



How can we reduce inflation?

Letter submitted to
the President of the French Republic,
the President of the Senate and
the President of the National Assembly

by
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SUMMARY

This *Letter* is naturally devoted to inflation, which has once again become the prime concern of French citizens and is at the heart of the central bank's price stability mission. The rise in prices has accelerated significantly over the past year, reaching 6.5% in France¹ at the end of June, a level that is clearly too high even though it remains, after that of Malta, the lowest in the euro area (which is 8.6% on average). But this rise has also changed in nature: it admittedly retains a strong imported component due to the increase in energy and commodity prices, which is being amplified by the shock of the Russian war in Ukraine. In recent months, inflation has nevertheless spread to a wide range of goods and services, and has also become domestic: "core" inflation,² excluding energy and food, has risen to 3.3% in France (and 3.7% in the euro area), well above our 2% target.

The resulting decline in purchasing power is being keenly felt by French citizens, much more so than the average statistical data would suggest. However, government measures – with a significant budgetary cost, and which should wherever possible remain temporary and targeted – the favourable indexation of the minimum wage, and ongoing wage bargaining – which must remain decentralised – could limit this decline to an average of around 1% in 2022, before returning to the previous upward trend. The most disadvantaged of our fellow citizens, and those living in rural areas who consume more energy, are nevertheless more affected by these financial difficulties. The Banque de France is committed to helping people in France through its actions to tackle overindebtedness and enhance banking inclusion. Lastly, the expectations of economic players, now including those of businesses, show a fear that this resurgent inflation is here to stay, which is an additional reason for monetary policy to respond.

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In our different scenarios, European and French inflation should return to around 2% in 2024: this is not only a forecast; it is our firm medium-term commitment. The Eurosystem will normalise its monetary policy as much as necessary: firstly, by exiting the exceptional measures taken when there was a danger of deflation especially at the start of the Covid crisis (including an end to negative interest rates by September). Then by continuing to raise its key interest rates to reach in the coming quarters a "neutral" level, between 1% and 2% in the short term. Lastly, by only tightening rates beyond this normalisation if, and only if, inflation requires it to do so. In other words, the European Central Bank (ECB) is moving in the same direction as the US Federal Reserve (Fed) and other central banks, even though the European situation does not necessarily require it to go as fast or as far.

For households and businesses, this means a return to a more normal interest rate environment, after years of exceptionally low interest rates. Without any new energy shock, the normalisation phase

will not provoke a recession insofar as real rates – after deducting expected inflation – remain very favourable. However, as regards public debt, the illusion of cost-free, unlimited spending is a thing of the past: faced with persistently higher borrowing costs, France must regain control of its public debt. Bringing it down below 100% of gross domestic product (GDP) in a few years' time, to the pre-Covid level, is possible if, with perseverance, we make a concerted and fair effort: priority for spending on the future, such as education, more efficient current operating costs through real public management, and prudence over cuts to taxes or employer charges that would be difficult to finance. If we fail to do so, we will be passing on to future generations not only a climate debt that rightly worries them, but also a financial debt that will jeopardise their future.

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Past (monetary and fiscal) demand-side policies have thus lost both their relevance and their room for manoeuvre. There remains an essential lever to both reduce inflation and increase our potential growth: promoting policies to "beef up" our productive capacity, in order to achieve sustainable transformations. Two of them are common to Europe as a whole, the ecological transformation – including further efforts to save energy – and the digital transformation. They must be capable of mobilising European public and, above all, private resources. One challenge is more specific to France: increasing the supply of available labour, and its skills. Despite the current slowdown, 55% of French companies report recruitment difficulties! The solutions to our jobs deficit depend entirely on our national choices: increasing youth employment means further boosting apprenticeships and professional training; getting more seniors into work raises the question of a fair pension reform, and a real commitment from employers. Increasing our potential growth by 0.5% per year – while making this growth greener and fairer – will give us the means to limit inflationary pressures and, above all, to achieve real economic and social progress: full employment within five to ten years, financing of major ecological and digital investments, and a sustainable increase in purchasing power without placing a greater burden on our public finances.

The shock resulting from the Russian war in Ukraine is putting further strain on the economic environment, with a risk of additional tensions in energy. This *Letter* nevertheless expresses two convictions: France, together with the euro area, can reduce inflation; and our country will succeed in overcoming this shock if it shares the cost fairly between businesses, households and public administrations; and if it also harnesses its real strengths over the long term.

1 This is inflation as measured by the Harmonised Index of Consumer Prices (HICP). It is higher than the Consumer Price Index (CPI) measure, which stood at 5.8% in June according to

INSEE's latest estimate published on 30 June (see Box 1 and glossary).

2 See Box 1 and glossary.

In keeping with republican tradition, this *Letter*, addressed to the President of the Republic and the Presidents of the two Assemblies, focuses this year on **inflation**.¹ This has indeed become the primary concern of French and European citizens, including through its perceived impact on purchasing power. Initially, the rise in inflation was mainly due to external supply shocks, notably the Russian invasion of Ukraine at the end of February. Since then, it has not only intensified but also broadened and become more “domestic” (1).

As a consequence, monetary policy **normalisation** is now fully justified. The Banque de France and the European Central Bank (ECB) strongly reaffirm their commitment to bringing inflation down to 2% in the medium term (2).

In this profoundly changed economic environment, demand-side support must now shift to supply-side policies in order to “beef up” our productive capacity. Supply-side policies will help control inflation and increase **potential growth** (3).

The return of inflation

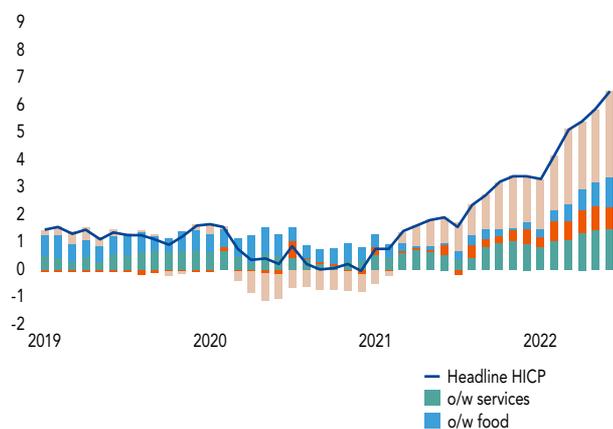
The rise in prices is accelerating sharply in the euro area, to 8.6% in June 2022, and is affecting an increasing number of products. **Core inflation**, excluding energy and food, has strengthened markedly since 2021, reaching 3.7% in June in the euro area. Inflation rates vary widely within the euro area, ranging as high as 22% in Estonia. France, with headline inflation of 6.5% and core inflation of 3.3% in June, has the lowest rate in the euro area alongside Malta (6.1%).²

These excessively high rates mark a reversal after a long period of too low inflation. On average, inflation had remained well below 2% since 2015 and had even fallen as low as 0.5% in France (0.3% in the euro area) in 2020 as a result of the Covid crisis (*see Chart 1*).

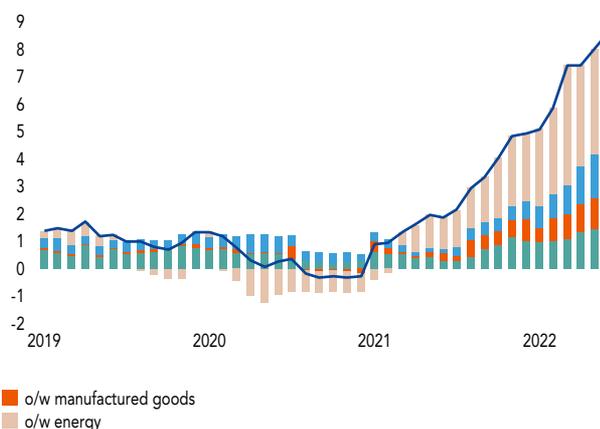
Chart 1 Inflation and its components

(year-on-year % change)

a) In France



b) In the euro area



Sources: Eurostat, Banque de France calculations.

Notes: Latest data at June 2022.

HICP – Harmonised Index of Consumer Prices.

¹ Definitions of the words highlighted in blue can be found in the glossary.

² Provisional estimates as at end-June.

Box 1

WHAT IS INFLATION?

Definition and measures

Inflation is defined as a general and self-sustaining increase in the price level: general in that the prices of an increasing number of products are rising; self-sustaining in that selling prices are increasing to a greater extent than costs in anticipation of future inflation. The rise in prices over a given period of time is measured using the consumer price index, which in France is compiled by INSEE.

