MACROECONOMIC PROJECTIONS

FRANCE



December 2019

- French GDP growth is expected to be confirmed at 1.3% in 2019. It should then ease temporarily to 1.1% in 2020 before strengthening again to 1.3% in 2021 and 2022. Against this backdrop, the unemployment rate should continue to decline, falling to below the 8% mark by the end of 2022.
- In 2019 and 2020, the sharp deterioration in the international environment is expected to translate into a marked slowdown in exports.
- Growth should nonetheless prove resilient in France, buoyed by strong domestic demand. Business investment should continue to be supported by favourable financial conditions. The significant purchasing power gains since end-2018 should also drive a gradual pick-up in household consumption growth, which is projected to peak in 2020.
- In 2021 and 2022, the composition of growth should become more balanced. Foreign demand and French exports are expected to recover progressively. Conversely, growth in household consumption and investment should ease to a rate more in line with GDP.
- French headline inflation (HICP) should bottom out at an annual average of 1.1% in 2020, reflecting a slowdown in food inflation and a drop in energy prices. It should then strengthen to 1.3% in 2021 and 1.4% in 2022, buoyed by a recovery in its non-energy, non-food component.
- These projections are subject to significant risks relating to the evolution of the international environment. However, the uncertainties surrounding our projection for French growth now appear balanced.

KEY PROJECTIONS FOR FRANCE

	2016	2017	2018	2019	2020	2021	2022
Real GDP	1.0	2.4	1.7	1.3	1.1	1.3	1.3
Contributions to GDP growth (in percentage points) ^{a)}							
Domestic demand (excluding changes in inventories)	1.8	2.3	1.3	1.7	1.5	1.4	1.3
Net exports	-0.4	-0.1	0.7	-0.2	-0.3	-0.1	0.0
Changes in inventories	-0.3	0.2	-0.2	-0.2	-0.1	0.0	0.0
Household consumption (52%) ^{b)}	1.6	1.6	0.9	1.2	1.5	1.4	1.2
Government consumption (23%)	1.4	1.5	8.0	1.1	0.9	1.2	1.2
Total investment (23%)	2.5	5.0	2.8	3.4	2.2	1.3	1.4
Government investment (3%)	0.0	0.5	2.4	3.9	1.5	-0.6	0.0
Household investment (5%)	2.8	6.6	2.0	1.6	0.4	0.5	0.8
Business investment							
(NFCs-FCs-IEs) (14%)	3.1	5.5	3.2	3.9	3.1	2.1	1.9
Exports (31%)	1.8	4.0	3.5	2.2	1.9	2.6	2.7
Imports (32%)	3.0	4.1	1.2	2.8	2.9	2.8	2.5
Real household gross disposable income	1.6	1.4	1.2	2.1	1.6	1.1	1.3
Net job creations (thousands)	176	275	288	266	153	82	77
ILO unemployment rate (France and overseas departments,							
% of labour force)	10.0	9.4	9.1	8.5	8.2	8.1	8.0
HICP	0.3	1.2	2.1	1.3	1.1	1.3	1.4
HICP excluding energy and food	0.6	0.5	0.9	0.6	1.0	1.3	1.4
GDP deflator	0.5	0.5	0.8	1.5	0.8	0.9	1.2

Sources: INSEE data up to the third quarter of 2019 (quarterly national accounts published on 30 October 2019). Blue-shaded columns show Banque de France projections.

Figures are adjusted for the number of working days.

a) Individual contributions may not add up to GDP growth as figures have been rounded.

b) Percentages in brackets refer to each item's share of GDP in 2018.

Due to the deterioration in the international environment, French growth should ease to 1.1% in 2020, but pick up again to 1.3% in 2021 and 2022

Faced with the slowdown in global activity since the start of 2018 (see Chart 2), the French economy has proved more resilient than some of its European partners. Economic activity expanded by 1.3% year-on-year in the third quarter of 2019, compared with growth of just 0.5% in Germany and 0.3% in Italy. Nevertheless, based on the Banque de France business surveys published on 9 December, French GDP growth should slow to 0.2% in the fourth quarter, from 0.3% in the third quarter. This moderation should continue at the start of 2020, and French GDP growth should then increase from the middle of 2020 onwards (see Chart 1).

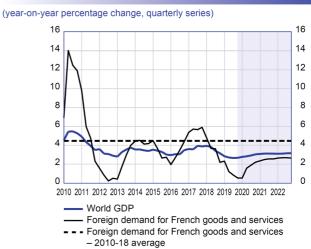
Chart 1: Real GDP growth in France



Sources: INSEE data up to the third quarter of 2019. Blue-shaded area shows Banque de France projections.

Note: The curve shows the percentage change year-on-year and the horizontal lines show the annual average percentage change.

