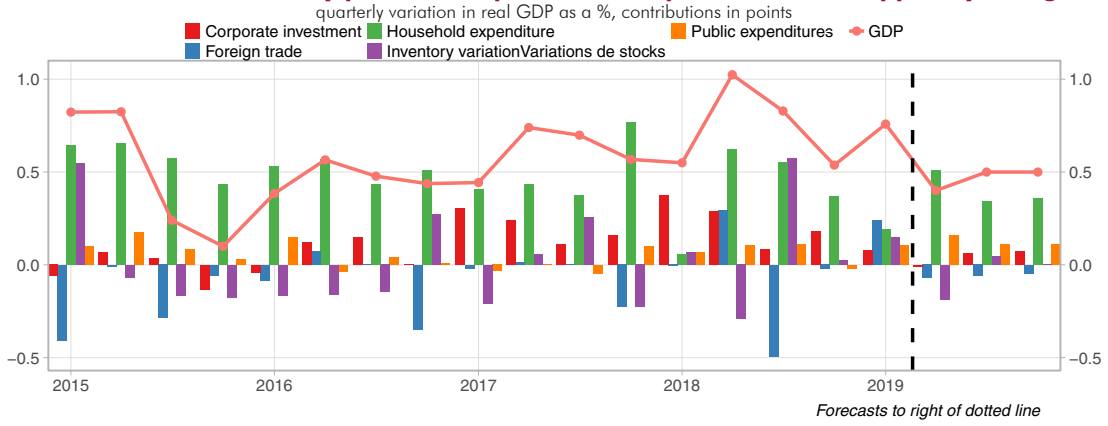
Corporate investment looks likely to weaken

Corporate investment is expected to slacken in Q2 (+0.0% after +0.6% at the start of 2019 and +1.3% in the autumn of 2018), before accelerating in H2 (+0.5% per quarter). It should be driven by its equipment and structural components, and sustained by capacity constraints and the stabilisation of the Federal Reserve base rates. All in all, corporate investment is likely to weaken significantly in 2019, to +2.7% after +6.9% in 2018, with the effects of the depreciation measures and tax incentives tending to fade.

Foreign trade is expected to slow down

Exports accelerated in Q1 (+1.2% after +0.4%), driven by sales of petroleum and gas products, whereas imports declined (–0.6% after +0.5%), held back mainly by a decline in purchases of Chinese goods and petroleum and gas products. Imports are likely to edge down again in Q2 (–0.1%), before gradually ramping up in H2 (+0.4% followed by +0.7%), in line with domestic demand. As an annual average, imports look set to decelerate in 2019 (+1.1% after +4.5%), as do exports (+1.0% after +4.0%). Foreign trade is expected to hamper US activity once again, reducing its growth by 0.1 point in 2019, after –0.3 points in 2018. ■

Growth should be sustained by private and public consumption but handicapped by foreign trade



Source: BEA, INSEE forecast

Japan

Variations in activity to be marked by the consumption tax rise

Japanese activity remained brisk in Q1 (+0.65% after +0.5%), automatically sustained by the decline in imports. Domestic demand came to a standstill (+0.1% after +0.6%) but should take over from foreign trade in sustaining growth from Q2 onwards. Activity is expected to slow in Q2 (+0.2%) and then gather pace in Q3 (+0.5%), in anticipation of the consumption tax rise on 1st October, before edging down at the end of the year (–0.3%). Foreign trade is expected to hamper activity in 2019 (–0.1 point).

Consumption is up prior to the consumption tax rise

In Q1, activity remained brisk (+0.6% after +0.5%), with imports falling more sharply than exports, whilst domestic demand came to a standstill (0.1% after +0.7%). Buoyed by household consumption, activity looks set to grow in Q2 and Q3 (+0.2% followed by +0.5%) before edging down at the end of the year (–0.3%). After declining in Q1 (–0.1%), household consumption is likely to pick up again in Q2 (+0.3%). It should be driven by a rise in the average wage per capita (+0.5% after –0.45%), with wage negotiations facilitated by tax incentives for companies and by an increase in employment, boosted by new measures to promote the admission of foreign workers. Household consumption is then expected to surge in Q3 (+1.5%), spurred on by anticipations of the two-point rise in consumption tax on 1st October (Graph). It is then likely to fall back by 2.1% at the end of the year, with inflation rising to +0.6% year-on-year.

Investment should hold firm

With enterprises benefiting from tax incentives to invest, their gross fixed capital formation is likely to increase again in Q2 and Q3 (+0.4% followed by +0.3%), before coming to a standstill at the end of 2019 (+0.0%).

Household investment should continue to grow steadily in Q2 (+1,5 %), before marking time in H2 (+0.1% then 0.0%). In the run-up to the 2020 Olympic Games, public investment looks set to accelerate steadily (+0.5% in Q2, +1.0% in Q3 and +1.5% at the end of the year).

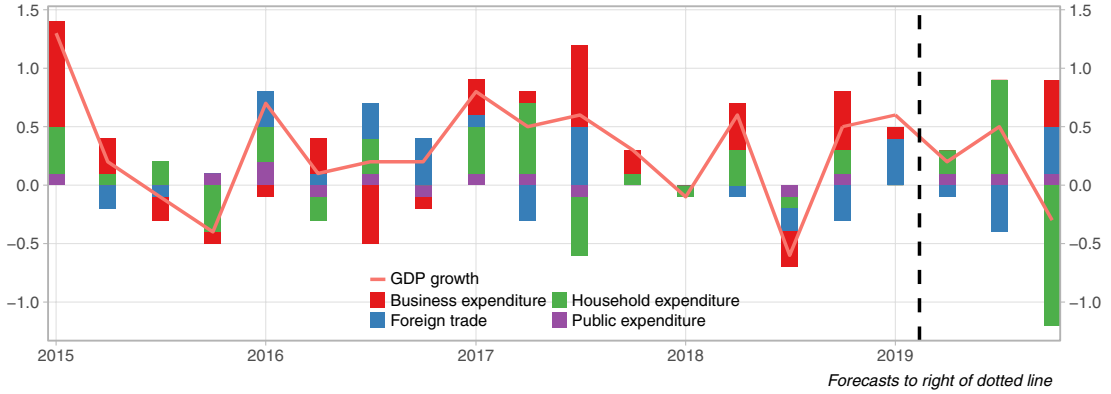
Foreign trade is expected to handicap activity in 2019

Exports should pick up in Q2 (+2.0% after –2.4%) in the wake of world demand, and then slow down in H2 (+0.2% followed by +0.3%) in the context of tensions and uncertainties over trade with the United States. As an annual average, Japanese exports are expected to decline in 2019 (–0.7% after +3.3%).

Imports are likely to perk up in Q2 and Q3 (+2.5% per quarter), in line with domestic demand, before falling back at the end of the year (–2.0%). As an annual average, they should decline by 0.1% (after +3.4% in 2018). Driven by the sharper drop in exports, foreign trade looks set to hold back activity in 2019 (–0.1 points, after making a neutral contribution in 2018). ■

Household consumption is expected to influence the variations in activity

quarterly variations in % and contributions in points



Source: Cabinet Office of Japan

Emerging economies

Chinese fiscal measures sustain domestic demand

In Q1 2019, Chinese activity accelerated slightly (+1.6% after +1.5%), according to estimates by the NBSC. Through to the end of the year, it should stabilise at +1.6% per quarter, driven by the policy mix adopted in the context of the trade war with the United States. As an annual average, activity is likely to slow down slightly in 2019, to +6.4% after +6.6%, held back by domestic demand. In Russia, the rise in VAT has aggravated inflationary pressures: GDP dropped in Q1 and should then grow slowly. In Brazil, activity slipped back slightly at the start of 2019, penalised by the failure of a dam, and should struggle to regain momentum afterwards. In Turkey, the business climate remains very poor and a high rate of inflation persists. Despite bouncing back in Q1, activity is likely to remain sluggish going forward. In India, activity looks set to remain buoyant in 2019, despite a slight slowdown in H1. Lastly, growth in Eastern Europe is expected to slip back slightly, in the wake of the Eurozone.