While each country has its own consumer price index (CPI), a harmonised measure (HICP) has also been introduced to enable a comparison between European countries: in France, HICP inflation (6.5%) is currently slightly higher than the CPI measure (5.8%),¹ notably due to the higher weighting of energy in the HICP. But the trends in both rates are similar. The price indices cover all household consumption, grouped into four main items: energy, food, manufactured goods and services. The weighting of each item depends on its share in total household consumption and therefore varies over time.

Weighting in the HICP, France

(%)	1997	2022
Energy	9	10
Food	24	21
Manufactured goods	30	25
Services	37	44

Source: Eurostat.

Note: HICP – Harmonised Index of Consumer Prices.

Core inflation

The prices of some goods, for example fuel and certain food items, are highly volatile as they depend on global markets.

“Core inflation” therefore aims to better measure the underlying long-term trend in prices. It can be measured using a number of indicators. The conventional one is the change in the HICP excluding energy and food. In 2020, this indicator declined sharply – from 1.2% in July to 0.4% in August – reflecting steep falls in the prices of a number of items during the Covid crisis (accommodation and food services, travel). In 2021 and 2022, however, all indicators have been pointing to a rise in core inflation.

1 INSEE estimates as at 30 June 2022.

2 Trimmed mean HICP and fine core HICP: see Lalliard (A.) and Robert (P.-A.) (2022), “A possible new indicator to measure core inflation in the euro area”, *Banque de France Bulletin*, No. 240/1, May-June.

In the United States and United Kingdom, inflation started to accelerate sharply from as early as the summer of 2021, sooner than in the euro area, and reached 8.6% and 9.1% respectively in May 2022. In contrast, price growth is proving much weaker in Asia, especially in Japan and China (2.5% and 2.1% respectively in May). The euro area is currently in an intermediate position, with its headline inflation rate moving much closer to that of Anglo-Saxon countries, but core inflation remaining more contained (see *Appendix*).

1.1 Inflation that is largely imported but becoming domestic and more widespread

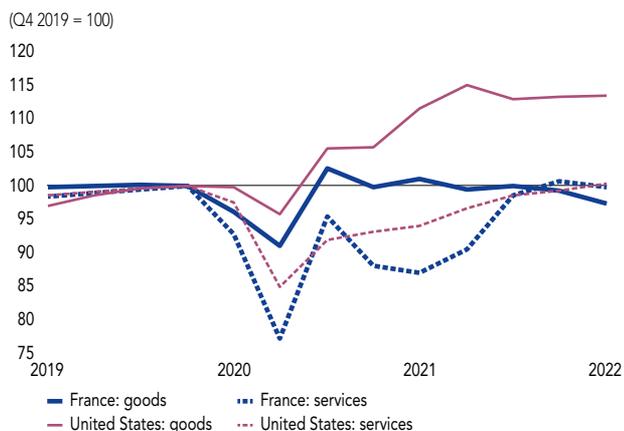
A phenomenon whose roots are essentially external

There has been an accumulation of factors driving the acceleration in inflation since mid-2021. A large share of euro area inflation was, and still is, “imported”.³ First, amid the strong global economic recovery that followed the lifting

of the lockdown measures, inflationary pressures began to emerge in commodities, coupled with increasing supply disruptions.⁴ These difficulties intensified significantly at the start of 2022 with the outbreak of Russia's war against Ukraine and the reintroduction of lockdown measures in certain parts of China.

The strength of the global demand recovery was amplified by a boom in the United States, where too much fiscal stimulus coupled with lockdowns led households to ramp up their consumption of goods rather than services (see Chart 2).

Chart 2 Consumption of goods and services in France and the United States



As goods markets are global, bottlenecks and resulting price pressures also affected the euro area, even though the region was not experiencing an overheating of demand. In France, for example, consumption of goods and services has only come back to its pre-crisis level. The consequences of the war in Ukraine have added to these pre-existing pressures: oil and gas prices have risen by 18% and 46% respectively⁵ after already surging by 64% and 342% between the start of 2021 and the outbreak of the war.

Economically, the effect of this imported inflation equates to a levy on everybody's income: we have to pay more to buy the same quantity of goods. The total levy is estimated at around EUR 170 billion in the euro area between the second quarter of 2021 and the first quarter of 2022, or 1.3% of the region's gross domestic product (GDP);⁶ for France, it amounts to EUR 32 billion over the same period, which is also equivalent to 1.3% of GDP.

These shocks and their consequences came as a surprise to all forecasters, especially when it comes to energy and food prices (which alone account for three-quarters of the shortfall in inflation forecasts). Against this backdrop, it is increasingly crucial that we complete our macroeconomic forecasting models with data collected from businesses, as the Banque de France does each month in particular with data on supply difficulties (see Chart 3).

Chart 3 Share of French firms reporting supply difficulties



Inflation that is now also "domestic"

Businesses do not mechanically pass on rises in production costs to their selling prices. Depending on the strength of demand and their ability to set prices, they either bear all or part of the rise themselves by reducing their margins, or pass the majority on to their selling prices.

In France, for example, the share of businesses that increased their selling prices in the previous month has now reached very high levels: 42% in industry in May and 58% in construction⁷ compared with respective averages of 7% and 5% each month between 2010 and 2019. Inflation is now also affecting services firms, with 25% of those surveyed saying they raised prices over the previous month, even though they usually see little direct impact from

3 De Bandt (O.) and Carluccio (J.) (2022), "Globalisation and its repercussions for inflation", *Banque de France Bulletin*, No. 240/4, May-June (forthcoming translation).

4 Gebauer (S.) (2022), "The importance of supply-side bottlenecks in France", *Eco Notepad blog*, post No. 252, January.

5 Change between 23 February and 21 June 2022.

6 Lagarde (C.) (2022), "Monetary policy normalisation in the euro area", *ECB Blog*, 23 May.

7 Banque de France, *Update on business conditions in France at the start of June 2022*.

imported inflation. Inflation is not just higher, therefore, it is also more “broad” as it is now affecting a larger number of products. As a result, inflation excluding energy and food also exceeds our 2% target, at 3.3% in France at the end of June.

1.2 The consequences for purchasing power and wages

Inflation has a very concrete effect on household purchasing power, the change in which is measured by comparing the trajectories of income and prices. In 2022, purchasing power per capita is expected to decrease by an average of around 1% under our baseline scenario, although this comes after several years of continuous growth (see Chart 4), even if it is not perceived as such.

Chart 4 Change in purchasing power per capita in France



Sources: INSEE, Banque de France (2022 forecast).

Cumulative change in purchasing power in France



Sources: INSEE, Banque de France calculations.

This average loss of purchasing power masks significant disparities in the inflation actually being experienced by households, which is essentially determined by the share of energy (heating, transportation, etc.) in their expenditure. According to INSEE,⁸ significant differences have been identified between age brackets, with the over-75s on average experiencing nearly 2 percentage points more inflation than the under-30s in April. Inflation also has a bigger impact on rural populations than in large cities, adding an extra 1 percentage point to their total expenditure. The gaps between income deciles are around

0.5 percentage point, with the lowest income households experiencing higher inflation than those that are better off.

Government measures (see Box 2) have helped to lower inflation significantly in France – by nearly 2 percentage points in 2022. However, these measures must remain as temporary as possible: otherwise, they will weigh on our public deficit and debt each year. Economists are also warning of the negative effects of subsidising prices over the long term, as it prevents us from adapting our consumption behaviour and from saving energy. Over the long term, the best solution against inflation is not fiscal but monetary (see Part 2), and a shift to more structural policies is needed (see Part 3).

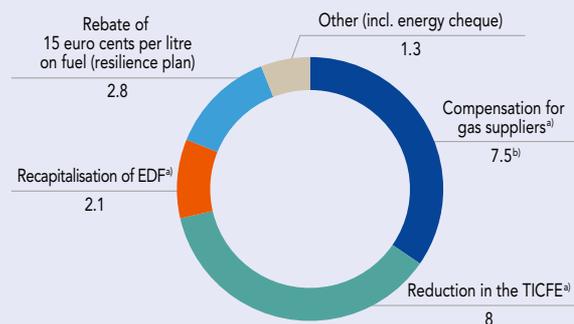
Box 2

THE FIRST GOVERNMENT MEASURES TO OFFSET THE RISE IN ENERGY PRICES IN FRANCE

Even before the planned purchasing power law comes into force, the government has already put in place measures to cushion the impact of surging energy prices – for example the price shield for gas and electricity, the rebate on fuel prices, the energy cheque and the one-off subsidy linked to inflation in 2021. The total cost of these measures, which is essentially concentrated in 2022, is close to EUR 29 billion or 1.1% of gross domestic product (GDP).