Chart 2: Growth in world GDP and foreign demand for French goods and services



Source: Eurosystem technical assumptions

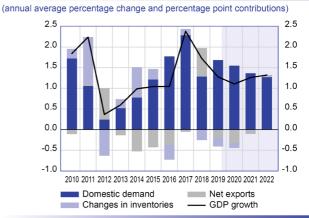
This trajectory of a slight softening then a rebound in activity tracks the path of foreign trade, although with a significant decoupling in 2019 and 2020 thanks to the resilience of French domestic demand (see Chart 3). Business

investment should prove very buoyant in 2019, for example. Moreover, the major purchasing power gains seen since the final quarter of 2018 should gradually translate into stronger household consumption, particularly in 2020. This should help to keep GDP growth at an annual rate of 1.3% in 2019 and 1.1% in 2020, despite the markedly negative contribution from net exports.

The composition of French growth is expected to balance out again in 2021 and 2022. Exports should gradually recover whereas domestic demand should soften as growth in household consumption and business investment eases to a rate similar to that of activity.

These projections are based on the quarterly national accounts published by INSEE on 30 October which cover the period up to the third

Chart 3: Contributions to GDP growth



Sources: INSEE data up to the third quarter of 2019. Blue-shaded area shows Banque de France projections.

Note: Domestic demand groups together private and government consumption as well as household, business and government investment.

quarter of 2019. They also factor in the technical and international environment assumptions used in the Eurosystem December projection exercise, for which the cut-off date is 19 November (see Table A in the appendix).

Compared with our September projections, GDP growth has been revised downwards moderately. For the second half of 2019, the revision stems from a slight negative surprise on third quarter growth, and a cut to our projection for fourth quarter growth. In 2020 (-0.2 percentage point) and 2021 (-0.1 percentage point), the main loss of momentum since September is linked to foreign trade and the downward revision to demand from France's main

trading partners, especially those outside the euro area. This deterioration has knock-on effects on all components of demand as well as on the labour market and inflation. Our September projections already factored in the reduction in income tax and freezing of the index points in the public sector pay grid in 2020, as well as the reform to unemployment benefit and renewed cuts in housing tax for 2021 and 2022. As a result, the fiscal measures included in the budget law for 2020 have little impact on the revisions to our September projections.

The high purchasing power gains in 2019 and 2020 stem from various sources

After rising at a lower rate than GDP per capita in 2017 and 2018, the purchasing power of per capita disposable income is expected to accelerate considerably in 2019 (see Chart 4), growing by an average of 2%, which is the highest rate since 2007. It should then continue to rise at a sustained pace in 2020 (1.3%), before settling into a path similar to that of GDP per capita (growth of 0.8% in 2021 and 1.0% in 2022, compared with 1.0% in 2021 and 2022 respectively for GDP per capita). Of course, these purchasing power gains are averages for the entire population and individual situations will differ depending on the household category. The increase in purchasing power is expected to derive from a combination of favourable factors.

Chart 4: Contributions to changes in purchasing power of household GDI and changes in purchasing power per capita

(annual average percentage change and percentage point contributions)

4
3
2
1
0
-1
-2
2014 2015 2016 2017 2018 2019 2020 2021 2022

— Purchasing power of gross disposable income per capita

Average per capita wage

Employment

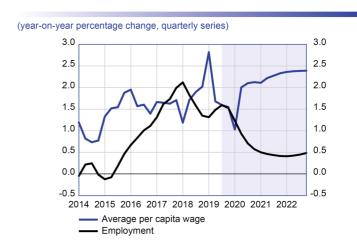
Other income

Direct taxes, social security benefits and transfers

Inflation (household consumption deflator)

Sources: INSEE data up to the second quarter of 2019. Blue-shaded area shows Banque de France projections.

Chart 5: Market sector wages and employment



Sources: INSEE data up to the second quarter of 2019. Blue-shaded area shows Banque de France projections.

First, the fiscal measures put in place since the end of 2018 and those planned for 2020 should lend support to household disposable income. This is particularly true for 2019 with the *mesures d'urgence économiques et sociales* (MUES – emergency economic and social measures) voted into law in December 2018 (especially the rise in the activity bonus and exemption of overtime from taxes and social security contributions), but also the measures introduced prior to this (especially the first full-year impact of the cuts to employee social security contributions and the reduction in housing tax). Added to this will be the measures voted into law in the 2020 budget. However, these will in part be offset by the savings expected under the reforms to unemployment benefit and the continuation of the public sector pay freeze in 2020.

In addition, household disposable income should be supported over the entire projection horizon by robust growth in household labour income. In 2019 and to a lesser extent 2020, this should be driven notably by the strong pace of employment growth, which remained high in 2019 (around 270,000 net new jobs) despite the slowdown in activity (see box on this subject in the September 2019 *Macroeconomic projections*, and Box 1 below). Employment growth should subsequently ease progressively as productivity begins to accelerate; net job creations are projected to fall to 150,000 in 2020, and then to stabilise at around 80,000 per year in 2021 and 2022. This should allow the unemployment rate to continue declining over the entire projection horizon, reaching 7.9% at end-2022. Despite the relative slowdown in employment growth, household labour income should be supported in 2021 and 2022 by an acceleration in the average per capita wage linked to productivity gains (see Chart 5).

