The challenges of a more demanding environment on monetary policy

François VILLEROY de GALHAU*
Vincent BIGNON**
Bruno CABRILLAC***

Monetary policy has played a decisive role in buffering the effects of the last two global crises that occurred in 2007-09 and 2020 in advanced countries. It has also made it possible to safeguard the integrity of the euro area. This is Mario Draghi's famous "Whatever it takes". This power and effectiveness of monetary policy are implicitly reflected in the mantra of central bankers over the past decade: "monetary policy is not the only game in town". This limitation is intended to protect central banks from excessive expectations which, by distancing them from their mandate, could undermine their credibility. But it should not prevent them from helping to tackle the challenges ahead: rising public debt, slowing potential growth, climate change, rising inequality, and digitalisation. All these challenges have consequences for price stability and interfere with monetary policy.

Paradoxically, this power and effectiveness of monetary policy, which is considered as coming from its high credibility, has come with a decade of apparent difficulties in fulfilling completely its mandate, with inflation significantly below target. Remarkably, however, with

* Governor, Banque de France.
** Advisor to the Director general for statistics, economics and international, Banque de France.
Contact : vincent.bignon@banque-france.fr.
*** Deputy Director general for statistics, economics and international, Banque de France.
Contact : bruno.cabrillac@banque-france.fr.

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the exception of Japan, inflation expectations have remained relatively anchored. Such credibility is the main asset of central banks in the current context of renewed inflationary pressures, partly caused by exogenous factors, and uncertainties about how long these pressures might last. This is the main difference with the late 1970s, a period that is often used as a point of comparison to explain the current period.

The management of the post-Covid crisis recovery is one of the best illustrations of the complex and more demanding economic environment in which central banks must fulfil their mandate. This crisis has simultaneously created a negative shock on supply and demand in all the countries affected, with very contrasting impacts among sectors. With the recovery, the sign of the demand shock has reversed, with strong and different ripples among sectors on the supply side caused by the reorganisation of global value chains. Moreover, structural changes induced by the Covid crisis, such as remote working or the acceleration of digitalisation, could have positive consequences on the natural interest rate, counteracting its downward trend of the last ten years[1]. This type of double shock, exceptional in peacetime, creates new challenges for monetary policy. Unfortunately, it could happen again, for example if nothing is done about climate change.

In the current context, our first challenge is the phasing out of exceptional measures. However, the issue of public debt will have to be addressed and, beyond the Covid crisis, central banks will have to take better account of the environmental and social dimensions.

How to phase out of exceptional programmes?

In a recovery surrounded by uncertainty, one thing is certain: gradually phasing out of the exceptional measures must be guided by a single compass, our inflation target: the ECB will adjust its monetary policy as pragmatically as necessary to achieve an inflation target of 2% over the medium term. Inflation is once again at the heart of an intense debate: in a few months it has gone from questioning the structural weakness of "missing inflation" – for more than a decade – to fears of the return of excessive and persistent inflation.

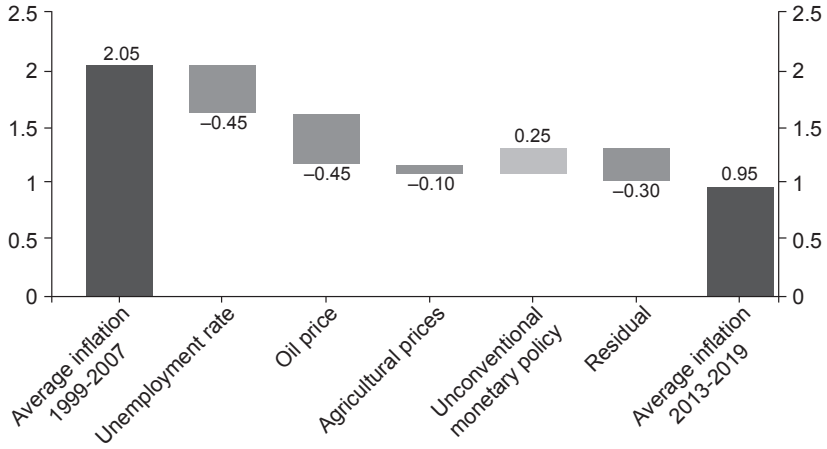
From a lack of inflation to a return of inflation

The Central Bank must first account for the trajectory over the past years. Until 2021, the "disappearance of inflation" – which was in fact a significant reduction – was a global phenomenon. Inflation in the euro area thus fell from an average of 2.1% over the 1999-2007 period to an average of 1.0% over the 2013-2019 period. In the US, inflation (as measured by the Personal Consumption Expenditure price index,

PCE index, which is the Fed's compass) fell by a similar 0.8 percentage points from 2.2% to 1.4% between the two periods.