China: domestic demand should pick up again

In Q1, Chinese growth increased marginally (+1.6% after +1.5%). Domestic demand was sustained by the fiscal, monetary and regulatory policies implemented recently (*Graph 1*).

Industrial output gathered pace in Q1, to +7.6% year-on-year after +5.7%.

In May, business climate indicators remained above the exansion thereshold in the manufacturing sector, but they decreases in the service sector.

Household confidence indicators increased in April and remain at a high level. Despite slowing down in April, retail sales are expected to pick up again with the reduction in the VAT rate in April.

Growth is likely to stabilise at +1.6% per quarter through to the end of 2019. Domestic demand should continue to be boosted by the government's measures – especially the reduction in the VAT rate. As an annual average, activity is likely to slow down in 2019, to +6.4% after +6.6%.

Real estate investment – one of the growth drivers – bounced back, in line with the measures introduced by many local authorities, including the relaxation of real estate acquisition conditions. Corporate investment should also recover.

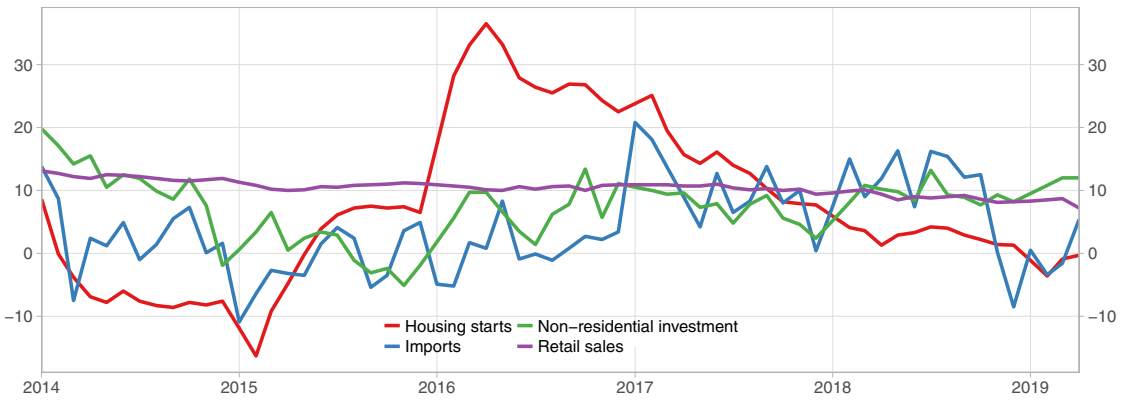
In Q1, Chinese customs data – reprocessed in accordance with the National Accounts and adjusted to account for the seasonal effects of the Chinese New Year – show a rebound in exports (+3.1% after –2.7%) and imports (+4.6% after –9.3%) as a result of an upswing in domestic demand. As an annual average, exports look set to slow down in 2019 (+0.3% after +5.8%) in a context of growing trade tensions with the United States. Imports are likely to slow down sharply in 2019 (+0.1% after +9.0%).

India: activity is likely to remain buoyant

In Q1 2019, Indian activity weakened slightly (+1.6% after +1.7%). The balances of opinion derived from surveys of purchasing managers fell back in the service sector in May but picked up in the manufacturing sector. Industrial output fell in Q1 (–1.7% after +1.0%). Imports stabilised in

In China, domestic demand picked up slightly at the start of 2019

year-on-year change in (%)



Source: National Bureau of Statistics of China (NBSC), INSEE calculations

real terms (+0.1% after –1.0%) under the effects of the drop in oil prices and the appreciation of the rupee. They are expected to gather pace through to the end of 2019: +1.0% in Q2 followed by +1.5% per quarter. Indian activity is likely to remain buoyant, despite a slight slowdown in Q2 (+1.2%) when it was hampered by the manufacturing sector. It should pick up in H2 (+2.0% per quarter), bolstered by solid domestic demand. On average in 2019, GDP growth should decrease slightly (+6.4%, after +7.4%).

Russia: inflationary pressures should continue to hinder growth

At the end of 2018, economic activity came to a standstill (0.0% after +0.2%), adversely affected by diplomatic tensions with the United States and the drop in oil prices. At the start of 2019, the two-point rise in the VAT rate fuelled inflation and reduced purchasing power (–0.8% after +1.0%). In addition, exports edged down, particularly in the energy sector, leading to a decline in GDP (–0.6%). Activity is expected to bounce back somewhat in Q2 (+0.5 %), with Brent crude oil prices picking up in April and May, before slackening thereafter. On average in 2019, GDP is likely to slow down significantly, to +0.4%, after +2.2% in 2018.

Brazil: activity struggles to gather pace

At the end of 2018, activity weakened (+0.1%), due to a downturn in investment. In early 2019, industrial output fell (–0.6%), penalised by the failure of the Brumadinho dam, and activity declined in Q1 (–0.2%). The business climate slipped back in the early spring (*Graph 2*). Activity should continue to grow at a modest pace from now on, slowed down by inflationary tensions, by the wait-and-see attitude of investors vis-à-vis pension reform and by the slowdown in world trade. On average in 2019, activity is likely to slow down (+0.5%, after +1.1% in both 2018 and 2017).

Turkey: activity is expected to decline in 2019

Since March 2018, the business climate in the manufacturing sector has been deteriorating significantly, hit by political tensions. It stabilised in early 2019 but remains well below the expansion threshold. Inflation has stopped rising as a result of the appreciation of the Turkish lira in late 2018, but it remains at a very high level (+19.5% in April, year-on-year).

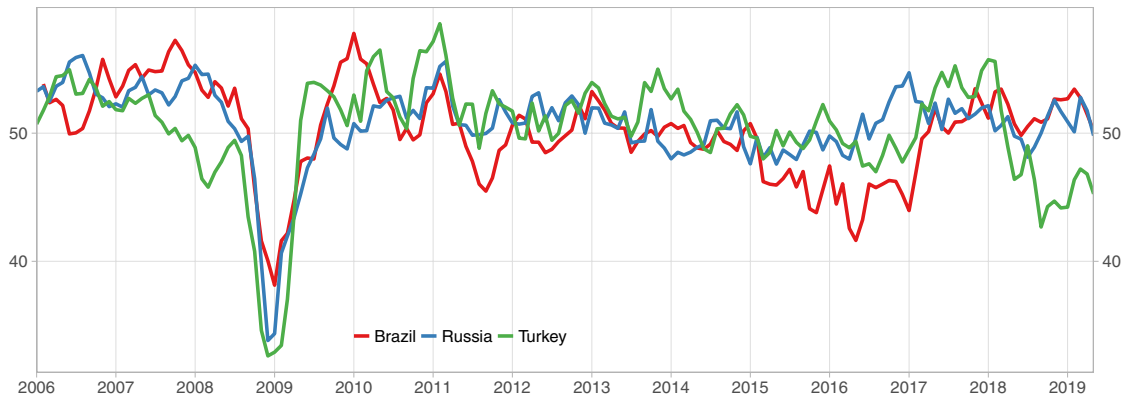
In Q1 2019, activity bounced back temporarily, to +0.6%. GDP is expected to stabilise in Q2, before growing moderately in H2. On average in 2019, GDP is likely to fall by 1.5%, after +2.8% in 2018 and +7.3% in 2017).