On the downside, households should see a steady fall in their net financial income between 2019 and 2022, mirroring the decline in government interest payments. The technical assumption, constructed on the basis of forward

contracts, is for interest rates to remain low up to 2022, which should lead to further falls in the returns on household saving products. However, assuming that households have a relatively low propensity to spend their financial income, this trend should have a limited impact on consumer spending: it should essentially be absorbed by the saving ratio, which is thus expected to retreat slightly in 2021 and 2022.

Household purchasing power should also be boosted by the drop in oil prices since mid-2018. The price of Brent oil is predicted to reach EUR 56 per barrel by the end of 2019, down EUR 9 from its mid-2018 peak. Based on futures prices, the assumption for these projections is then that oil prices will stabilise at a slightly lower level of EUR 51 in 2021 and 2022 (see section below on inflation).

Box 1

Total employment in France has increased by 1 million over the past four years

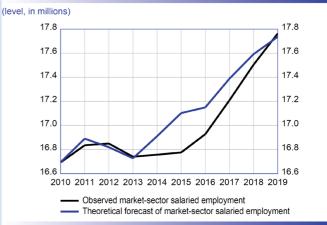
In 2019, and for the third consecutive year, net job creations in the economy as a whole will exceed 250,000 in annual average terms (see Table C4 in the appendix), meaning that during the four-year period from 2016 to 2019, around 1 million new jobs will have been created in France. This is the biggest cumulative four-year increase since 2008. Furthermore, on this occasion these new jobs have mainly been salaried employment in the market sector. Indeed, non-market sector employment has declined slightly over the period, largely due to the reduction in subsidised contracts, and the improvement in non-salaried employment has been limited (an increase of approximately 30,000 jobs in four years).

The strong growth in market-sector salaried employment since 2016 is due to the recovery in economic activity, particularly since 2017, and to the richer employment content of growth linked to the economic policies put in place. In the last few years, these policies have mainly targeted two objectives: (i) considerably reducing the cost of labour (the Tax Credit for Competitiveness and Employment or CICE); and (ii) reforming the functioning of the labour market (the El-Kohmri law of 2016, executive orders of 2017).

The accompanying chart compares observed market-sector salaried employment with the "target" or "theoretical forecast" resulting from a simple theoretical framework (and the long-term simulation used in our projection model), in which the level of market-sector employment in the economy depends on the level of market value added with an elasticity of 1 and on the level of real labour cost with an (econometrically estimated) elasticity of 0.5. The CICE is also incorporated into the cost of labour for 2014 to 2018.

Obviously, this simple macroeconomic approach does not make it possible to identify which measure or reform, with multiple channels, specifically affected the trends in value added and cost of labour and, therefore, employment. Nor does it describe the short-term mechanisms that may have led to the divergence between the observed figures and the target from 2014 onwards, with, on the one hand, an "employment lag" phase in 2014 and 2015, and on the other, a catch up phase from 2016 onwards. It does, however, show that the level of market-sector employment reached in 2019 is very consistent with its two determinants – strength of economic activity and cost of labour. Quarterly surprises aside, the substantial net job creations observed during

Observed market-sector salaried employment and theoretical forecast



Sources: INSEE data and Banque de France calculations.

the past four years strongly reflect a lasting improvement in labour market conditions. Mechanically, the trade-off is a slowdown in productivity.

In the quarters and years to come, a certain number of factors are likely to further boost net job creations, particularly the transformation of the CICE into a reduction in social security contributions in early 2019, enhanced tax relief on minimum and near-to-minimum wages since October 2019, and labour market reforms (notably the executive orders of 2017 and the vocational training and unemployment benefit reforms).

Household consumption should support domestic demand in 2020 before easing to a growth rate similar to that of GDP

Household consumption is projected to grow by 1.2% in 2019, outstripping the 0.9% rise seen in 2018. The increase should mainly be driven by the strong purchasing power gains seen since mid-2018, although a share of these has been saved. Household consumption growth is expected to continue accelerating on the back of further purchasing power gains, and should reach a peak in mid-2020 (see Chart 6). In annual average terms, therefore, it is predicted to reach 1.5% in 2020, before stabilising at a rate similar to that of GDP.

The household saving ratio is anticipated to peak at 15.0% in 2020, but should then retreat slightly as the purchasing power gains are gradually consumed, and then stabilise at around 14.8% in 2022. Already in December 2017, we predicted that the strong growth in purchasing power expected for 2019 would be accompanied by a significant rise in the saving ratio. The sharp increase observed in 2019 (with the saving ratio reaching 14.8% in the second quarter of 2019, compared with an average of 14.2% in 2018) brings the saving ratio back up to a level slightly above the average since 2000 (14.6%), after a period marked by a lower ratio (average of 14.0%) from 2015 to 2017.

The household investment ratio, which measures investment expenditure as a percentage of

Chart 6: Household consumption



Sources: INSEE data up to the third quarter of 2019. Blue-shaded area shows Banque de France projections.

disposable income, is seen stabilising as of 2019 after two consecutive years of strong growth. Household investment has already begun to slow in 2019 and should continue to lose momentum in 2020 (growth of 0.4%) before recovering slightly as of 2021.