According to an analysis by the Banque de France (Diev *et al.*, 2021), in the euro area, two factors explain most of the gap between the observed level of inflation and our target between 2013 and 2019: the weak business cycle and the fall in energy prices. The Great Recession and the sovereign debt crisis indeed had a lasting adverse effect on demand and employment between 2008 and 2012 and, consequently, on prices. In contrast to the years between 2002 and 2007, during which energy prices were the reason why central banks reached their 2% target, the sharp decline in oil prices after 2014 has lowered both the energy component of consumer prices directly and the production costs of non-energy goods and services indirectly. Monetary policy was able to limit these disinflationary impacts by implementing unconventional instruments once rates had reached their effective lower bound. Without this policy, average annual inflation would have been about 0.3 percentage points lower between 2014 and 2019. This leaves an unexplained part of the decrease in inflation, which amounts to around 0.3 percentage points on average, and which can be attributed to structural factors: globalisation, digitalisation, changes in wage bargaining, etc. (see Chart 1).

Chart 1
Breakdown of the Decline in Average Inflation in the Euro Area between 1999-2007 and 2013-2019
(HICP, year-on-year in %)



Note: values are rounded to the nearest 0.05.

Source: Banque de France (Bulletin No. 234/7).

Since the beginning of 2021, inflation in the euro area has risen significantly: from -0.3% in December 2020 to 5% in December 2021. The sharp rise in HICP inflation largely reflects the recovery in oil and gas prices from their low levels in 2020. It also reflects a gradual recovery in HICP inflation excluding energy and food, from 0.2% in December 2020 (exceptionally low given the temporary reduction in VAT in Germany) to 2.6% in December 2021. This rise in inflation is also related to sectoral bottlenecks, which do not stem from excessive demand overall, but from unevenly distributed demand, particularly among sectors, which is growing faster than supply. The price increases, which are mainly for commodities and some intermediate goods, are expected to fade as supply and inventories normalise in relation to demand. In other words, our central scenario is neither inflationary overheating nor stagflation.

After the inflation hump of 2021 which will last during of 2022, the euro area inflation rate would return to around 2% in 2023 and 2024. The sharp drop in unemployment over the entire forecast horizon and the gradual return of the economy to full production capacity utilisation would enable a return to growth rate in wages and prices excluding energy and food close to that of the 2002-2007 period, particularly for services. In France, the dynamics of inflation would return, over the same forecast horizon, to a rate close to 2% p.a., compared with approximately +0.7% p.a. over the 2013-2020 period[2].

This is thus not a return to the pre-Covid *status quo*: the determinants of inflation dynamics would be closer to those of pre-2008 than to those of the 2013-2019 period. Between 2013 and 2019, the services component was particularly weak, with an average year-on-year change of 1.2%, twice as low as its average of 2.7% between 2002 and 2007. In 2023-2024, prices of private services would continue their upward trend thus supporting inflation excluding energy and food, as in 2002-2007. This increase, supported by the rise in wages driven by a historically low unemployment rate and taking into account recruitment difficulties, is built on long-term expectations anchored by the credibility of monetary policy. In this scenario, wage increases would be in line with labour productivity gains with medium-term inflation expectations anchored at 2%. In line with the historical patterns since the early 2000s, these wage increases would lead to fairly robust gains in household purchasing power, averaging around more than 1% over those two years, and at the same time, corporate profit margins would remain close to their pre-covid level.

Inflation and monetary policy

The prospect of a return to a medium-term inflation rate consistent with the Eurosystem's inflation target guides our monetary policy. It builds on the conclusions of the Strategic Review of Monetary Policy published in July 2021, which clarify our 2% inflation target. The decisions published on 8th of July reinforced three interrelated characteristics. Our inflation target is now:

– simpler: the previous definition referred to a target "below but close to 2% (ECB, 2003)". Like most other central banks (US, Japan, UK), the ECB is now targeting 2% inflation;

– symmetric: our target is a goal, not a ceiling. The Eurosystem can now accept a moderate and temporary inflation above 2%, without necessarily reacting through its monetary policy;

– over the Medium-term: we will continue to assess inflation outcomes over a sufficiently long period of time, beyond short-term changes in inflation.