Measures introduced in France in 2022 to offset the rise in energy prices

(EUR billions)



Source: Légifrance.

Notes: TICFE – *Taxe intérieure sur la consommation finale d'électricité* (domestic electricity tax). Estimates constructed in June 2022 (before the amended budget law), based on the principal measures.

a) Price shield.

b) Banque de France estimates based on the assumption factored into futures prices that gas prices will remain frozen until end-2022.

Other significant measures to support purchasing power for financially vulnerable households are the inflation-indexation of certain welfare benefits (including a rise of 1.8% in January for income support and pensions, with a further rise of 4% scheduled for July) and of the national minimum wage (rise of 5.9% over one year which is slightly above inflation – see Chart 5).

This sharp upward revision has helped to stimulate industry-level wage bargaining, to align pay scales with the national minimum wage. More broadly, employee unions and employers are obviously taking into account the current return of inflation. The industry-level agreements signed in the first half of the year provide for pay rises of around 3% on average compared with close to 1% in recent years (in some cases they also contain inflation clauses stipulating that talks will have to be reopened if inflation proves higher than expected).⁹ Over the full year 2022, the Banque de France anticipates that the average per capita wage will increase by 5%.¹⁰ This should come back to around 3% per year as of 2024, which corresponds to an easing of inflation back to 2% and productivity growth of around 1%.

Chart 5 Change in minimum wage and monthly base wage in France



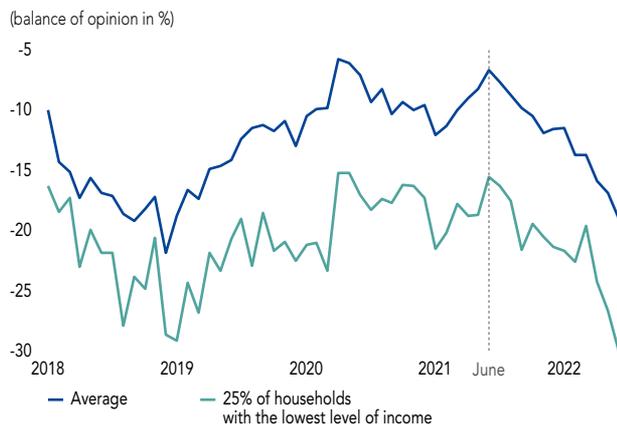
Source: Dares.

Note: Last data point in the minimum wage curve is for Q2 2022.

The decision to end automatic wage indexation in the 1980s should help France to avoid triggering a recurrent wage-price spiral. The latter would ultimately prove negative for both households and businesses, as witnessed during the 1970s oil price shocks. It is all the more important to continue holding wage talks at a decentralised level (within individual firms or branches of industry), closer to the economic reality and to dialogue with employee representatives.

Even though the average loss of purchasing power remains relatively moderate in 2022, it is still being keenly felt by the French public. According to INSEE's monthly survey, households' opinion of their personal financial situation over the previous 12 months has deteriorated since mid-2021, especially for those with the lowest incomes (see Chart 6).¹¹

Chart 6 Opinion of households in France on their past financial situation



Source: European Commission.

Notes: Latest data at June 2022.

Question asked: "In the last 12 months, has your household's financial situation improved (+) / remained the same / deteriorated (-)?"

The balance of opinion is calculated by subtracting the negative responses from the positive responses.

This sentiment, which is significantly more negative than the statistics, has been a notable feature in France for a number of years.¹² It means we need to look more closely at two main dimensions: first, beyond the averages, the *distribution* of price and income rises by category, since figures on inequality are traditionally only available with a lag; second, the "asymmetry" of consumer perceptions, as individuals are naturally more sensitive to price rises than to falling or stable prices, and to changes in their most frequent purchases, such as food or a tank of fuel.

8 INSEE (2022), "War and prices", *Economic Outlook*, June. See in particular the insight on page 25: "Selon leurs dépenses d'énergie et d'alimentation, certaines catégories de ménages sont exposées à une inflation apparente pouvant différer de plus d'un point par rapport à la moyenne" (French only).

9 Gautier (E.) (2022), "Negotiated wage rises for 2022: the results so far", *Eco Notepad blog*, post No. 269, Banque de France, May.

10 Including individual pay rises and the impact of recruitments and departures.

11 INSEE, Monthly consumer confidence survey (Camme); European Commission.

12 Banque de France (2019), "Achievements and challenges of the euro, 20 years after its creation", *Letter to the President of the Republic*, April, pp. 7-11.

Alongside associations, the Banque de France is working hard to help those who are most vulnerable, through its action to tackle overindebtedness, on the payment incident registers and on ensuring access to banking services and limiting their cost. It also publishes regular statistics on its work in this field,¹³ which so far show no significant rise in financing difficulties; naturally, the Banque de France remains very vigilant in this regard.

From a broader perspective, the question now is what action our country can take to “absorb” and spread the cost of the Ukraine shock: the shock is undoubtedly negative, amounting to an external levy (see above) already exceeding 1% of GDP or EUR 30 billion per year. Compared with the Covid shock of 2020, however, this one is having a much less significant impact on economic activity: GDP slumped by 8% in 2020 but should grow by 2.3% this year. There is therefore no justification for another “whatever it takes”, which would moreover be very difficult given the state of our public finances (see below). Government support should play a more partial role, through targeted measures to help purchasing power. This time around, it cannot completely take the place of a fairer distribution of the burden: across businesses, which will see a limited reduction in their margins – from the record of 34% reached in 2021, the average corporate margin is expected to fall to 31% in 2024, which is close to its pre-Covid level; and across households with a temporary slowdown in their purchasing power, while at the same time paying close attention to the most disadvantaged. This sharing of the burden is a prerequisite for fairness, but also for economic efficiency so that our country can emerge from this shock with each of its main economic agents (businesses, households, public administrations) sufficiently robust.

1.3 Inflation expectations and forecasts

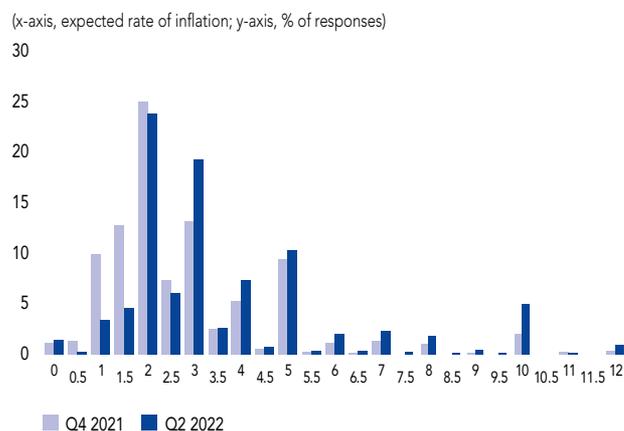
These developments suggest we are facing a new paradigm in inflation. Up until now, an entire generation of consumers, salaried workers and entrepreneurs in advanced economies had never seen meaningful levels of inflation. This could lead to a shift in mind-sets,¹⁴ both in society and among economic policymakers.

Long-term inflation expectations that are well “anchored” – in other words stable and close to the central bank target – are essential for price stability. To assess whether they are anchored, we have to look not just at their level, but also, and most importantly, at how they evolve. From a monetary policy point of view, it is medium-term expectations (over a three to five-year horizon) that matter the most, as

one-year expectations are strongly influenced by temporary fluctuations in the inflation rate.

The medium and long-term inflation expectations of *professional forecasters* and the *markets* remain sufficiently close to our 2% target. Professional forecasters are projecting an inflation rate of around 2.1% in 2026;¹⁵ and in June, the markets were anticipating an average inflation rate of just under 2.2% at a five to ten-year horizon.¹⁶ In contrast, with regard to *businesses*, our new quarterly survey¹⁷ shows that their three to five-year expectations have risen more sharply, from a median of 2% in the fourth quarter of 2021 to 3% in the second quarter of 2022.¹⁸ However, 2% is still the most frequent response given by firms (see Chart 7).