The business investment ratio should reach a historical high

Business investment was particularly buoyant in the second and third quarters of 2019, and is projected to grow by a robust 3.9% over the full year. This should push the investment ratio for non-financial corporations (NFCs) well above its previous peaks (see Chart 7). The strength in investment is notably being fuelled by the steep fall in the corporate cost of capital since 2012's peak, which is linked to the decline in the cost of debt thanks to the Eurosystem's highly accommodative monetary policy. However, with the slowdown in activity, business investment should moderate to an extent, but should still grow at a much higher rate than GDP.

The breakdown of investment spending by product also highlights the significant role played by the digital transformation in fuelling the strength in business investment. Investment in information and communication services accounted for 40% of overall business investment growth over the period 2014-19, far outstripping the contributions of all other forms of investment. As a result of this dynamism, spending on information and communication services now accounts for around a quarter of total business investment, compared with some 15% at the start of the 2000s.

After peaking in 2019 (under the double impact of the Tax Credit for Competitiveness and Employment (CICE) received in 2019 for 2018, and the cut in social security contributions implemented at the start of 2019), the NFC margin rate is projected to stabilise at around 31.4% of value added as of 2020, which is still slightly below the average level observed since

Chart 7: Cost of capital and investment ratio of non-financial corporations

(cost of capital in %, investment ratio as a percentage of value added)

9
8
7
6
22
23
2006 2008 2010 2012 2014 2016 2018 2020 2022

— Weighted average cost of capital (WACC) of non-financial corporations (left-hand scale)
— Investment ratio of non-financial corporations (right-hand scale)
(right-hand scale)

Sources: Banque de France (cost of capital). INSEE data up to the second quarter of 2019 and Banque de France projections in the blue-shaded area (investment ratio). Note: The weighted average cost of capital (WACC) is the weighted average of the yields on BBB-rated corporate bonds, bank lending rates for businesses and the cost of equity.

2000 (31.8%). In parallel, however, the NFC saving ratio is predicted to remain well above its historical average at around 22.5% in 2020-22, thanks notably to the decline in interest payments.

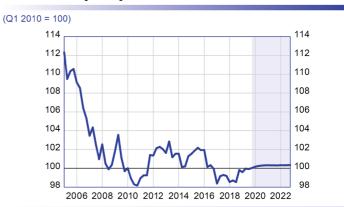
The international environment should remain particularly weak in 2020 and its recovery as of 2021 should still fall far short of previous favourable periods

French exports are expected to be impacted by the persistent worsening of the global trade outlook. As a result, the projection for foreign demand for French goods and services has been revised downwards again (-0.2 percentage point in 2019 versus September, -0.8 percentage point for 2020 and -0.5 percentage point for 2021), after the already significant revisions made in June and September (especially for 2019). December's revision essentially reflects the deterioration in demand from Asia and the United States, which also affects activity and demand in our main euro area trading partners. Foreign demand for French goods and services is now expected to grow by 1.2% in 2019, the lowest rate since 2012, and then by just 1.5% in 2020. It should then recover, but will continue to rise at a rate below previous trends (see Chart 2). As a result, foreign demand is expected to remain a drag on French growth in the medium term.

This sluggish trade outlook is anticipated to translate into a marked slowdown in French export growth, to 2.2% in 2019 (from 3.5% in 2018) and 1.9% in 2020. The resilience of exports in comparison with foreign demand in 2019 reflects the recovery in export performances since mid-2018 (see Chart 8 and Box 2).

Imports in turn should grow at a similar rate to domestic demand, although some slight time lags could occur. After growing by a subdued 1.2% in 2018, imports have gained traction recently (growth of 3.4% year-on-year in the third quarter of 2019). Import growth should peak at an annual average of 2.9% in 2020, reflecting the acceleration in household consumption, before slowing again progressively in 2021 and 2022.

Chart 8: Export performances



Sources: Eurosystem, INSEE data up to the third quarter of 2019. Blue-shaded area shows Banque de France projections.

Note: Export performance is defined as the ratio between exports and foreign demand.

Box 2

The recovery in French export performances since mid-2018, after a particularly pronounced dip in 2016-17, reflects a rebound in France's stronghold sector exports

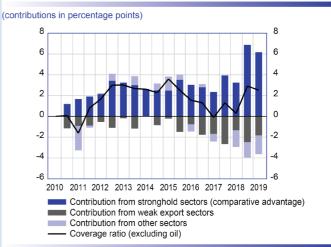
France's export performances, defined as the ratio between exports and foreign demand, went through a soft patch in 2016-17 and reached a low in 2017 (see Chart 8 above). However, export performances began to pick up in mid-2018, which explains the relative resilience of French exports to the sharp deterioration in global

demand observed in 2019.

Since the beginning of the 2000s when specialisation in France was less pronounced than that of its main European partners, France's foreign trade has developed to become significantly more specialised (see Camatte (H.) and Gaulier (G.) (2018), "Sectoral specialisation and the downturn in France's foreign trade between 2014 and 2016", Rue de la Banque No. 71). France's trade specialisation intensity is now similar to that of Italy or Spain, although it still falls well short of that of Germany. According to customs data, France's stronghold sectors (product categories whose average coverage ratio - exports as a percentage of imports - exceeds 110%) are aeronautics, pharmaceutical products, luxury goods and cosmetics, agrifood products and automobile equipment (although the coverage ratios for the latter have declined steadily, related to production being relocated abroad, but with a time lag compared with the offshoring of automobile manufacturing). Conversely, France's weak export sectors seem to be electronic equipment and mass consumer goods.