CEEC: growth is set to slow

At the start of 2019, activity gathered pace in the Central and Eastern European Countries (CEEC) (+1.0% after +0.8%). However, since the start of 2018, the balances of opinion derived from surveys of purchasing managers have deteriorated significantly, in the wake of German activity. Consequently, activity is expected to decelerate slightly (+0.5%) in Q1 2019, held back by the decline in demand from the Eurozone, and should continue to slow down in the summer (+0.5%). At the end of 2019, growth should decline a little further (+0.3%), hampered by global trade tensions and Brexit. On average in 2019, growth is likely to stand at +3.1%, after +3.9% in 2018. ■

The balances of opinion derived from surveys of purchasing managers are struggling to regain momentum in Russia and Brazil, and are deteriorating in Turkey

balance of opinion



Source: PMI, Markit

Statistical French Appendix

Goods and services: sources and uses at chain-linked previous year prices

billion euros and percentage changes from previoux period and previous year
working-day and seasonally adjusted data

	2017				2018				2019						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Gross domestic product (GDP)	556.5	560.3	563.8	568.0	569.8	570.7	572.2	574.6	576.5	578.0	579.7	581.7	2249	2287	2316
% change	0.9	0.7	0.6	0.7	0.3	0.2	0.3	0.4	0.3	0.3	0.3	0.3	2.4	1.7	1.3
Imports	186.5	186.2	188.8	190.0	188.6	190.2	189.8	191.9	194.5	193.8	195.5	197.7	751.5	760.4	781.5
% change	2.0	–0.1	1.4	0.6	–0.7	0.8	–0.2	1.1	1.4	–0.3	0.9	1.1	4.1	1.2	2.8
Total ressources	1191	1200	1211	1221	1222	1225	1230	1237	1245	1247	1252	1258	4823	4913	5001
% change	1.14	0.74	0.88	0.86	0.05	0.27	0.36	0.61	0.62	0.15	0.42	0.47	3.21	1.87	1.77
Household consumption expenditure	292.4	293.3	295.0	295.7	296.5	295.6	296.8	297.6	298.7	299.6	301.1	302.2	1176	1186	1202
% change	0.3	0.3	0.6	0.2	0.3	–0.3	0.4	0.3	0.4	0.3	0.5	0.4	1.6	0.9	1.3
General government consumption expenditure*	141.4	142.0	142.8	143.1	143.1	143.4	143.5	144.0	144.3	144.7	145.1	145.6	569.4	574.1	579.8
% change	0.2	0.4	0.6	0.2	0.0	0.1	0.1	0.4	0.2	0.3	0.3	0.3	1.5	0.8	1.0
of which General government individual consumption expenditure	88.2	88.4	88.8	89.0	89.0	89.1	89.3	89.6	89.7	90.1	90.4	90.8	354.4	357.0	361.0
% change	0.6	0.2	0.6	0.2	–0.1	0.2	0.2	0.3	0.1	0.4	0.4	0.4	1.7	0.7	1.1
Collective consumption expenditure	45.7	46.1	46.4	46.5	46.6	46.6	46.5	46.8	46.9	46.9	46.9	47.0	184.8	186.4	187.7
% change	–0.6	0.9	0.6	0.2	0.1	0.0	–0.1	0.5	0.3	0.0	0.1	0.2	1.1	0.9	0.7
Gross fixed capital formation (GFCF)	125.5	126.8	128.3	129.4	129.3	130.7	131.8	132.5	133.2	133.9	134.4	134.9	510.0	524.3	536.4
% change	2.4	1.1	1.2	0.9	–0.1	1.0	0.8	0.6	0.5	0.5	0.4	0.4	5.0	2.8	2.3
of which : Non-financial enterprises (incl. unincorporated enterprises)	70.5	71.0	72.1	73.1	73.1	74.0	75.0	75.6	76.2	76.7	77.1	77.5	286.7	297.8	307.5
% change	3.0	0.7	1.5	1.4	–0.1	1.3	1.3	0.8	0.7	0.8	0.5	0.4	5.0	3.9	3.3
households	29.0	29.6	29.8	30.0	30.0	30.2	30.3	30.2	30.2	30.1	30.0	30.0	118.4	120.7	120.3
% change	2.2	2.2	0.8	0.5	0.1	0.7	0.3	–0.3	0.0	–0.3	–0.2	–0.1	6.6	2.0	–0.3
Government	19.0	19.0	19.1	19.1	19.2	19.5	19.6	19.8	19.9	20.0	20.1	20.3	76.3	78.1	80.3
% change	–0.1	0.4	0.5	0.0	0.5	1.4	0.2	1.0	0.7	0.6	0.7	0.7	0.5	2.4	2.9
Exports	171.8	176.2	177.3	181.0	180.4	181.7	182.6	186.2	186.9	185.5	186.9	189.6	706.4	730.8	748.9
% change	–0.2	2.5	0.7	2.1	–0.4	0.7	0.5	2.0	0.4	–0.7	0.7	1.4	4.0	3.5	2.5
Contributions to GDP growth: (in percentage points)															
Domestic demand excluding invetory changes**	0.7	0.5	0.7	0.4	0.1	0.1	0.4	0.4	0.4	0.3	0.4	0.4	2.3	1.3	1.4
Inventory changes**	0.8	–0.6	0.2	–0.1	0.1	0.1	–0.4	–0.2	0.3	0.0	–0.1	–0.1	0.2	–0.3	–0.1
Net foreign trade	–0.7	0.8	–0.2	0.4	0.1	0.0	0.2	0.3	–0.3	–0.1	0.0	0.1	–0.1	0.7	–0.1

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

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Output of the branches of activity	0.4	0.8	0.9	1.4	–1.3	–0.2	0.7	0.2	0.6	–0.2	0.3	0.2	2.4	0.6	1.0
Value added	0.5	0.3	0.7	1.2	–1.2	–0.1	0.2	0.2	0.5	0.0	0.2	0.2	1.4	0.1	0.9
Intermediate consumption	0.4	1.0	1.1	1.5	–1.3	–0.3	0.8	0.2	0.6	–0.3	0.4	0.2	2.9	0.8	1.1
Imports	3.7	–0.2	2.7	0.3	–0.6	2.2	–1.1	1.9	1.2	–0.7	0.8	1.1	5.4	2.5	2.7
Taxes on products excluding subsidies	0.7	0.2	0.1	–0.3	–0.3	0.4	0.1	–0.4	0.4	0.0	0.5	0.3	1.5	–0.2	0.6
Trade and transport margins	1.0	1.1	0.7	0.8	0.4	–0.1	0.1	0.2	0.6	0.4	0.5	0.5	3.1	1.7	1.5
Total ressources	1.4	0.5	1.3	0.9	–0.6	0.6	0.0	0.6	0.7	–0.2	0.5	0.5	3.2	1.5	1.5
Intermédiate uses	1.0	0.8	1.1	1.3	–0.6	0.3	0.5	0.6	0.6	0.0	0.3	0.3	3.5	1.6	1.6
Household consumption expenditure	0.4	0.3	0.8	–0.3	–0.2	–0.2	0.1	–0.1	0.0	–0.3	0.7	0.4	1.9	–0.1	0.1
General government individual consumption expenditure	0.6	0.9	1.3	0.0	0.7	0.7	0.6	1.8	0.8	1.1	1.1	1.1	4.0	2.8	4.3
Gross fixed capidal formation (GFCF)	1.8	–0.6	1.5	1.9	–1.6	1.4	1.4	–0.4	1.7	0.8	0.3	0.2	1.4	2.1	3.4
Non-financial enterrises (incl. unincorporated enterprises)	3.1	0.0	2.0	2.1	–2.2	1.4	1.5	–0.5	2.0	0.9	0.3	0.2	3.1	2.0	3.7
Other	–5.0	–3.7	–1.5	0.7	1.8	1.8	0.9	0.5	–0.2	0.1	0.2	0.3	–8.4	2.5	1.3
Contribution of inventory changes to manufactured production*	2.4	–1.7	0.8	–0.6	0.3	0.6	–1.4	–0.8	0.5	0.1	–0.3	–0.5	–0.1	–0.6	–0.9
Exports	–1.0	3.4	1.0	2.5	–1.2	0.5	1.1	2.7	0.5	–0.9	1.1	1.8	4.9	3.6	3.5
Domestic demand excluding inventory changes*	0.8	0.5	1.0	0.7	–0.5	0.2	0.4	0.3	0.5	0.0	0.5	0.3	2.7	1.1	1.3