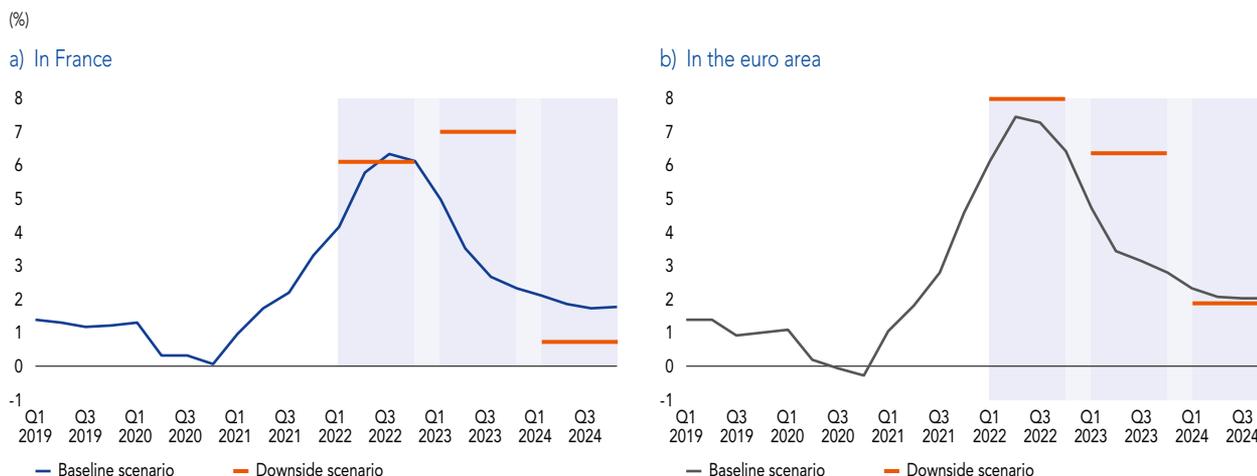
Chart 7 Businesses’ inflation expectations for France over a 3 to 5-year horizon



Source: Banque de France, *Eco Notepad* blog, post No. 275.

Households are traditionally the economic agents with the highest inflation expectations. The median one-year inflation expectation for European households was 5.9% in June.¹⁹ One-year inflation expectations have risen more broadly, which is more or less in line with our own **forecasts**²⁰ – and those of professional forecasters – that inflation will remain high until the start of 2023. But after that, our baseline scenario is that the gradual dissipation of the energy contribution – responsible for the majority of the price shock dating from the start of 2022 – and the normalisation of monetary policy (see Part 2), will lead to a marked reduction in annual inflation, to a rate of around 2% in 2024 in both France and the euro area (see Chart 8). These projections are of course highly contingent on the future trajectory of energy prices: in our downside scenario,

Chart 8 Inflation projection for 2024



Sources: Eurostat, ECB and Banque de France projections for June 2022.

Note: For the downside scenario, annual forecasts.

which factors in another sharp rise in energy prices, the inflationary surge is seen remaining strong in 2023; however, in this same scenario, core inflation – excluding energy and food – is projected to ease to around 2% by 2024.

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Faced with inflation, monetary policy needs to be normalised

Combating too high inflation is the responsibility of the Eurosystem: its mandate focuses on price stability, defined as inflation of 2% over the medium term.²¹ This inflation rate of 2% is the “equilibrium temperature” of the economy, reflecting a good balance between supply and demand.

In a too low inflation regime, below 2%, the economy is “anaemic”, with insufficient demand and the risk of a deflationary spiral. This was the situation that prevailed in the euro area from 2014 to 2021, and was the reason for implementing an exceptionally accommodative monetary policy via several so-called “non-standard”²² measures. To increase the inflation rate, the Eurosystem made money:

- More abundant, with measures to expand its balance sheet (securities purchase programmes and longer-term refinancing operations – see Chart 9).

- Less expensive, with a decrease in its **key interest rates** (see Chart 10), and even a negative deposit rate of -0.5% since 2016, allowing an easing of lending conditions on all loans to the economy.

This accommodative monetary policy proved necessary and effective in preventing the risk of **deflation**. This observation is not being called into question today: the too high inflation in the euro area is primarily due to rising energy prices and supply bottlenecks (see Part 1) which were not caused by the past volume of liquidity in the euro area. But currently, the situation has changed and warrants monetary policy normalisation. For us, the ECB and the Banque de France, the return of inflation to around 2% is not just a forecast for 2024, it is our firm medium-term commitment.

13 See 2021 Annual Report of the Observatory for Banking Inclusion (OIB) and monthly barometer of financial inclusion (French only).

14 Carstens (A.) (2022), *The return of inflation*, speech, Bank for International Settlements, 5 April.

15 ECB (2022), *Survey of Professional Forecasters (SPF) – second quarter 2022*, April. This quarterly survey notably gathers information inflation expectations over different horizons.

16 The five-year five-year forward inflation expectation rate derived from inflation derivatives (swap) markets.

17 Quarterly business survey of inflation expectations (<https://www.banque-france.fr/en/statistics/inflation-expectations-2022q2>).

18 Bouche (P.), Demuyck (J.), Gautier (E.) and Savignac (F.) (2022), “What are business leaders’ inflation expectations?”, *Eco Notepad blog*, post No. 275, June.

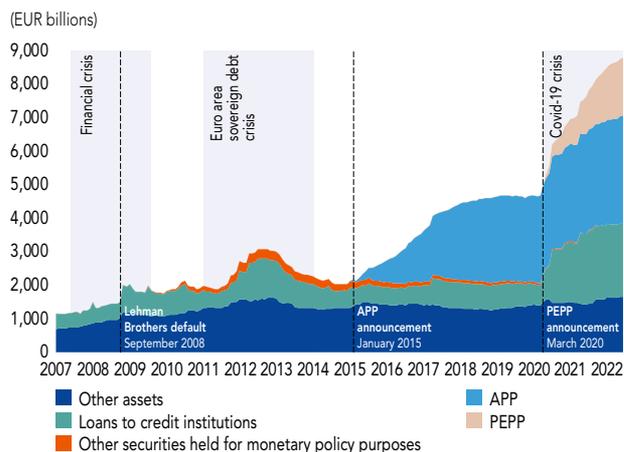
19 European Commission; Banque de France calculations.

20 Banque de France *Macroeconomic projections for France* and ECB *Eurosystem staff macroeconomic projections for the euro area*, June 2022.

21 Banque de France (2021), “Monetary policy beyond the Covid crisis”, *Letter to the President of the Republic*, July.

22 <https://www.banque-france.fr/politique-monetaire/cadre-operationnel-de-la-politique-monetaire/les-mesures-non-conventionnelles>

Chart 9 Evolution of the Eurosystem's balance sheet



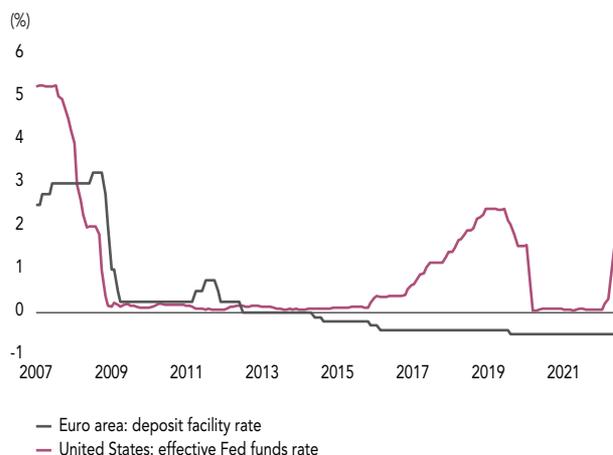
Sources: ECB, Banque de France calculations.

Notes: Latest data at May 2022.

Stock of ECB assets by type, in EUR billions.

APP, asset purchase programme; PEPP, pandemic emergency purchase programme.

Chart 10 Key interest rates in the euro area and the United States



Sources : Bloomberg, Banque de France calculations (latest data at 17 June 2022).

2.1 A necessary monetary normalisation

The normalisation of monetary policy means that as a first step the non-standard measures taken exceptionally from 2014 in response to too low inflation will be discontinued.

- First, the Eurosystem is completely ceasing its net asset purchase programmes. The ECB stopped net purchases under the Pandemic Emergency Purchase Programme

(PEPP) in March. As of 1 July 2022, the Eurosystem also ended net asset purchases under its Asset Purchase Programme (APP) which was launched in 2014.

- Second, the increase in key interest rates will allow a rapid exit from negative interest rates. A first hike of 25 basis points is planned at the Governing Council meeting on 21 July 2022 and a second, potentially greater one, will be implemented in September.²³

Over the subsequent quarters, an orderly rise should bring interest rates to the “neutral rate”, i.e. the theoretical rate at which there would be neither monetary expansion nor contraction of inflation. The neutral rate is currently estimated at between 1% and 2% in the euro area.