With regard to this specialisation, the deterioration in the coverage ratio from 2014 onwards stemmed from worsening negative contributions from the weak export sectors, which is to be expected when international trade volumes are rising, but

Cumulative contributions to growth in the non-energy goods coverage ratio



Sources: Customs authorities and Banque de France calculations.

Note: Coverage ratio (exports as a percentage of imports) as percentage deviations from the first half of 2010. Contributions from: (i) stronghold sectors (including aeronautics); (ii) weak export sectors (including computer equipment); and (iii) other products (including automobile manufacturing).

which were not offset by additional positive contributions from France's stronghold sectors (see the accompanying chart). However, the recovery since mid-2018 is the result of a sharp upturn in stronghold sector performance, particularly in aeronautics.

Over the projection horizon, this pronounced dependence on specific export sectors (particularly aeronautics) could leave France more open to sectoral shocks (such as targeted tariff hikes). However, France's exports could also be less vulnerable than those of Germany and Italy to shocks in foreign demand affecting automobile and machinery durable goods. Our projection is therefore subject to these – ultimately symmetric – uncertainties.

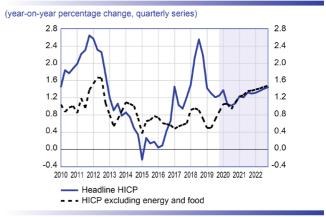
Inflation should fall to a low of 1.1% in 2020 due to a slowdown in energy and food prices, but is then seen recovering gradually to 1.4% in 2022, essentially on the back of higher services prices

HICP inflation has gradually decreased over 2019, and came out at 1.2% in the third quarter of the year (see Chart 9). The decline is mainly the result of a slowdown in energy and food inflation. On the one hand, energy prices have

seen weaker growth due to the drop in oil prices and the cancellation of the hike in the domestic consumption tax on energy products (TICPE) at the beginning of 2019, both of which had a strong upward impact on energy prices in 2018. On the other hand, although food prices remain dynamic, they have nonetheless slowed overall throughout the year. The slowdown was particularly marked in September and October 2019, following the sharp price rises over the summer triggered by high temperatures across France.

Inflation excluding energy and food has risen slightly over the year: after a particularly subdued first half with the rate remaining at around 0.5%, it strengthened again in the third quarter to 0.7%. Services inflation has gained traction over the year, rising from less than 1% in the first half to around 1.5% at the end of the third quarter.

Chart 9: HICP and HICP excluding energy and food



Sources: INSEE data up to October 2019. Blue-shaded area shows Banque de France projections.

In 2019, headline HICP inflation should thus come out at 1.3% in annual average terms, while inflation excluding energy and food is expected to average 0.6%. These figures are unchanged from our September projections.

In 2020, HICP inflation should moderate further to 1.1%, with the decline stemming mainly from energy and food. After lower growth in 2019, energy prices are expected to trend downwards in 2020, in line with the trajectory of oil prices. Meanwhile food inflation should also continue to slow from its summer 2019 peak. In contrast, inflation excluding energy and food is projected to remain on its recent upward trend, reaching 1.0% in 2020. The increase should mainly be driven by services inflation, which is predicted to rise to an annual average rate of 1.8% in 2020.

Following this soft patch, headline HICP inflation should then pick up again to 1.3% in 2021 and 1.4% in 2022, and by the end of the horizon should be supported more evenly by its different components. Food inflation should continue to ease, largely as a result of smaller tobacco price rises than in the recent past. Energy inflation is predicted to gain momentum again gradually, but should nonetheless remain weak. Inflation excluding energy and food is expected to continue to rise, reaching 1.3% in 2021 and 1.4% in 2022. The upward trend should be helped by stronger growth in manufactured goods prices, but is mainly expected to be driven by services inflation, which is seen hovering around 2.0% in annual average terms in 2021 and 2022. This should reflect the dynamism of the labour market and wages.

However, in line with the September projections, inflation excluding energy and food is expected to follow an uneven trajectory owing to various economic policy measures: social housing rents are expected to be cut again in January 2020 (after a first reduction in June 2018); flight prices are projected to rise with the introduction of a new ecotax in January 2020, and prices of optical products, hearing aids and dental prostheses are expected to fall with the gradual introduction of the zero excess law between 2019 and 2021 (although the price of complementary health insurance is anticipated to rise).