The realisation in 2021 that the pandemic no longer had a significant downward impact on inflation - after a strong negative impact for almost a year - led to the announcement of the end of net purchases under the Pandemic Emergency Purchase Programme (PEPP) at the end of March 2022, as well as the end of the TLTRO-III interest rate subsidy scheme in June 2022. Furthermore, the strong short-term recovery and the expected inflation profile up to 2024 led the Eurosystem to decide to reduce the pace of the purchase programmes.

Uncertainties over medium-term activity and inflation remain however high, due to ongoing pandemic waves, bottlenecks, and the reorganisation of value chains. They therefore require the Governing Council to pay close attention to the actual data and to have strong "optionality" on the pace of the gradual normalisation of our monetary policy. Whatever the inflation scenario, the ECB will do what it takes to bring inflation back around its 2% target and to maintain the anchoring inflation expectations at that level on a lasting basis.

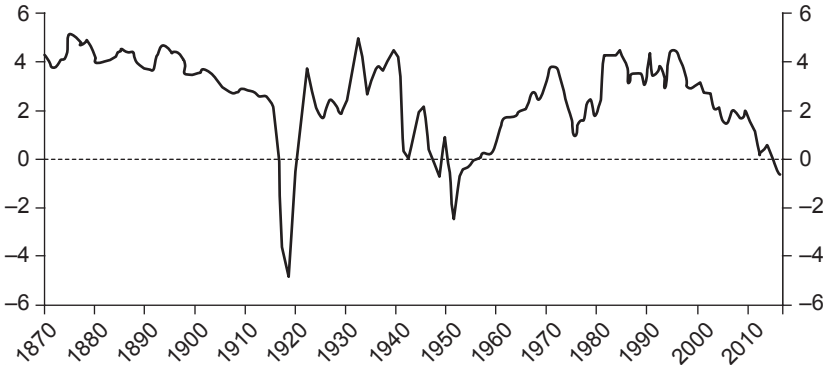
Unconventional monetary policy and lower natural rates

The quartet of unconventional instruments[3] was put in place well before the Covid crisis to counter the existence of the Effective Lower Bound (ELB) on interest rates. This circumstance is all the more likely and therefore common when the natural interest rate is low. The natural interest rate is difficult to measure empirically but can be approximated by looking at changes in real rates.

In terms of its duration and magnitude, the decline in real interest rates over three decades is historic in peacetime. Chart 2 (below) shows the change in global long-term real interest rates between 1870 and

2016[4]. This chart shows that, apart from the lows following the two World Wars, the global real interest rate has fluctuated between 2% and 4% before declining steadily from 5% in the mid-1980s into negative territory in the 2010s. Today, real rates in the euro area or the United States, measured for example by OIS rates, are between -1.5% and -2% for a 10-year maturity or between -3% and -4% for a one-year maturity[5], i.e. a historical low since the Second World War. The current level of real rates is therefore quite exceptionnal.

Chart 2
Global Long-Term Real Interest Rates (1870-2016)
(%)



Note: median real interest rates calculated by economists at the Bank for International Settlements (Borio *et al.*, 2017) using a broad set of advanced countries. Real rates were deflate using the CPI of each country.

Source: Borio *et al.* (2017).

Two types of factors explain the level of natural interest rates: those that affect the trend growth of economies, and those that influence the supply of savings and the demand for investment[6].

In advanced countries, the ageing labour force and the slowdown in total factor productivity (TFP) have led to a slowdown in the trend growth rate of GDP (Holston *et al.*, 2017). The ageing of the population results in a reduced labour supply and has a negative impact on economic dynamism, innovation and productivity. Since the late 1970s, TFP in the euro area and Japan has lost on average 1 percentage point of growth per decade and since the mid-2000s it has stagnated at a level close to zero in most OECD countries (Bergeaud *et al.*, 2016).