In an uncertain environment, this normalisation is guided, among other things, by a principle of “*optionality*”. Monetary policy measures will be calibrated pragmatically on the basis of the most up-to-date data and forecasts. The ECB is keeping a free rein, while ensuring that it does not catch economic agents or the markets off guard. Furthermore, the *flexibility* of the instruments used will ensure a consistent transmission of monetary policy across the euro area in order to limit the risks of unjustified fragmentation. At its exceptional meeting on 15 June, in the light of widening euro area sovereign spreads, the Governing Council decided to use this flexibility in the reinvestment of maturing PEPP securities and to accelerate its work on a new tool under development. Thanks to the use of appropriate tools, the Eurosystem has always succeeded in preventing the risks of fragmentation, notably in 2012 during the sovereign debt crisis and in 2020 during the Covid crisis.

This *normalisation* is still far from a monetary *tightening*: **real interest rates** – net of expected inflation – will remain significantly negative for some time. When **nominal rates** approach the neutral rate, it will then be necessary to assess whether this level appears consistent with an inflation outlook stabilised at 2% over the medium term, or whether it will be necessary to move beyond the neutral rate zone and begin a tightening process, such as the one that seems to be taking shape in the United States. The risks of inflation persistence in this country are indeed more related to demand, with a tighter labour market (see *Part 1.1*). This explains the acceleration in rate hikes there,²⁴ as well as the reduction in the size of the balance sheet of the Federal Reserve (Fed) underway since June. In other words, the ECB is following the same path as the Fed or the Bank of England: but the European situation will not necessarily require it to go as fast or as far.

Today, some believe that the Eurosystem could cause a recession by fighting inflation through higher rates, leading to lower investment and consumption. This supposed “dilemma” must be put into perspective: according to our baseline scenario, both the euro area and France should experience positive growth each year until 2024, and should therefore escape recession unless there is a new energy shock. For as long as we are in a normalisation phase, the aim of monetary policy is simply to restore more normal financing conditions. Moreover, our mandate clearly prioritises the fight against inflation, and this is the priority of our citizens. Entrenched inflation would result in a loss of confidence, higher interest rate risk premia and price distortions, and therefore ultimately weaker growth.

2.2 Financing conditions returning to normal

For households and businesses

Financing conditions have been exceptionally favourable for several years, with historically low nominal and real rates (see Chart 11).

The increase in nominal interest rates for bank loans started very gradually in December 2021. However, conditions for access to funding remain very favourable for economic activity. First, as regards housing loans already granted, French banks apply fixed interest rate to the vast majority of loans, which protect households that have already

borrowed from future rate changes. Second, it is the real rates – net of expected inflation – that determine the cost of a loan. Despite nominal interest rates on housing loans of 3-4% ten years ago, real rates were around 2%; they have even been negative since 2021, reaching almost -1.5% in May 2022. The return to more normal nominal rates therefore should not excessively penalise households and businesses that mainly use bank financing.

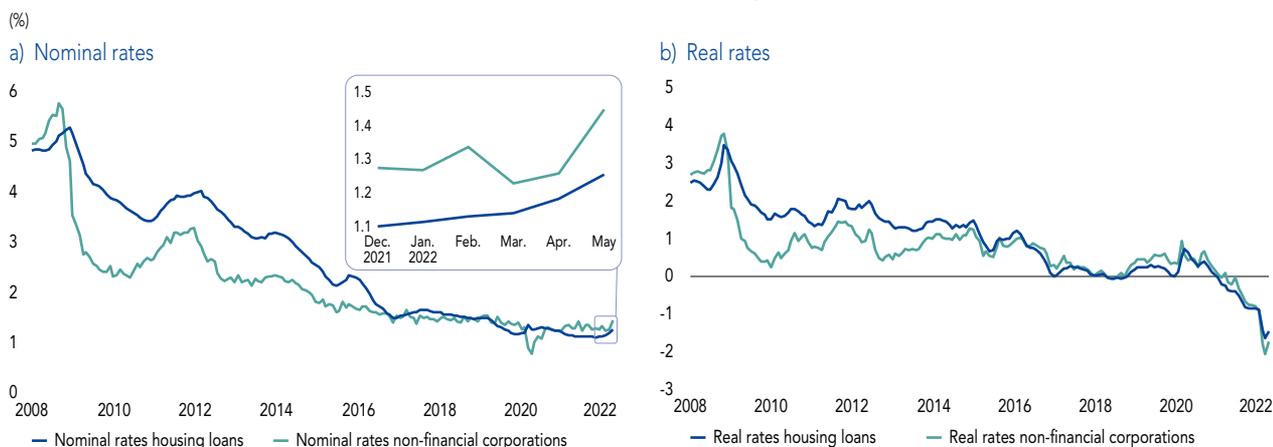
Financing conditions in the markets have nevertheless tightened further in recent months for businesses. This movement has been particularly strong in the riskiest segment (high yield), with a return to the nominal interest rate conditions seen in 2018-19. Furthermore, the equity markets have been trending down sharply since the beginning of the year. Market risks are thus considered high in relation to certain valuations, with a risk of a correction.²⁵ Keeping interest rates at exceptionally low levels indefinitely would have further increased the risk of assets becoming overvalued and the markets correcting sharply.

²³ ECB Governing Council meeting, Amsterdam (2022), “Monetary policy decisions”, press release, 9 June.

²⁴ 0.25 basis point in March, then 0.50 in May, and 0.75 in June 2022.

²⁵ Banque de France (2022), *Assessment of risks to the French financial system*, June.

Chart 11 Interest rates on housing loans to households and non-financial corporations in the euro area



Sources: ECB, Eurostat, Banque de France calculations (latest data at May 2022).

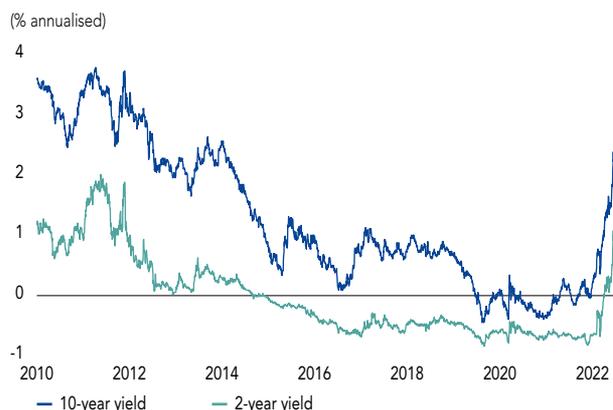
Note: Real rates are calculated by deducting five-year inflation expectations in the case of loans to non-financial corporations, or ten-year inflation expectations in the case of housing loans to households, from nominal rates. These expectations are derived from the inflation swaps market.

To address the vulnerabilities of the financial system, the *Haut Conseil de stabilité financière* (HCSF – High Council for Financial Stability) has taken a number of macroprudential measures over the past few years and up until last March;²⁶ these measures have helped to substantially increase the resilience of financial players, and notably of French banks.²⁷

The consequences for the sustainability of public debt

During the Covid crisis, fiscal and monetary policies, while remaining independent, were aligned and mutually reinforcing: as long as inflation remained low, key interest rates remained low, reducing the costs of an expansionary fiscal policy which in turn supported activity and ultimately inflation. French public debt even benefitted from negative rates on the markets (see Chart 12). Conversely, rates now incorporate not only higher expected inflation but also a risk premium for this resurgent inflation. They have already risen significantly: the yield on the 10-year OAT rose from 0.1% a year ago to 1.9% at the end of June. The State is the economic agent that finances and refinances itself most extensively and most frequently on the markets. Furthermore, markets pass on not only the actual increases but also the expected increases in key rates much more quickly than banks. Clearly, the era of negative or zero interest rates is over; we must shed the seductive but dangerous illusion of cost-free and unlimited French public debt.²⁸

Chart 12 French government bond yields

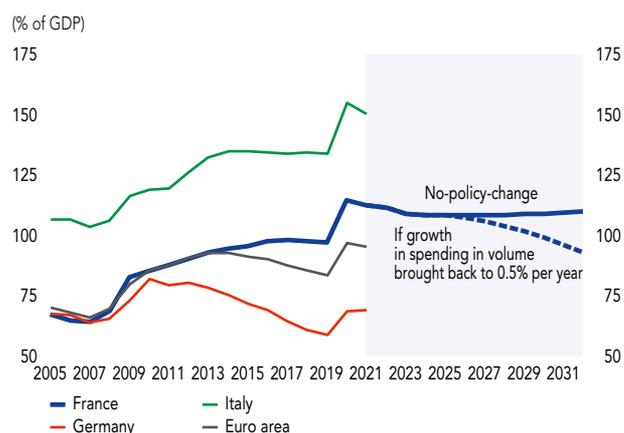


Sources : Bloomberg, Banque de France calculations (latest data at 30 June 2022).