The government deficit should tend towards 2% of GDP and government debt should stabilise at just below 100% of GDP, with significant tax cuts taking effect and spending growth set to remain robust, excluding the decline in interest payments

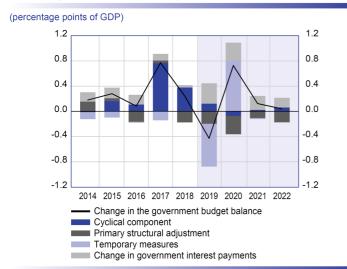
The government deficit is projected to widen to 3.0% of GDP in 2019 from 2.5% in 2018 owing to the transformation of the CICE into a permanent cut in employer social security contributions. Excluding this temporary impact, however, the deficit is estimated to come out at 2.1% of GDP for 2019. It should then reach 2.2% of GDP in 2020, before narrowing slightly towards a level close to 2%. These projections factor in all information contained in the 2020 budget law, and the recent announcements regarding the emergency plan for hospitals. In 2021 and 2022, only those measures set out in sufficient detail have been taken into account in our projections.

The aggregate tax-to-GDP ratio (taxes and social security contributions as a percentage of GDP) is predicted to fall to 44.1% by 2021-22, after reaching 45.2% in 2018. The cuts to taxes and social security contributions set out in the 2020 budget law (reform of the income tax brackets in 2020, gradual abolition of housing tax on principal residences for the remaining 20% of wealthier households as of 2021) will add to the reductions in the tax burden already included in previous budget laws (abolition of housing tax for 80% of households, full year of cuts to employee sickness and unemployment contributions, exemption of overtime from tax and social security contributions, gradual cut in corporation tax).

Government spending (excluding tax credits) is expected to rise by an average of 1.8% per year in nominal terms over the period 2019-22, and by 0.8% in real terms (adjusted for CPI excluding tobacco), of which 0.1 percentage point will be due to a scope effect with the incorporation of France Compétences into general government. Although certain measures should result in significant slowdowns in spending growth (freezing of the index points in the public sector pay grid, below-inflation rises in social security benefits, unemployment benefit reforms), the biggest savings come from the ongoing fall in interest payments due to historically low interest rates. Primary spending (excluding tax credits and interest payments) should in fact continue to rise by an average of 1.2% per year in real terms over 2019-22, which is close to the trend rate over the last ten years and to potential GDP growth.

The government's structural deficit, calculated using the European Commission's methodology and estimates for potential growth, should only narrow marginally over 2019-22, from 2.7% of GDP in 2018 to 2.5% of GDP in 2022, with the improvement stemming solely from lower interest payments. The primary structural adjustment is anticipated to be negative over the projection horizon (cumulative adjustment of -0.8 percentage point over 2019-22). According to these projections, government debt will rise again slightly up to 2021, then stabilise at just below 100% of GDP in 2022. In other words, the savings from the lower interest payments are expected to be matched by a relaxation of fiscal policy. This more active fiscal stance raises the question of its qualitative content:

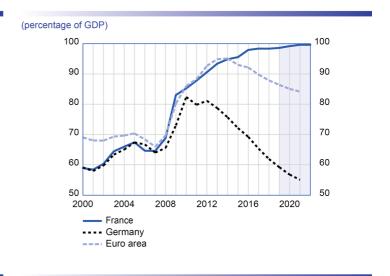
Chart 10: Contributions to changes in the government budget balance



Sources: INSEE data for the government budget balance and debt burden up to 2018 Blue-shaded area shows Banque de France projections.

Note: Primary structural adjustment calculated using the European Commission's methodology and estimates for potential GDP growth. Banque de France calculations for the entire period. Scope of temporary measures (mainly the double CICE impact for 2019-20) determined by the Banque de France.

Chart 11: Government debt



Sources: INSEE and European Commission data up to 2018. Blue-shaded area shows Banque de France and European Commission projections.

an assessment of its effects on growth, including over a medium-term horizon, should lead to a prioritisation of investment and spending on the future.

Any further deterioration in foreign demand could weigh on these projections, but, conversely, the high household saving ratio could also lead to stronger-than-expected growth in domestic demand

These projections remain subject to significant risks due to the particularly uncertain international environment. A sharper-than-expected deterioration in the outlook for activity in France's main economic partners, especially Germany and Italy, could weigh on French growth. Moreover, the trade measures already implemented or announced by the United States regarding Airbus and the wine sector could have a stronger-than-expected negative impact on France's stronghold export sectors. The possibility of an escalation in trade tensions between China and the United States continues to pose a significant downside risk. However, if the current signs of an economic stabilisation in certain trading partner countries were to be confirmed, this could have a positive impact on foreign demand for French goods, and thus on French activity. The consequences of Brexit are another potential risk, as the United Kingdom and European Union will have to negotiate the terms of their agreement on trade and financial services by December 2020.

On a domestic level, there is also some uncertainty over the speed at which households will consume their purchasing power gains. Given the high level of the household saving ratio in 2019, household consumption could rise more sharply than expected, which could in turn give a boost to French growth (although, conversely, we cannot rule out the possibility that households might remain very prudent and choose not to reduce their saving ratio at the end of the period).

The trajectory of prices is also subject to uncertainties. On the one hand, oil prices, which are assumed to fall slightly in these projections, remain volatile and subject to upside and downside risks. On the other hand, although inflation excluding energy and food has undeniably risen since the summer, it is still lower than the long-term average, generating uncertainties as to the extent of its recovery. Finally, although we have factored in the same effects from the "100% health" law as in our September projections, it is still difficult to evaluate precisely the full impact of the measures.