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 seasnally adjested data

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Gross domestic product (GDP)	0.3	0.2	0.0	0.0	0.3	0.2	0.4	0.3	0.4	0.2	0.2	0.2	0.5	0.8	1.2
Imports	1.6	–0.8	–0.4	1.0	0.4	1.0	1.2	0.0	–0.9	0.2	–0.2	0.0	2.1	2.0	0.0
Total ressources	0.7	–0.2	–0.1	0.5	0.3	0.4	0.7	0.1	–0.1	0.2	0.1	0.1	1.1	1.3	0.6
Household consumption expenditure	0.5	–0.1	0.0	0.4	0.6	0.5	0.3	0.2	0.2	0.4	0.3	0.2	0.9	1.5	1.1
General government consumption expenditure	0.7	0.1	0.0	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.1	1.0	0.5	0.2
Gross fixed capital formation (GFCF)	0.5	0.2	0.1	0.3	0.3	0.5	0.7	0.1	0.3	0.3	0.3	0.3	1.1	1.4	1.2
of which: Non-financial enterprises (incl. unincorp. enterprises)	0.3	0.1	0.0	0.2	0.3	0.5	0.6	0.2	0.2	0.3	0.2	0.2	0.5	1.1	1.1
Households	0.6	0.6	0.5	0.3	0.3	0.7	0.9	–0.2	0.5	0.3	0.4	0.4	2.1	1.9	1.5
Exports	0.9	–0.6	–0.3	0.1	0.1	0.5	0.9	0.0	0.2	0.0	0.1	0.1	0.8	0.8	0.8
Domestic demand excluding inventory changes *	0.6	0.0	0.0	0.3	0.4	0.4	0.4	0.1	0.1	0.3	0.2	0.2	0.9	1.2	0.9

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

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Output of the branches of activity	1.0	0.2	–0.2	0.5	0.3	0.6	0.8	–0.2	0.0	0.0	0.0	0.0	2.0	1.4	0.4
Value added	–0.5	0.1	–0.5	–1.2	0.1	0.2	0.7	0.1	1.0	–0.3	–0.2	–0.2	–1.4	–0.5	1.0
Intermédiate consumption	1.6	0.2	–0.1	1.2	0.4	0.8	0.8	–0.3	–0.4	0.1	0.1	0.1	3.5	2.2	0.1
Imports	1.0	–0.4	–0.3	0.3	0.2	0.9	0.7	–0.2	–0.2	0.1	–0.2	–0.1	1.7	1.2	0.2
Total ressources	0.9	0.0	–0.2	0.4	0.4	0.7	0.6	–0.1	–0.1	0.1	0.0	0.0	1.6	1.4	0.4
Intermédiate uses	1.5	0.0	0.0	1.0	0.6	0.8	0.7	–0.6	–0.6	0.1	0.1	0.1	3.0	2.0	–0.3
Household consumption expenditure	0.6	0.0	–0.1	0.7	1.0	0.9	0.2	0.2	0.0	0.7	0.3	0.1	1.0	2.2	1.1
General government individual consumption expenditure	–0.2	–0.7	–0.6	–0.5	–0.9	–0.6	–0.4	–0.5	–0.7	–0.4	–0.4	–0.4	–2.1	–2.5	–2.0
Gross fixed capital formation (GFCF)	0.1	0.3	–0.2	–0.3	0.5	0.2	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.7	1.1
of which: Non-financial enterprises (incl. unincorp. enterprises)	0.1	0.3	–0.1	–0.3	0.5	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.4	0.8	1.1
General government	0.4	0.1	–0.6	–1.0	0.5	0.1	0.7	0.6	0.8	0.2	0.2	0.2	0.1	0.1	1.9
Exports	1.1	–0.7	–0.4	0.1	–0.1	0.6	0.7	0.1	0.2	0.0	0.0	0.0	0.9	0.4	0.8
Domestic demand excluding inventory changes*	1.0	0.0	–0.1	0.7	0.7	0.7	0.4	–0.2	–0.3	0.3	0.2	0.1	1.9	1.9	0.3

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

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Agriculture	1.8	1.7	1.0	0.7	–0.2	–0.1	–0.1	0.3	0.4	0.4	0.2	0.1	3.8	1.1	1.0
Manufacturing	0.4	0.8	0.9	1.4	–1.3	–0.2	0.7	0.2	0.6	–0.2	0.3	0.2	2.4	0.6	1.0
Energy, water and waste	–1.1	0.0	1.2	–0.4	2.1	–3.4	0.9	0.4	0.5	0.6	0.2	0.2	0.3	0.4	0.9
Construction	1.4	1.6	0.9	0.4	–0.2	0.8	0.1	0.4	0.4	0.1	0.2	0.2	4.8	1.8	1.2
Trade	0.7	1.0	1.2	1.0	0.1	0.6	0.2	0.6	0.6	0.1	0.3	0.3	3.2	2.4	1.5
Market services excluding trade	1.7	1.0	0.7	1.2	0.9	0.5	0.6	0.8	0.5	0.5	0.5	0.5	3.9	3.2	2.3
Non market services	0.1	0.4	0.5	0.3	0.1	0.2	0.1	0.3	0.3	0.2	0.3	0.3	1.1	0.8	1.0
Total	1.0	0.9	0.8	0.9	0.2	0.2	0.5	0.5	0.5	0.2	0.3	0.4	3.0	2.0	1.6

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

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Agriculture	4.3	3.8	2.4	1.5	–0.1	0.1	0.1	0.4	0.5	0.6	0.4	0.3	9.2	3.4	1.6
Manufacturing	0.5	0.3	0.7	1.2	–1.2	–0.1	0.2	0.2	0.5	0.0	0.2	0.2	1.4	0.1	0.9
Energy, water and waste	–1.0	–0.1	0.9	–0.7	2.8	–3.6	0.4	0.8	0.6	0.6	0.2	0.2	–1.4	0.3	1.0
Construction	1.3	1.2	0.6	0.0	–0.3	0.0	–0.4	0.1	0.2	–0.1	0.0	0.0	3.3	0.1	0.0
Trade	0.6	0.8	1.0	0.7	–0.3	0.1	0.0	0.3	0.4	0.0	0.1	0.1	2.5	1.1	0.7
Market services excluding trade	1.3	0.8	0.5	1.1	1.0	0.4	0.5	0.7	0.3	0.4	0.4	0.5	2.9	3.0	1.8
Non market services	–0.1	0.3	0.5	0.3	0.1	0.2	0.1	0.2	0.1	0.2	0.3	0.3	0.9	0.9	0.7
Total	0.8	0.7	0.6	0.8	0.4	0.1	0.3	0.4	0.3	0.3	0.3	0.3	2.3	1.8	1.2

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

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Manufactured good	3.1	0.0	2.0	2.1	–2.2	1.4	1.5	–0.5	2.0	0.9	0.3	0.2	3.1	2.0	3.7
Construction	1.3	1.6	1.2	0.4	0.6	1.7	0.2	0.7	0.3	–0.3	0.0	0.1	4.5	3.5	1.2
Other	3.8	0.8	1.4	1.5	1.2	1.0	1.9	1.8	–0.1	1.3	1.0	0.8	6.8	5.5	4.2
Total	3.0	0.7	1.5	1.4	–0.1	1.3	1.3	0.8	0.7	0.8	0.5	0.4	5.0	3.9	3.3