Public debt in euro area countries has legitimately increased to assist households and businesses in coping with the Covid crisis, albeit from already very high levels in some countries including France. In 2021, it reached historical

highs in France (113% of GDP) and in several European countries (e.g. 118% in Spain and 151% in Italy), compared with 69% in Germany (see Chart 13). We have now exited this emergency and the “whatever it takes” situation. However, according to our projections, French public debt should remain at best almost stable at around 110% of GDP by 2032 under a no-fiscal-policy-change assumption.

Chart 13 Government debt ratios of the main euro area countries



Sources: Eurostat, national accounts, Banque de France calculations (blue-shaded area shows projection).

Notes: The public debt ratio is the ratio of gross government debt to gross domestic product (GDP).

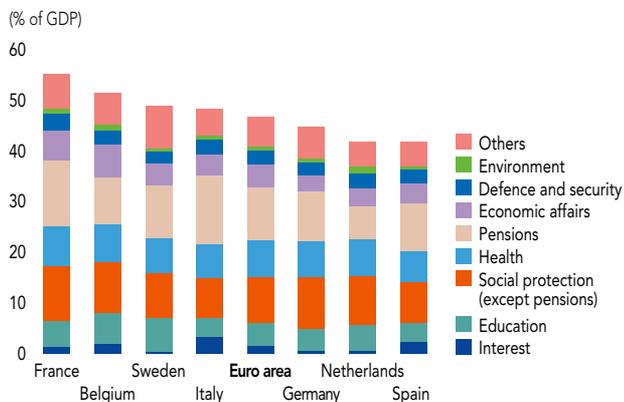
Projections based on rate assumptions at 23 May 2022.

This is clearly insufficient to ensure fiscal sustainability in the long term. France and Europe have faced unforeseen external crises in the past and will continue to do so in the future. In addition, massive investment is required to achieve two key transformations for the future, the ecological and digital transitions. We do not have the right to bequeath to the young, on top of a climate debt that so rightly worries them, a financial debt that that has already almost doubled over the past 20 years as a proportion of GDP. Our political credibility in Europe is also at stake, as well as our ability to inspire the confidence of investors in the long term – and therefore to limit the cost of borrowing on the markets.

France must therefore pursue an ambitious and credible debt reduction strategy. These choices are naturally a matter for democratic debate, but ensuring that within ten years its debt-to-GDP ratio falls below 100%, i.e. below the pre-Covid level of 98%, is possible. This will require the addition of three levers: time, stronger growth (see Part 3), but above all more efficient public spending. We share the same [social model](#) as our European neighbours, but it

costs us more: our public spending is significantly higher (see *Chart 14*), particularly on certain social benefits, such as pensions, and economic affairs (including tax credits).

Chart 14 Breakdown of government expenditure by function in 2019



Source: OECD.

However difficult the resulting political choices and trade-offs, we must stop indefinitely leaving fiscal consolidation to future generations. Among these difficult choices of priorities or savings to be made, a crucial factor, which too often remains the blind spot in fiscal debates, can help us: the quality of public spending. Analyses show that spending on the future (education, research, most investments) have a far greater “multiplier” effect on growth over time than current spending. And, regarding this latter expenditure, the crisis in many public services is being felt both by their players – the civil servants – and by their users – the citizens. But this crisis may be less a matter of additional resources – already on a par with our neighbours – than of better management for the public service: re-legitimation of its objectives, recognition of civil servants and autonomy of its managers, multi-annual performance and innovation contracts, and modernisation investments. The strength of public services is not only measured by their means but also by their output. On its own modest scale, the Banque de France has for a number of years been providing more services, reducing costs, while maintaining its nationwide presence.²⁹

An increase in real expenditure that is brought back to 0.5% per year, for example, as opposed to more than 1% over the previous decade, would enable us to reduce the debt ratio by around 15 percentage points over ten years (see *Chart 13* above) – these figures should be understood

as without further cuts in taxes or employer charges, which we can hardly afford. It is, of course, for government and parliament to establish such a “spending rule”. In a nutshell, the aim is not to advocate a general reduction in expenditure, but rather to curb the increase in spending, which is a far cry from dreaded “austerity”. Most importantly, the targets set must be achieved in a sustainable manner.

3

To reduce inflation and increase growth, promote long-term supply-side policies

Over the past few years, the priority for public policy has been to tackle the successive emergencies caused by the Covid crisis, the conflict in Ukraine and the recent decrease in purchasing power. It nevertheless remains essential to take a longer-term view and direct economic policies towards our structural challenges, for two reasons:

- By reducing our vulnerability to external shocks, for example through greater energy diversification, or to a shortage of domestic supply, including by increasing the skills available in the labour market, **supply-side policies** also help to control **inflation**.
- These policies are vital to strengthen potential **growth** over the medium term and adapt to the changes in our economic and geopolitical environment. France can then aim for a lasting solution to its challenges (debt, unemployment, purchasing power).

Conversely, past monetary and fiscal **demand-side policies** are today less relevant as they would sustain inflation rather than lower it; in addition, there is no longer the same room for manoeuvre on these policies (see *Part 2*). We should make it clear that the “supply-side policies” we are referring to here are those aimed at making long-term transformations to “beef up” our productive capacity: it is not primarily about prioritising additional tax

²⁶ HCSF (2022), press release, 24 March.

²⁷ The solvency ratio of the six French banking groups reached 14.8% in the first quarter of 2022, down slightly from the end of 2021 but still well above regulatory requirements.

²⁸ Villeroy de Galhau (F.) (2022), “The sustainability of French debt, between rising interest rates and European rules”, speech, conference of the Haut Conseil des finances publiques, 10 May.

²⁹ Banque de France (2022), *Annual Report 2021*, March (French only).

cuts for businesses, whose effects are less certain while unfortunately representing a very definite cost.

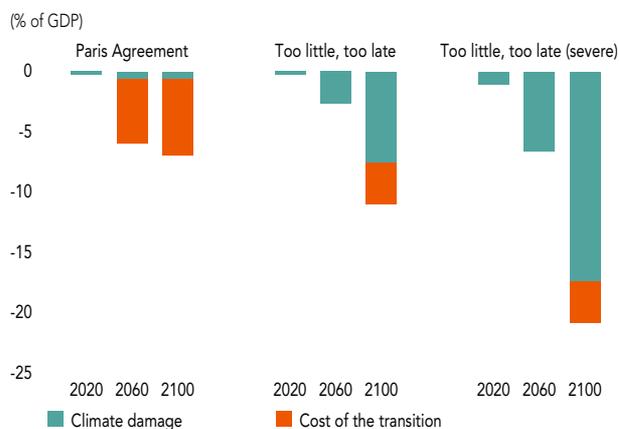
Among the transformations to be made, two are common to all of Europe: the ecological transition and the digital transition; but the third one is specific to France: increasing the supply and quality of labour.

3.1 Two European “great transformations”

The ecological and energy transition

The transition towards a less carbon-intensive economy is a vital imperative at the global level: climate change is accelerating, as underlined by the latest IPCC³⁰ report. Europe has committed to achieving carbon neutrality by 2050. The cost of a disorderly transition, essentially due to climate damage, could amount to between 10 and 20 percentage points of GDP by 2100; in contrast, the cost would be limited to 7 percentage points under an orderly transition scenario where the Paris Agreement targets are met³¹ while at the same time preserving favourable conditions for economic growth (see Chart 15).

Chart 15 Macroeconomic cost of different climate transition scenarios



Source: European Systemic Risk Board (ESRB).

Note: Scenario for an orderly transition (Paris Agreement, 2015) and adverse scenarios involving a delayed transition.