Appendix A: Eurosystem technical assumptions

Table A: Technical assumptions and international environmental

		December 2019 projections					Revisions since September 2019 projections			
	2016	2017	2018	2019	2020	2021	2022	2019	2020	2021
Technical assumptions										
Brent oil price (USD/barrel)	44.0	54.4	71.1	63.8	59.6	57.4	56.8	1.3	2.6	1.2
Brent oil price (EUR/barrel)	39.8	48.2	60.2	57.0	54.0	52.0	51.5	1.4	3.0	1.7
Non-energy commodity prices in EUR (annual percentage change)	-2.1	5.8	-0.6	1.6	5.2	2.6	2.4	-0.1	1.2	-1.1
USD/EUR exchange rate	1.11	1.13	1.18	1.12	1.10	1.10	1.10	0.0	0.0	0.0
Euro nominal effective exchange rate (annual percentage change) ^{b)}	3.8	2.2	5.2	-1.1	-0.7	0.0	0.0	-0.4	-1.2	0.0
3-month Euribor ^{c)}	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.3	0.0	0.2	0.2
10-year French government bond yields ^{c)}	0.5	8.0	0.8	0.1	0.1	0.2	0.4	0.1	0.3	0.3
International environment, annual percentage change										
Extra euro-area competitors' prices on the export side (in EUR)	-4.8	1.5	0.0	3.8	2.8	2.1	2.1	0.2	0.6	-0.3
World real GDP	3.1	3.8	3.6	2.7	2.9	3.1	3.1	-0.1	-0.3	-0.1
World (excluding euro area) real GDP	3.3	3.9	3.8	2.9	3.1	3.3	3.4	-0.1	-0.3	-0.2
Global (excluding euro area) trade	1.8	6.4	4.6	0.0	8.0	2.4	2.7	-0.4	-1.4	-0.5
Foreign demand for French goods and services	3.1	5.7	3.6	1.2	1.5	2.4	2.7	-0.2	-0.8	-0.5
Intra-euro area	4.1	5.8	3.1	2.1	2.4	2.7	2.8	-0.1	-0.5	-0.6
Extra-euro area	2.3	5.6	3.9	0.5	0.8	2.2	2.5	-0.3	-1.0	-0.4

Sources: Eurosystem. Blue-shaded columns show Banque de France projections.

Revisions to the September 2019 projections are expressed as absolute variations for levels and as percentage points for rates of growth.

a) These technical assumptions and international environment projections were constructed by the Eurosystem on 19 November 2019 for market data and foreign demand for French goods and services, in accordance with the principles set out in *A guide to the Eurosystem/ECB staff macroeconomic projection exercises*, July 2016, available at: https://www.ecb. europa.eu/pub/pdf/other/staffprojectionsguide201607.en.pdf. Foreign demand corresponds to the average imports of France's main trading partners weighted by the share of each country in France's exports. The method of calculation is described in the Occasional Paper "Trade consistency exercise in the context of the Eurosystem projection exercises – an overview", available at: https://www.ecb.europa.eu/pub/pdf/scpops/ecbocp108.pdf.

b) Calculated against 38 trading partners of the euro area

c) The forecasts for interest rates were calculated using the yield curve.

Appendix B: Revisions to projections since September 2019 and breakdown of contributions to GDP growth

Table B1: Revisions to projections since September 2019

	December 2019 projections				Revisions since September 2019 projections			
	2019	2020	2021	2022	2019	2020	2021	
Real GDP	1.3	1.1	1.3	1.3	-0.1	-0.2	-0.1	
Contributions to GDP growth (in percentage points) ^{a)b)}								
Domestic demand (excluding changes in inventories)	1.7	1.5	1.4	1.3	0.1	-0.1	-0.1	
Net exports	-0.2	-0.3	-0.1	0.0	-0.1	-0.1	0.0	
Changes in inventories	-0.2	-0.1	0.0	0.0	-0.1	-0.1	0.0	
Household consumption (52%) ^{c)}	1.2	1.5	1.4	1.2	-0.1	-0.2	0.0	
Government consumption (23%)	1.1	0.9	1.2	1.2	0.2	-0.1	0.1	
Total investment (23%)	3.4	2.2	1.3	1.4	0.6	0.1	-0.4	
Government investment (3%)	3.9	1.5	-0.6	0.0	1.0	0.0	-1.1	
Household investment (5%)	1.6	0.4	0.5	0.8	0.5	-0.5	-0.3	
Business investment (NFCs-FCs-IEs) (14%)	3.9	3.1	2.1	1.9	0.6	0.4	-0.3	
Exports (31%)	2.2	1.9	2.6	2.7	0.0	-0.4	-0.4	
Imports (32%)	2.8	2.9	2.8	2.5	0.4	-0.2	-0.3	
Real household gross disposable income	2.1	1.6	1.1	1.3	-0.3	-0.1	-0.3	
Net job creations (thousands)	266	153	82	77	-4	-16	-23	
ILO unemployment rate (France and overseas departments, $\%$ of labour force)	8.5	8.2	8.1	8.0	0.1	0.1	0.2	
HICP	1.3	1.1	1.3	1.4	0.0	0.0	0.0	
HICP excluding energy and food	0.6	1.0	1.3	1.4	0.0	0.0	0.0	
GDP deflator	1.5	0.8	0.9	1.2	0.0	-0.1	-0.1	

Sources: Blue-shaded columns show Banque de France projections.