Forecast

Imports (CIF) at chain-linked previoux year prices

percentage changes from previous period and previous year
working-day and seasonally adjusted data

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Agricultural goods	–0.2	1.6	–2.1	–2.6	2.8	1.2	–1.8	3.7	2.0	0.0	0.5	1.0	1.8	0.9	4.6
Manufactured goods	3.7	–0.2	2.7	0.3	–0.6	2.2	–1.1	1.9	1.2	–0.7	0.8	1.1	5.4	2.5	2.7
Energy, water and waste	–7.8	1.2	–5.4	14.1	–4.7	–13.8	9.2	–3.9	9.7	0.0	0.5	1.0	7.0	–5.0	7.6
Total goods	2.6	–0.1	2.1	1.0	–0.7	1.0	–0.5	1.5	1.8	–0.6	0.8	1.1	5.4	1.9	3.2
Total services	0.2	–0.1	–0.9	–1.4	–1.1	–0.3	0.6	–0.3	–0.4	0.6	1.2	1.4	0.7	–2.6	1.0
Total*	2.0	–0.1	1.4	0.6	–0.7	0.8	–0.2	1.1	1.4	–0.3	0.9	1.1	4.1	1.2	2.8

Forcast

* Including territorial correction

Exports (FOB) at chain-linked previoux year prices

percentage changes from previous period and previous year
working-day and seasonally adjusted data

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Agricultural goods	0.4	2.9	9.1	0.4	–1.9	2.5	–6.9	3.0	2.5	2.0	0.5	0.5	–3.6	2.4	3.6
Manufactured goods	–1.0	3.4	1.0	2.5	–1.2	0.5	1.1	2.7	0.5	–0.9	1.1	1.8	4.9	3.6	3.5
Energy, water and waste	14.5	7.1	–1.7	5.4	2.1	2.8	–4.7	–0.8	12.3	–2.0	0.5	0.5	23.4	6.5	8.4
Total goods	–0.6	3.4	1.1	2.4	–1.2	0.7	0.7	2.6	0.8	–0.8	1.1	1.7	5.0	3.6	3.7
Total services	0.3	–0.7	–1.7	1.0	1.8	1.4	0.6	0.9	–0.8	–0.7	–0.2	0.8	0.0	3.1	0.1
Total*	–0.2	2.5	0.7	2.1	–0.4	0.7	0.5	2.0	0.4	–0.7	0.7	1.4	4.0	3.5	2.5

Forecast

* Including territorial correction

Changes in inventories at chain-linked previous year prices

percentage changes from previous period and previous year

working-day and seasonally adjusted data

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Agricultural goods	0.1	0.0	–0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	–0.1	0.1
Manufactured goods	0.8	–0.5	0.3	–0.2	0.1	0.2	–0.5	–0.3	0.2	0.0	–0.1	–0.2	0.0	–0.2	–0.3
Energy, water and waste	–0.1	–0.1	0.0	0.2	0.0	–0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Other (construction, services)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.8	–0.6	0.2	–0.1	0.1	0.1	–0.4	–0.2	0.3	0.0	–0.1	–0.1	0.2	–0.3	–0.1

Forecast

Household consumption expenditure at chain-linked previous year prices

working-day and seasonally adjested data, percentage changes from previous period and previous year

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Agricultural goods	–2.1	2.3	–0.7	–1.3	0.3	–2.1	–1.8	–0.3	–0.8	2.1	0.3	0.2	–1.3	–3.0	–0.8
Manufactured goods	0.4	0.3	0.8	–0.3	–0.2	–0.2	0.1	–0.1	0.0	–0.3	0.7	0.4	1.9	–0.1	0.1
Energy, water and waste	–4.3	0.0	1.7	0.2	2.6	–6.4	1.7	–0.9	0.2	2.5	–0.3	0.3	–1.2	–0.8	0.4
Trade	1.8	0.3	1.3	2.5	0.8	1.6	–0.9	–0.1	1.0	–0.5	0.4	0.3	6.0	4.1	0.7
Market services excluding trade	1.0	0.7	0.7	0.7	0.5	0.0	0.5	0.7	0.7	0.5	0.4	0.4	2.7	2.0	2.1
Non market services	–0.1	–0.3	0.2	0.0	–0.3	0.3	–0.1	0.1	0.4	0.3	0.3	0.3	–0.7	–0.1	1.0
Territorial correction	9.8	17.4	8.3	0.8	0.6	–6.4	–8.9	–3.7	–4.5	–0.6	–0.4	–0.2	30.9	–1.5	–13.7
Total consumption expenditure	0.3	0.3	0.6	0.2	0.3	–0.3	0.4	0.3	0.4	0.3	0.5	0.4	1.6	0.9	1.3
Total consumption	0.3	0.3	0.6	0.2	0.2	–0.2	0.3	0.3	0.3	0.3	0.5	0.4	1.6	0.8	1.2

Forecast

Household income account

working-day and seasonally adjested data, percentage changes from previous period and previous year

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Gross operating surplus	0.8	0.7	0.6	0.5	0.1	0.2	0.2	0.5	0.7	0.6	0.3	0.3	2.1	1.4	2.0
Unincorporated enterprises	0.9	0.6	0.6	0.2	–0.4	–0.4	–0.2	0.0	0.7	0.3	0.2	0.1	1.4	–0.3	0.8
Households excluding unincorporated enterprises	0.8	0.7	0.7	0.7	0.4	0.6	0.5	0.8	0.7	0.8	0.4	0.3	2.5	2.3	2.6
Gross wages and salaries	1.1	0.7	0.7	0.8	0.8	0.7	0.5	0.6	1.1	0.1	0.6	0.6	3.1	2.9	2.5
Net interests and dividends	–1.5	0.1	1.2	2.1	3.1	2.3	1.5	0.8	0.1	1.5	0.5	0.2	–2.4	8.3	3.5
Social benefits (in cash)	0.4	0.3	0.5	0.6	0.4	0.8	0.5	0.7	0.9	0.5	0.5	0.7	1.5	2.3	2.7
Total ressources	0.8	0.6	0.7	0.7	0.6	0.7	0.5	0.6	0.9	0.3	0.5	0.6	2.3	2.7	2.5
Income and wealth taxes	1.1	0.6	1.9	–0.6	10.9	–1.8	–0.2	–1.5	1.2	0.7	0.6	–2.2	2.4	9.6	–0.3
Households' contributions	1.0	0.7	0.9	0.7	–7.6	–0.9	0.4	–2.9	–0.5	0.4	0.6	0.6	3.2	–7.7	–2.0
Total charges	1.0	0.7	1.5	0.0	3.3	–1.5	0.0	–2.0	0.5	0.6	0.6	–1.2	2.7	2.5	–0.9
Gross disposable income	0.7	0.6	0.5	1.0	–0.1	1.3	0.7	1.3	1.0	0.2	0.5	1.0	2.2	2.7	3.4
Consumption deflator	0.5	–0.1	0.0	0.4	0.6	0.5	0.3	0.2	0.2	0.4	0.3	0.2	0.9	1.5	1.1
Real gross disposable income	0.2	0.6	0.5	0.6	–0.7	0.9	0.3	1.1	0.9	–0.2	0.2	0.8	1.4	1.2	2.3
Social benefits (in kind)	0.9	0.5	0.7	0.4	0.1	0.3	0.2	0.3	0.2	0.4	0.4	0.5	2.5	1.3	1.2
Adjusted gross disposable income	0.7	0.5	0.5	0.8	0.0	1.1	0.6	1.1	0.8	0.3	0.5	0.9	2.3	2.4	2.9