In the near term, the main challenge will be to reconcile our climate targets with the urgent need for Europe to achieve greater energy autonomy in the face of the war in Ukraine. The increased use of coal – temporarily at least – in certain countries obviously raises doubts in the near term. But the “path of compatibility” can notably involve

making a collective effort on energy savings, which seems both desirable and feasible in order to meet our target of a 50% reduction by 2050.³² We also need to adapt our gas infrastructure to raise the share of gas sourced from outside Russia, and develop technological innovations (nuclear energy, renewable energies and, in the longer term, hydrogen). Policies such as a higher carbon price or the adaptation of our transport infrastructure remain indispensable in order to steer investments in the right direction. Central banks, starting with the Banque de France, are playing their part in this trend³³ by greening their investments and making climate risk a priority in their supervision of banks and insurers. The Eurosystem has also committed to including climate considerations in its conduct of monetary policy.³⁴

However, the ecological and energy transition could itself generate risks of temporary inflationary pressures (“greenflation”). These risks are linked to the introduction of a carbon price (border carbon adjustment mechanism, carbon trading) and the shifting of demand towards green energies or technologies,³⁵ which pushes up prices as supply is relatively rigid. Yet it is important to clarify two points in this debate: (i) the ecological transition is in no way responsible for the current rate of inflation, which is essentially a result of our dependence on fossil energies; (ii) the later and more disorderly the transition, the greater the risks of greenflation.

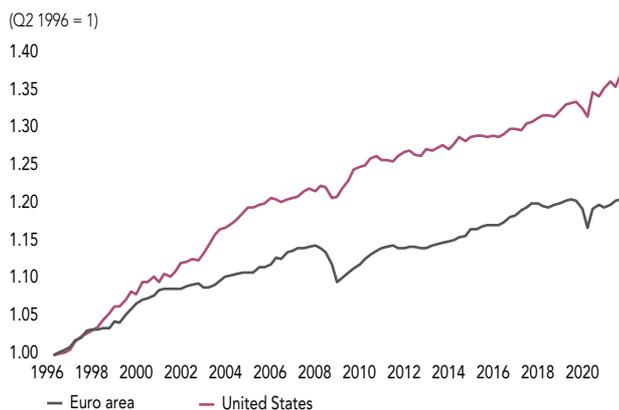
The digital transformation and associated challenges for productivity

Europe is lagging behind the United States and other global powers in the development of digital technologies. This is reflected in the lower number of patents for information and communication technologies (7,900 in the euro area compared with 17,100 in the United States over the period 2015-19). This lag is a structural handicap for innovation and growth.

It essentially stems from lower levels of financing – Europe devotes only 2.0% of its GDP to research and development compared with 2.8% in the United States – and from a slower adoption of new technologies. As a result, the productivity gap is widening (see Chart 16 below).

However, Europe is potentially at a turning point thanks to the latest advances in artificial intelligence and biotechnology, and to the reorganisations brought about by teleworking.³⁶ It therefore needs to redouble its efforts and seize this opportunity to accelerate its digital transformation and increase its productivity.

Chart 16 Total factor productivity in the euro area and the United States



Sources: OECD, Banque de France.

Notes: Latest data at Q4 2021. Total factor productivity is a measure of the efficiency of production and its dynamics are largely explained by technical progress and its diffusion to the economy.

Combining public and private financing

Ensuring successful ecological and digital transitions will require massive investment, estimated by the European Commission at around EUR 500 billion per year in Europe.³⁷ the size of this investment calls for a pooling of our financing, both public and private. Regarding **public investment**, the NextGenerationEU is a decisive step forward: more than EUR 180 billion are being directed towards the ecological transition and close to EUR 120 billion towards the digital transition. But it is just as important to encourage a better allocation of **private capital**; Europe has the largest reserve of savings in the world with an external surplus of around EUR 300 billion per year. We now need to direct this more towards our financing priorities, and especially towards innovative projects and businesses. Europe is lagging behind on this: in 2021, European venture capital funds raised a total of USD 25 billion compared with more than USD 130 billion in the United States.³⁸ Despite recent progress, including in France, the lack of pan-European financing vehicles is leading promising start-ups to seek investors outside Europe: up to 70% of the capital raised during major financing campaigns comes from investors in third countries, and the more developed these start-ups are, the greater the share. We therefore need to act decisively to speed up the creation of a European financing ecosystem via the creation of a Capital Markets Union that is green and digital.³⁹

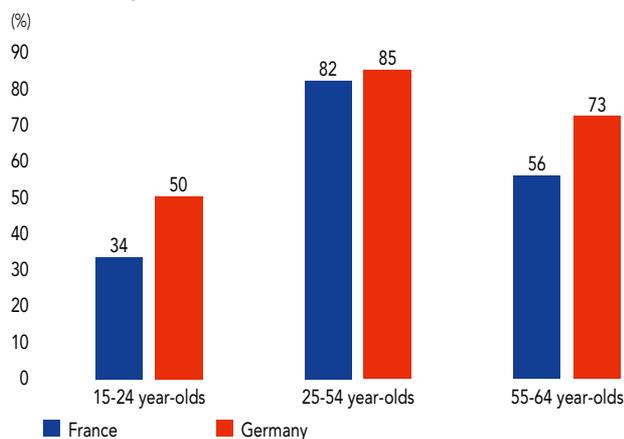
3.2 A challenge that is more specific to France: labour supply and skills

France is facing a paradox with regards to employment: 55% of businesses are now experiencing hiring difficulties⁴⁰ and

more than 350,000 job positions remain unfilled even though there are still 2.9 million jobseekers. The number of vacancies is higher now than in 2019 (200,000). Aside from current supply disruptions, hiring difficulties are the main long-term obstacle to growth for our businesses; this shows the need for employers to improve their job offers and for workers to adapt their skills to those areas where the need is greatest.

Despite recent progress, France's **employment rate** is increasing more slowly than Germany's. There is significant room for progress – albeit with marked differences across age brackets (see *Chart 17*). Contrary to widespread assumptions, the entry of more people into the labour market leads to new job creations, thanks to a rise in revenues, and hence to less unemployment.

Chart 17 Employment rate by age bracket in France and Germany



Source: OECD.

Note: Data for Q4 2021.

30 Intergovernmental Panel on Climate Change.

31 De Gaye (A.) and Lisack (N.) (2022), "Too little, too late: Impact of a disorderly climate transition" *Eco Notepad blog*, post No. 255, February.

32 Target for the reduction in energy consumption compared with 2012, as set in the 2015 Law on the Energy Transition for Green Growth.

33 Bolton (P.), Després (M.), Pereira da Silva (L.-A.), Samama (F.) and Svartzman (R.) (2020), "Green Swans: Central banks in the age of climate-related risks", *Banque de France Bulletin*, No. 229/8, May-June.

34 Dees (S.), Ouvrard (J.-F.) and Weber (P.-F.) (2022) "Climate change and implications for the conduct of monetary policy", *Eco Notepad blog*, post No. 265, April.

35 Lagarde (C.) (2021) "Monetary policy during an atypical recovery", speech (ECB Forum on Central Banking), 28 September.

36 Bergeaud (A.), Cetté (G.) and Drapala (S.) (2022), "Telework and Productivity: Insights from a New Survey", SSRN, January.

37 Some EUR 360 billion for the ecological transition and some EUR 125 billion for the digital transition; see European Commission (2020), *Stepping up Europe's 2030 climate ambition, Investing in a climate-neutral future for the benefit of our people*, communication, COM/2020/562, 17 September, and European Commission (2020), *Europe's moment: Repair and Prepare for the Next Generation*, press release, 27 May.

38 KPMG, *Venture Pulse Report*, Q4 2021

39 Banque de France (2019) "Achievements and challenges of the euro, 20 years after its creation", *Letter to the President of the Republic*, April, pp. 16-18.

40 Banque de France, *Update on business conditions in France at the start of June 2022*.

Resolving this French difficulty is an absolute priority, both socially – to at last get people out of unemployment – and economically, to accelerate our growth. Professional training is a first cross-cutting lever for action, to improve and deepen skills. The *compte personnel de formation* (CPF – personal training account) is a step forward, but it needs to be optimised to better direct this major expenditure to our skills needs, especially in digital professions and in industry.