Annual percentage change except where otherwise indicated. Revisions are in percentage points.

- a) Individual contributions may not add up to GDP growth as figures have been rounded.
- b) The revisions presented here have been calculated using unrounded figures and then rounded off to one decimal.
- c) Percentages in brackets refer to each item's share of GDP in 2018.

Table B2: Breakdown of contributions to GDP growth

		December 2019 projections								eptember ons
	2016	2017	2018	2019	2020	2021	2022	2019	2020	2021
Real GDP	1.0	2.4	1.7	1.3	1.1	1.3	1.3	-0.1	-0.2	-0.1
Contributions to GDP growth (in percentage points) ^{a)b)}										
Private consumption	0.9	0.8	0.5	0.7	0.8	0.8	0.7	0.0	-0.1	0.0
Private investment ^{c)}	0.5	1.1	0.5	0.6	0.5	0.3	0.3	0.1	0.0	-0.1
Public demand ^{a)}	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.1	0.0	0.0
Net exports	-0.4	-0.1	0.7	-0.2	-0.3	-0.1	0.0	-0.1	-0.1	0.0
Changes in inventories	-0.4	0.2	-0.3	-0.2	-0.1	0.0	0.0	-0.1	-0.1	0.0

Sources: Blue-shaded columns show Banque de France projections.

Annual percentage change except where otherwise indicated. Revisions are in percentage points.

- a) Individual contributions may not add up to GDP growth as figures have been rounded.
- b) The revisions presented here have been calculated using unrounded figures and then rounded off to one decimal.
- c) Private investment groups together business and household investment.
- d) Public demand groups together government consumption and investment.

Appendix C: Additional indicators

Table C1: Change in household consumption and purchasing power

(annual average percentage change)	2016	2017	2018	2019	2020	2021	2022
Real household consumption	1.6	1.6	0.9	1.2	1.5	1.4	1.2
Purchasing power	1.6	1.4	1.2	2.1	1.6	1.1	1.3
Purchasing power per capita	1.3	1.1	1.1	2.0	1.3	0.8	1.0
Saving ratio (% of GDI)	14.0	13.8	14.2	14.9	15.0	14.8	14.8

Sources: INSEE quarterly national accounts published on 30 October 2019. Blue-shaded columns show Banque de France projections

Table C2: Ratios of non-financial corporations

(annual average, in %)	2016	2017	2018	2019	2020	2021	2022
Margin rate (% of value added)	31.7	31.8	31.2	33.0	31.5	31.4	31.4
Investment ratio (% of value added)	23.2	23.7	24.1	24.5	24.9	25.1	25.1
Self-financing ratio (investment/savings)	97.2	98.2	93.7	97.1	89.1	89.2	90.4

Sources: INSEE quarterly national accounts published on 30 October 2019. Blue-shaded columns show Banque de France projections.

Table C3: Change in wages and productivity in the market sector

(annual average percentage change)	2016	2017	2018	2019	2020	2021	2022
Value added deflator	0.6	0.0	0.4	1.8	0.8	0.8	1.2
Unit labour costs	1.3	0.6	1.4	-0.7	1.2	1.2	1.2
Productivity per capita	0.2	1.2	0.5	0.2	0.5	1.0	1.1
Average per capita nominal wage	1.6	1.7	1.7	1.9	1.8	2.2	2.4
Average per capita real wage ^{a)}	1.4	8.0	0.2	0.7	0.9	1.1	1.2

Sources: INSEE quarterly national accounts published on 30 October 2019. Blue-shaded columns show Banque de France projections a) Adjusted for the household consumption deflator.

Note: In the national accounts, only social security contributions are included in unit labour costs. The CICE (Tax Credit for Competitiveness and Employment) therefore has no impact on this indicator: the decline in unit labour costs in 2019 is thus attributable to the cut in social security contributions introduced to replace the CICE.

Table C4: Change in employment and unemployment for the entire economy

(annual average change, in thousands)	2016	2017	2018	2019	2020	2021	2022
Total employment	176	275	288	266	153	82	77
Market-sector salaried employment	152	282	296	259	153	81	79
Non-market sector employment	25	-11	-22	-5	-2	0	0
Non-salaried employment	-1	4	15	13	3	1	-2
Labour force	94	95	201	92	68	60	47
Unemployed	-82	-180	-87	-175	-85	-22	-30
ILO unemployment rate (France and overseas departments, % of labour force)	10.0	9.4	9.1	8.5	8.2	8.1	8.0

Sources: INSEE data (Labour Force Survey, quarterly national accounts published on 30 October 2019). Blue-shaded columns show Banque de France projections. Note: The labour force projections from the fourth quarter of 2019 onwards are based on INSEE's baseline scenario projections for the labour force up to 2070.