Forecast

Main ratios (households)

working-day and seasonally adjested data, in percentage points

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Saving ratio	13.6	13.9	13.8	14.1	13.3	14.2	14.2	14.9	15.3	14.9	14.7	15.0	13.8	14.2	15.0
Financial saving ratio*	3.7	3.7	3.6	3.9	3.1	4.1	4.0	4.9	5.4	5.0	4.7	5.0	3.8	4.0	5.0
Weight of taxes and social contributions**	21.7	21.8	21.9	21.8	22.3	21.8	21.7	21.1	21.1	21.1	21.1	20.8	21.8	21.7	21.0
Gross wages and salaries/gross disposable income	64.4	64.5	64.7	64.5	65.1	64.7	64.6	64.1	64.2	64.0	64.1	63.9	64.5	64.6	64.0
Social benefits (cash)/gross disposable income	35.8	35.7	35.7	35.6	35.8	35.6	35.5	35.3	35.2	35.3	35.3	35.2	35.7	35.5	35.3

Forecast

* Gross operating surplus

** Gross fixed capital formation

*** Savings / Gross fixed capital formation

Opering account of non-financial corporations and unincorporated enterprises

working-day and seasonally adjusted data, percentage changes from previous period and previous year

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Value added	1.3	1.2	0.8	0.9	0.5	0.2	0.8	0.9	1.2	0.5	0.6	0.5	3.3	2.7	3.1
Subsidies	2.5	1.1	–1.7	–2.7	4.0	–0.1	4.1	7.4	2.2	2.6	–3.2	–10.2	3.8	5.2	7.4
Total ressources	1.4	1.2	0.7	0.8	0.6	0.2	0.8	1.1	1.2	0.5	0.5	0.2	3.3	2.7	3.2
Compensation of employees	1.2	0.7	0.8	1.1	1.0	0.9	0.7	0.8	–0.3	–0.1	0.7	0.7	3.3	3.7	1.3
of which: Gross wages and salaries	1.2	0.8	0.8	1.0	1.0	0.9	0.7	0.9	1.4	–0.1	0.7	0.7	3.4	3.6	3.2
Employers' social contributions	1.2	0.6	0.9	1.3	1.1	1.0	0.7	0.3	–5.8	0.0	0.8	0.8	3.0	3.9	–4.4
Taxes on production	0.5	0.9	0.7	1.4	1.8	0.8	0.8	0.1	0.2	–0.5	0.2	0.4	2.6	4.4	0.7
Total charges	1.2	0.8	0.8	1.1	1.0	0.9	0.7	0.7	–0.3	–0.1	0.7	0.7	3.3	3.8	1.3
Gross operating surplus	1.7	1.9	0.6	0.3	–0.2	–1.0	1.1	1.8	3.9	1.6	0.2	–0.6	3.3	0.9	6.8
Unincorporated enterprises	0.9	0.6	0.6	0.2	–0.4	–0.5	–0.2	0.0	0.7	0.7	0.6	0.5	1.4	–0.3	1.4
Non-financial corporations	2.0	2.3	0.5	0.3	–0.2	–1.2	1.5	2.3	4.8	1.8	0.1	–0.9	3.8	1.3	8.4

Forecast

Non-financial corporations' income account

working-day and seasonally adjusted data, percentage changes from previous period and previous year

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Value added	1.4	1.2	0.8	1.0	0.6	0.3	0.9	1.0	1.3	0.5	0.6	0.5	3.5	3.0	3.4
Subsidies	2.7	1.3	–1.8	–2.9	4.4	0.0	4.4	8.0	2.4	2.8	–3.5	–11.1	4.5	5.9	8.0
Total ressources	1.5	1.2	0.8	0.9	0.7	0.3	1.0	1.2	1.3	0.5	0.5	0.2	3.6	3.1	3.5
Compensation of employees	1.3	0.8	0.9	1.1	1.0	1.0	0.7	0.8	–0.3	–0.1	0.7	0.7	3.5	3.8	1.4
Taxes	–1.7	5.9	1.0	7.1	–4.9	–2.9	–6.3	14.0	–5.5	2.0	2.5	2.7	8.7	–0.2	3.6
of which: Taxes on production	0.6	0.9	0.6	1.2	1.6	0.6	0.7	0.1	0.3	–0.5	0.2	0.4	2.7	3.9	0.7
Corporate taxes	–4.8	13.3	1.4	14.6	–12.4	–7.6	–16.4	38.1	–12.8	5.7	5.7	5.7	17.4	–5.6	7.7
Net interests and dividents	–13.1	–8.6	–1.1	6.1	12.6	8.4	5.0	1.5	–0.3	2.9	2.9	2.5	–27.4	25.2	9.8
Other net charges	3.7	1.9	–0.8	–1.4	–2.0	–1.7	–0.3	1.1	2.5	1.5	1.2	0.9	4.0	–4.2	4.7
Total charges	0.4	1.0	0.8	1.9	0.6	0.7	0.1	2.2	–0.8	0.3	1.0	1.0	2.6	3.9	2.1
Gross disposable income	5.2	1.9	0.7	–2.6	1.0	–1.2	4.0	–2.2	9.0	1.2	–1.1	–2.5	6.8	0.3	8.7

Forecast

Breakdown of non-financial corporations' profit share

working-day and seasonally adjusted data, percentage changes from previous period and previous year

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Margin rate* (in %)	31.6	31.9	31.9	31.6	31.4	30.9	31.1	31.5	32.6	33.1	32.9	32.4	31.8	31.2	32.8
Margin rate % change	0.2	0.3	–0.1	–0.2	–0.2	–0.5	0.2	0.4	1.1	0.4	–0.2	–0.5	0.1	–0.5	1.5
Contributions to margin rate variation															
Productivity (+)	0.5	0.2	0.2	0.3	–0.1	–0.2	0.1	0.2	0.2	–0.1	0.1	0.1	0.9	0.2	0.3
Real wages (–)	–0.2	–0.2	–0.2	0.0	0.2	–0.1	–0.1	–0.3	–0.6	0.6	–0.1	–0.2	–0.4	–0.2	–0.6
Employers' social contributions rate (–)	0.0	0.0	0.0	–0.1	0.0	0.0	0.0	0.1	1.1	0.0	0.0	0.0	0.1	–0.1	1.2
Ratio of value added price and consumption price (+)	–0.3	0.2	0.0	–0.3	–0.3	–0.2	0.1	0.1	0.3	–0.1	0.0	0.0	–0.5	–0.5	0.3
Other items	0.1	0.0	–0.1	–0.1	0.0	0.0	0.1	0.2	0.1	0.1	–0.1	–0.3	0.1	0.0	0.2

Forecast

* Gross operating surplus/value added

Main ratios (non-financial corporate sector)

working-day and seasonally adjusted data, in percentage points

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Wage costs / Value added (VA)	66.0	65.7	65.7	65.8	66.1	66.6	66.5	66.3	65.3	64.9	65.0	65.2	65.8	66.4	65.1
Taxes on production / VA	5.2	5.2	5.2	5.2	5.3	5.3	5.3	5.2	5.2	5.1	5.1	5.1	5.2	5.3	5.1
Margin rate (GOS* / VA)	31.6	31.9	31.9	31.6	31.4	30.9	31.1	31.5	32.6	33.1	32.9	32.4	31.8	31.2	32.8
Investment rate (GFCF** / VA)	23.6	23.5	23.7	23.8	23.8	24.1	24.4	24.4	24.3	24.4	24.4	24.5	23.7	24.1	24.4
Saving ratio (savings / VA)	23.3	23.5	23.5	22.6	22.7	22.4	23.1	22.4	24.1	24.2	23.8	23.1	23.2	22.6	23.8
Tax pressure (income taxes / gross disposable income before taxes)	13.2	14.5	14.6	16.7	14.8	14.0	11.6	15.6	12.9	13.4	14.2	15.2	14.8	14.0	13.9
Self-financing ratio (cash earnings)	98.9	100.0	99.1	95.0	95.6	92.8	94.7	91.8	99.2	99.3	97.5	94.5	98.2	93.7	97.6