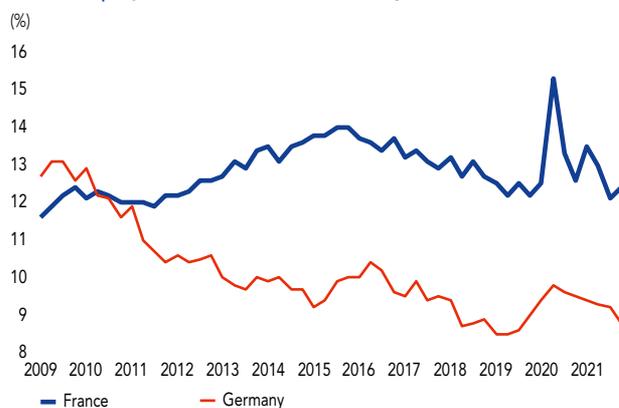
Other measures are more specific to the two age brackets where there is a jobs deficit:

- For the **youngest**, apprenticeships are proving a real success, with a record of close to 710,000 new contracts signed in 2021. This trend needs to be accelerated, with the aim of reaching the number of apprentices in Germany (1.3 million compared with 870,000 in France). Upstream, we need to enhance basic education to stop the slow erosion of skills observed over the past 40 years in all international surveys (PISA, TIMSS, etc.).⁴¹ There is no greater battle than that of education, especially to reduce the share of young people that are not in employment, education or training, which unfortunately stands at 13% of 15-29 year-olds (see Chart 18).

- For **seniors** (55-65 year-olds), pension reform will admittedly be delicate and require a democratic debate; but it remains economically desirable. Few reforms in France would have a greater impact in terms of increasing potential growth and securing the financing of our social protection. But it will have to be fair and be accompanied by commitments on the part of businesses towards seniors and the quality of their jobs.

Put together, these French and European transformations would consolidate our potential growth, which in France remains capped at around 1.2-1.3%. A more ambitious target of between 1.5% and 2% is achievable, in other words a gain of around half a percentage point compared with the current trend. The digital and ecological transitions (especially the former) could contribute a third of this, including via strategic investments, while the remaining two-thirds would come from increasing the labour supply in France. Raising our potential growth – while at the same time making it greener and fairer – means creating additional revenues to finance our projects and welfare. We could then aim for full employment within five to ten years. And we will be able to ensure a sustainable rise in household purchasing power without financing it through debt as we have up to now; on the contrary, we could at last reduce the public debt that is weighing on future generations.

Chart 18 Share of 15-29 year-olds in France and Germany not in employment, education or training



Source: Eurostat.

Note: Data corrected for seasonal variations (latest data at Q4 2021).

41 See Ministry of National Education and Youth: *L'évaluation des élèves français à l'échelle internationale* (French only – International assessment of French pupils).

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In a difficult economic context marked by Russia's war against Ukraine, the Banque de France is striving to serve the French public – and above all those who need help the most. It assists overindebted families, ensures the disadvantaged have access to banking and financial services, and works alongside VSEs-SMEs at its 105 branches throughout all of France.

It also, and most importantly, makes a commitment to all: to guarantee, alongside the ECB, price stability by bringing today's too high level of inflation back towards its medium-term target of 2%. This *Letter* expresses a first conviction: we must reduce inflation, and we will succeed.

First, through the normalisation of monetary policy which we have now begun and which we will continue in both a resolute and orderly manner. Added to this should be a collective mobilisation – French and European – to limit our energy dependency and at the same time speed up the

ecological transition. Then, over the longer term, policies are needed to “beef up” our productive capacity, to help reduce inflation and improve our growth so that it is stronger, greener and fairer. France has some major assets, and this forms the basis for a second conviction: our country can succeed – if it mobilises itself in a lucid and fair manner – in overcoming the cost of this shock, and beyond this, in building more solid and lasting economic and social progress.

More than ever, the Banque de France needs to listen, and to explain. Last year it launched its *Banque de France à votre écoute* (The Banque de France Listens) Q&A sessions and its annual *Rencontres nationales de la politique monétaire* (National Monetary Policy Forum). Capitalising on its independence and technical expertise, it is meeting these demanding challenges for the benefit of all – elected representatives and citizens of France.

François Villeroy de Galhau

APPENDIX

THE ACCELERATION IN INFLATION VARIES ACROSS COUNTRIES



2020 (annual average)

Headline inflation: 0.3%
Core inflation: 0.7%

May 2022 (year-on-year)

Headline inflation: 8.1%
Core inflation: 3.8%



2020 (annual average)

Headline inflation: 1.2%
Core inflation: 1.7%

May 2022 (year-on-year)

Headline inflation: 8.6%
Core inflation: 6.0%



2020 (annual average)

Headline inflation: 0.9%
Core inflation: 1.4%

May 2022 (year-on-year)

Headline inflation: 9.1%
Core inflation: 5.9%



2020 (annual average)

Headline inflation: 0.0%
Core inflation: 0.2%

May 2022 (year-on-year)

Headline inflation: 2.5%
Core inflation: 0.8%



2020 (annual average)

Headline inflation: 2.5%
Core inflation: 0.8%

May 2022 (year-on-year)

Headline inflation: 2.1%
Core inflation: 0.9%

Headline inflation
Core inflation

Sources: Eurostat (euro area), Bureau of Labor Statistics (United States), Office for National Statistics (United Kingdom), Statistics Bureau of Japan (Japan), National Bureau of Statistics (China).

GLOSSARY

Anchored expectations

Inflation expectations that are stable and close to the central bank target.

Core inflation

The prices of some goods – for example fuel and certain food items – are highly volatile as they depend on global markets. Core inflation aims to better measure the underlying long-term trend in prices.

Deflation

A sustained and general decline in the price level.

Distribution

In statistics, a distribution shows all possible values for a given variable and the frequency with which they occur.

Employment rate

Share of the total working age population that is in work, expressed as a percentage.

Indexation/De-indexation

Indexation is the adjustment of a value in line with a given economic index (e.g. the indexation of the minimum wage to inflation). De-indexation is the act of ending this indexation.

Industry-level agreement

Collective agreement signed by employer representatives and one or more employee unions in a particular professional activity. An industry-level agreement defines the rules applicable to all workers in that professional activity.

Inflation

A general and self-sustaining increase in the price level: general in that the prices of an increasing number of products are rising; self-sustaining in that selling prices are increasing to a greater extent than costs in anticipation of future inflation.

Inflation swaps

Inflation swaps or inflation-linked swaps (ILS) are derivative products that are traded over-the-counter, whereby two investors agree to exchange two monetary flows at a future date under predefined terms.

Key interest rates

Interest rates set by the central bank of a country or monetary union and applicable to its monetary policy counterparties (primarily banks). In the euro area the ECB sets three different rates: the interest rate on deposit facilities, the interest rate on the main refinancing operations and the interest rate on the marginal lending facility.

Median

The value lying at the midpoint of a distribution. For example, in a distribution of wages, 50% of wages are below the median value and 50% are above it.

Multiplier effect

This is when the increase (or decrease) in a variable, in this case public expenditure, leads to a greater increase (or decrease) in another variable, in this case gross domestic product (GDP). It can apply to demand and investment, but also to public expenditure, exports or even money.

Neutral rate

The theoretical level of key interest rates at which monetary inflation neither accelerates nor slows down.

Non-standard measures

Set of tools used by central banks in situations where standard monetary policy tools (key interest rates, compulsory reserves, open market operations) are ineffective. The measures consist of asset purchase programmes (e.g. APP and PEPP), targeted longer-term refinancing operations (TLTRO), negative interest rates.

Normalisation (of monetary policy)

Describes the end of exceptional (also called non-standard) measures.

OAT

Obligations assimilables du Trésor (OATs) are financial securities issued by the French Treasury that account for a fraction of France's long-term public debt.

OECD

Organisation for Economic Co-operation and Development.

Potential growth

Potential growth is an estimate of the rate of growth in gross domestic product (GDP) when all available production factors are used optimally and the inflation rate remains stable.

Real/nominal rates

Interest rates represent the "cost" of capital: this can either be the cost of borrowing or the return on a loan.

- The nominal interest rate is the rate actually agreed and paid. For example, it is the rate stipulated in the contract for a loan to finance a house purchase.
- The real interest rate is the effective cost of the loan, the purchasing power of money. It takes into account the cost of living and is calculated by deducting the observed inflation rate, or expected inflation rate, from the nominal interest rate.

Recession

Temporary period of decline in a country's economic activity. A recession is usually defined as at least two consecutive quarters of decline in a country's gross domestic product (GDP).

Risk premium

The additional return demanded by investors to compensate for higher exposure to risk.

SMEs, VSEs

Small and medium-sized enterprises, very small enterprises.

Social model

System of institutions and legislation whereby a state ensures national welfare, equality of opportunity and access to education, employment, social protection, health care, housing, pensions, etc.

Supply-side/demand-side policies

Supply-side policies are a set of measures to boost economic output. Demand-side policies are measures aimed at stimulating consumption and/or investment.



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