Forecast

* Gross operating surplus

** Gross fixed capital formation

*** Savings / Gross fixed capital formation

Countries Accounts

Eurozone	Quarterly change in %												Annual change in %		
	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Supply and use table (in real terms)															
GDP	**0.7**	**0.7**	**0.7**	**0.7**	**0.4**	**0.4**	**0.1**	**0.2**	**0.4**	**0.3**	**0.3**	**0.3**	**2.5**	**1.9**	**1.2**
Private consumption (54%)	0.4	0.5	0.6	0.2	0.5	0.1	0.1	0.3	0.5	0.4	0.4	0.3	1.8	1.3	1.4
Investment (20%)	–0.7	2.2	–0.1	1.2	0.0	1.6	0.5	1.4	1.1	0.4	0.5	0.5	3.0	3.3	3.6
Public consumption (21%)	0.3	0.4	0.5	0.2	0.1	0.4	0.0	0.6	0.1	0.3	0.3	0.3	1.3	1.0	1.2
Exports (46%)	1.8	1.0	1.3	2.1	–0.6	1.2	0.2	1.2	0.6	0.2	0.6	0.6	5.4	3.2	2.5
Imports (41%)	0.6	1.3	0.3	1.5	–0.2	1.1	1.2	1.2	0.4	0.7	0.7	0.7	4.1	3.2	3.3
Contributions to GDP growth															
Domestic demand excluding inventories	0.1	0.8	0.4	0.4	0.3	0.5	0.2	0.6	0.5	0.4	0.4	0.3	1.9	1.6	1.8
Change in inventories	0.0	–0.1	–0.2	–0.1	0.3	–0.2	0.4	–0.4	–0.3	0.1	–0.1	0.0	–0.1	0.1	–0.4
Foreign trade	0.6	0.0	0.5	0.4	–0.2	0.1	–0.4	0.0	0.1	–0.2	0.0	0.0	0.8	0.1	–0.2

Forecast

Consumer prices in Eurozone

change in a % and contributions in points

GPI groups (2018 weightings)	Q1 2019		Q2 2019		Q3 2019		Q4 2019		Annual averages	
	ga	cga	ga	cga	ca	cga	ca	cga	2018	2019
All (100.0%)	**1.4**		**1.5**		**1.3**		**1.3**		**1.8**	**1.4**
Food (including Alc. and Tabacco) (19.6%)	**1.9**	**0.4**	**1.5**	**0.3**	**1.4**	**0.3**	**1.6**	**0.3**	**2.2**	**1.6**
Energy (9.6%)	3.8	0.4	3.9	0.4	2.0	0.2	1.0	0.1	6.3	2.6
"Core" inflation (70.8%)	1.0	0.7	1.2	0.8	1.1	0.8	1.3	0.9	1.0	1.1

Forecast

* The 2018 figure is the growth overhang at the end of H1

France (21%)[1]	Quarterly change in %												Annual change in %		
	2017				2018				2019				2017	2018	2019
	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4			
Supply and use table (in real terms)															
GDP	**0.9**	**0.7**	**0.6**	**0.7**	**0.3**	**0.2**	**0.3**	**0.4**	**0.3**	**0.3**	**0.3**	**0.3**	**2.4**	**1.7**	**1.3**
Private consumption (54%)	0.3	0.3	0.6	0.2	0.3	–0.3	0.4	0.3	0.4	0.3	0.5	0.4	1.6	0.9	1.3
Investment (22%)	2.4	1.1	1.2	0.9	–0.1	1.0	0.8	0.6	0.5	0.5	0.4	0.4	5.0	2.8	2.3
Public consumption (24%)	0.2	0.4	0.6	0.2	0.0	0.1	0.1	0.4	0.2	0.3	0.3	0.3	1.5	0.8	1.0
Exports (30%)	–0.2	2.5	0.7	2.1	–0.4	0.7	0.5	2.0	0.4	–0.7	0.7	1.4	4.0	3.5	2.5
Imports (31%)	2.0	–0.1	1.4	0.6	–0.7	0.8	–0.2	1.1	1.4	–0.3	0.9	1.1	4.1	1.2	2.8
Contributions to GDP growth															
Domestic demand excluding inventories	0.7	0.5	0.7	0.4	0.1	0.1	0.4	0.4	0.4	0.3	0.4	0.4	2.3	1.3	1.4
Changes in inventories	0.8	–0.6	0.2	–0.1	0.1	0.1	–0.4	–0.2	0.3	0.0	–0.1	–0.1	0.2	–0.3	–0.1
Foreign trade	–0.7	0.8	–0.2	0.4	0.1	0.0	0.2	0.3	–0.3	–0.1	0.0	0.1	–0.1	0.7	–0.1

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. Share in Eurozone GDP in 2016

Sources: Eurostat. INSEE

Germany (29%)[1]	Quarterly change in %												Annual change in %		
	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Supply and use table (in real terms)															
GDP	1.1	0.5	0.6	0.5	0.4	0.5	–0.2	0.0	0.4	0.2	0.2	0.2	2.5	1.5	0.8
Private consumption (53%)	0.4	0.8	0.4	0.3	0.2	0.3	–0.1	0.3	1.2	0.4	0.3	0.3	2.0	1.1	2.0
Investissement (20%)	2.0	1.3	0.4	0.3	1.1	0.6	0.5	0.8	1.1	0.3	0.4	0.4	3.6	2.7	2.7
Public consumption (20%)	0.5	0.4	0.3	0.4	–0.3	0.7	–0.3	1.3	–0.3	0.5	0.5	0.5	1.6	1.0	1.5
Exports (46%)	2.3	1.1	1.2	1.7	–0.2	0.8	–0.9	0.6	1.0	0.0	0.6	0.4	5.3	2.2	1.7
Imports (38%)	1.1	1.9	0.5	1.4	–0.3	1.5	1.3	0.7	0.7	0.7	0.7	0.7	5.3	3.4	3.3
Contributions to GDP growth															
Domestic demand excluding inventorie	0.7	0.7	0.3	0.3	0.3	0.4	0.0	0.6	0.8	0.4	0.3	0.3	2.1	1.3	1.9
Change in inventories	–0.2	0.0	–0.1	0.0	0.1	0.3	0.8	–0.6	–0.6	0.1	–0.1	0.0	0.0	0.5	–0.5
Foreign trade	0.7	–0.2	0.3	0.2	0.0	–0.2	–0.9	0.0	0.2	–0.3	0.0	–0.1	0.3	–0.4	–0.6

Forecast

Italy (16%)[1]	Quarterly change in %												Annual change in %		
	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Supply and use table (in real terms)															
GDP	**0.6**	**0.4**	**0.4**	**0.4**	**0.2**	**0.0**	**–0.1**	**–0.1**	**0.1**	**0.2**	**0.1**	**0.1**	**1.8**	**0.7**	**0.2**
Private consumption (60%)	0.8	0.1	0.3	0.0	0.5	–0.1	0.0	0.2	0.1	0.3	0.1	0.1	1.5	0.6	0.6
Investissement (17%)	–1.8	1.3	3.2	2.0	–1.7	2.7	–1.2	0.6	0.6	0.3	0.3	0.3	4.5	3.2	1.6
Public consumption (19%)	0.6	–0.1	–0.1	0.2	0.1	0.1	–0.2	–0.2	0.2	0.0	0.0	0.0	0.3	0.2	0.0
Exports (30%)	3.2	–0.2	1.5	1.9	–2.2	0.8	1.1	1.4	0.2	0.9	0.5	0.5	6.4	1.4	3.1
Imports (26%)	2.0	1.4	0.9	1.6	–1.9	1.6	0.4	1.3	–1.5	1.3	0.7	0.7	5.8	1.8	1.5
Contributions to GDP growth															
Domestic demand excluding inventorie	0.3	0.3	0.7	0.4	0.0	0.4	–0.3	0.2	0.2	0.2	0.1	0.1	1.8	0.9	0.6
Change in inventories	–0.1	0.6	–0.5	–0.1	0.4	–0.2	–0.1	–0.4	–0.6	0.0	0.0	0.0	–0.4	–0.1	–1.0
Foreign trade	0.4	–0.5	0.2	0.1	–0.2	–0.2	0.2	0.1	0.5	–0.1	0.0	0.0	0.4	–0.1	0.5

Forecast

Spain (10%)[1]	Quarterly change in %												Annual change in %		
	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Supply and use table (in real terms)															
GDP	**0.8**	**0.9**	**0.6**	**0.7**	**0.6**	**0.6**	**0.5**	**0.6**	**0.7**	**0.6**	**0.6**	**0.6**	**3.0**	**2.6**	**2.5**
Private consumption (58%)	0.5	0.8	0.9	0.4	0.9	0.1	0.6	0.4	0.3	0.6	0.5	0.5	2.5	2.3	1.8
Investissement (20%)	2.4	–0.2	2.3	0.6	1.2	3.2	0.2	–0.2	1.5	0.6	0.9	0.9	4.8	5.3	3.3
Public consumption (19%)	1.1	0.6	0.6	0.3	0.6	0.3	0.8	0.4	0.4	0.4	0.4	0.4	1.9	2.1	1.8
Exports (33%)	1.3	1.3	0.1	1.4	1.0	0.1	–0.8	0.7	–0.5	1.0	0.5	0.5	5.2	2.3	0.8
Imports (30%)	2.4	0.5	1.9	0.6	1.8	0.8	–0.9	0.0	–1.1	0.8	0.4	0.4	5.6	3.5	–0.5
Contributions to GDP growth															
Domestic demand excluding inventorie	1.0	0.6	1.1	0.4	0.9	0.8	0.5	0.3	0.6	0.5	0.6	0.6	2.8	2.8	2.1
Change in inventories	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Foreign trade	–0.3	0.3	–0.5	0.3	–0.2	–0.2	0.0	0.3	0.2	0.1	0.0	0.0	0.1	–0.3	0.4

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. INSEE

United States of America	Quarterly change in %												Annual change in %		
	2017				2018				2019						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Supply and use table (in real terms)															
GDP	**0.4**	**0.7**	**0.7**	**0.6**	**0.5**	**1.0**	**0.8**	**0.5**	**0.8**	**0.4**	**0.5**	**0.5**	**2.2**	**2.9**	**2.5**
Private consumption (67%)	0.4	0.7	0.6	1.0	0.1	0.9	0.9	0.6	0.3	0.8	0.5	0.5	2.5	2.6	2.4
Private Investissement (17%)	2.4	1.1	0.6	1.5	1.9	1.6	0.3	0.8	0.2	–0.3	0.4	0.5	4.8	5.2	1.5
government expenditures and public investment (18%)	–0.2	0.0	–0.3	0.6	0.4	0.6	0.6	–0.1	0.6	0.9	0.6	0.6	–0.1	1.5	2.2
Exports (14%)	1.2	0.9	0.9	1.6	0.9	2.2	–1.2	0.4	1.2	–0.7	0.0	0.5	3.0	4.0	1.0
Imports (16%)	1.2	0.6	0.7	2.8	0.7	–0.1	2.2	0.5	–0.6	–0.1	0.4	0.7	4.6	4.5	1.1
Contributions to GDP growth															
Domestic demand excluding inventorie	0.7	0.7	0.4	1.0	0.5	1.0	0.7	0.5	0.4	0.7	0.5	0.5	2.5	2.9	2.2
Change in inventories	–0.2	0.1	0.3	–0.2	0.1	–0.3	0.6	0.0	0.1	–0.2	0.0	0.0	0.2	0.3	0.3
Foreign trade	0.0	0.0	0.0	–0.2	0.0	0.3	–0.5	0.0	0.2	–0.1	–0.1	0.0	–0.4	–0.3	–0.1

Forecast

United Kingdom	Quarterly change in %												Annual change in %		
	2017				2018				2019						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Supply and use table (in real terms)															
GDP	**0.4**	**0.3**	**0.5**	**0.4**	**0.1**	**0.4**	**0.7**	**0.2**	**0.5**	**0.0**	**0.4**	**0.1**	**1.8**	**1.4**	**1.3**
Private consumption (63%)	0.7	0.4	0.5	0.3	0.5	0.5	0.4	0.3	0.7	0.2	0.4	0.2	2.2	1.8	1.6
Investissement (17%)	1.0	1.9	0.3	0.7	–0.8	–0.6	0.9	–0.6	2.1	–0.4	0.2	0.3	3.5	0.2	1.7
Public consumption (22%)	–0.6	0.4	0.0	0.0	0.1	–0.4	–0.1	1.1	1.1	0.5	0.5	0.5	–0.2	0.1	2.6
Exports (28%)	0.2	1.2	1.9	0.1	–1.3	–1.0	0.9	1.6	1.5	–2.0	0.5	–0.5	5.6	0.1	1.5
Imports (30%)	0.9	0.9	0.6	–0.6	–0.6	0.4	0.7	2.1	10.8	–5.0	1.5	0.2	3.5	0.7	9.6
Contributions to GDP growth															
Domestic demand excluding inventorie	0.5	0.7	0.4	0.3	0.2	0.2	0.4	0.3	1.0	0.2	0.4	0.3	1.7	1.1	1.7
Change in inventories	0.1	–0.5	–0.2	–0.1	0.1	0.7	0.3	0.1	2.5	–1.3	0.4	0.0	–0.4	0.5	2.1
Foreign trade	–0.2	0.1	0.4	0.2	–0.2	–0.4	0.0	–0.2	–3.0	1.1	–0.4	–0.2	0.5	–0.2	–2.5

Forecast

Japan	Quarterly change in %												Annual change in %		
	2017				2018				2019						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Supply and use table (in real terms)															
GDP	**0.8**	**0.5**	**0.6**	**0.3**	**–0.1**	**0.6**	**–0.6**	**0.5**	**0.6**	**0.2**	**0.5**	**–0.3**	**1.9**	**0.8**	**1.0**
Private consumption (56%)	0.6	1.0	–0.9	0.4	–0.1	0.6	–0.3	0.3	–0.1	0.3	1.5	–2.1	1.1	0.4	0.6
Investissement (24%)	1.1	1.5	0.4	0.0	0.1	1.3	–2.1	1.7	0.5	0.6	0.4	0.3	3.0	1.1	1.8
Public consumption (20%)	0.3	–0.1	0.3	0.0	0.3	0.1	0.2	0.7	–0.1	0.2	0.3	0.2	0.3	0.8	0.9
Exports (16%)	2.1	0.1	2.2	2.0	1.0	0.7	–2.0	1.2	–2.4	2.0	0.2	0.3	6.8	3.3	–0.7
Imports (15%)	1.9	1.8	–0.9	2.2	0.7	1.0	–1.0	3.0	–4.6	2.5	2.5	–2.0	3.5	3.4	–0.1
Contributions to GDP growth															
Domestic demand excluding inventorie	0.7	0.9	–0.3	0.2	0.0	0.7	–0.6	0.7	0.1	0.3	1.0	–1.1	1.4	0.6	1.0
Change in inventories	0.1	0.0	0.4	0.1	–0.2	0.0	0.2	0.1	0.1	–0.1	–0.1	0.4	0.0	0.1	0.2
Foreign trade	0.1	–0.3	0.5	0.0	0.0	–0.1	–0.2	–0.3	0.4	–0.1	–0.4	0.4	0.6	0.0	–0.1

Forecast

How to read it: % in brackets represent the weight in the nominal GDP in 2016

Source : BEA. ONS. Japan Cabinet Office. INSEE forecast