The other cause of the decrease of the natural rate comes from an increased supply of savings and less demand for investment. The lower demand for investment in physical capital is mainly explained by the rise of the intangible économy (Haskel and Westlake, 2017). The global savings glut is fuelled both by various structural factors such as

ageing and rising inequality in advanced countries, as well as by factors linked to how capital markets work:

– for example, the accumulation of foreign exchange reserves in emerging countries for precautionary reasons after the Asian crisis in 1997 increased the demand for safe assets, as did the tighter prudential regulations in the financial sector that accelerated after the financial crisis of 2007-2008 (Gorton *et al.*, 2012). In addition, changes in the perception of risk surrounding the global growth outlook have also reduced the risk-free interest rate relative to the rate of return on capital (Marx *et al.*, 2021);

– the increase in life expectancy gives rise to a phenomenon amplified by ageing: the working-age population expects to 'age for longer' and therefore chooses to save a larger share of its income to finance its retirement over a longer horizon (Carvalho *et al.*, 2016). A rise in inequality also leads to a rise in the supply of savings, with high earners having a higher savings rate than low earners (Mian *et al.*, 2021).

The relative weight of each of these factors is discussed in a number of academic papers. Referring to a series of empirical work, Brand *et al.* (2018) find that productivity plays a secondary role in lowering natural interest rates. Research by Rachel and Smith (2017) suggests that factors related to the global savings glut explain three quarters of the decline in the natural rate. However, the analysis of Holston *et al.* (2017) indicates that the decline in natural interest rates in advanced countries is mainly the result of a slowdown in the trend growth rate of GDP, which in turn is the consequence of lower growth in labour supply and total factor productivity.

Over the medium term, the level of the natural interest rate could be influenced by two types of factors. On the one hand, according to Goodhart and Pradhan (2020), the ageing world population and deglobalisation trends could cause a change in the inflation regime compared to the 2010 decade (Goodhart and Pradhan, 2020). On the other hand, the structural changes brought about by the Covid crisis potentially bear the seeds of a surge in productivity, including through the increased digitalisation of economies. Combined with an expansion of labour supply and a more efficient use of resources, this surge in productivity could have a positive impact on the natural rate, suggesting a significant increase in the effectiveness of conventional monetary policy. Furthermore, the fight against climate change should lead to increased investment to meet the objectives set by the Paris Agreement, contributing to an increase in the natural rate.

An examination of the data will confirm when the different channels for increasing the natural rate will be activated in our economies. In the central scenario, the expected dynamics of prices excluding energy and

food at the forecast horizon of 2024 give hope for a medium-term normalisation of monetary policy. This would make it possible to limit the potentially distorting side effects created by non-conventional instruments, particularly on financial stability (see below). However, the uncertainties of this scenario, as the supply constraints, suggest that the whole toolbox should be retained for monetary policy to be highly flexible and responsive.

MORE STRUCTURAL CHALLENGES: BEYOND PUBLIC DEBT, HOW CAN THE TWO ENVIRONMENTAL AND SOCIAL DIMENSIONS BE BETTER INTEGRATED?

Europe, like the rest of the world, is facing three challenges: growing national debt, climate change and inequality. While these three challenges are each related to the Covid crisis, they pre-existed it and will not disappear with the end of the pandemic. None of them are directly related to the mandate given to central banks. But each makes the economic environment in which central banks operate more demanding for monetary policy. They are therefore an issue for central banks. Their direct impact, in the absence of any policy to counteract current trends, contributes to a lower natural rate of interest. Policies that address these three challenges, however, would have an upward impact on the natural rate, thereby increasing the effectiveness of conventional monetary policy instruments. Furthermore, by contributing to an increase in financial risks, climate change and debt are factors of increased financial instability. In this section, we discuss the potential role that central banks could play, within the scope of their mandate.

Growing national debt

In France, as in the rest of the euro area, public debt ratios rose sharply with the extraordinary - and fully justified - fiscal measures taken to support activity during the Covid crisis[7]. All advanced countries experienced a shock of a similar magnitude, representing more than 10 percentage points of GDP on their public debt ratios, leading to historically high levels of debt for the last 50 years.

Unfortunately, a significant spontaneous reduction in France's public debt ratio cannot be expected in the current decade. With about 1.1% p.a. of potential GDP growth – a conservative assumption – and real public expenditure growth rate of circa 1.1%, which would be close to the trend over the last ten years, the level of public debt would remain well above its pre-Covid level over the next decade. This would be a risky strategy given the possibility of further economic or financial crises.

Against this backdrop, a credible debt reduction strategy must combine three levers, none of which taken separately is enough:

– firstly, we need time: to start reducing our debt ratio as soon as we emerge from the Covid crisis, and adopt a medium/long term strategy. Over 10 years, the debt ratio should fall well below 100%, which is its pre-Covid level;

– growth is a key factor in debt ratio reduction: it is necessary, but not sufficient, and can only be stimulated in the long term by structural reforms, which have been put off for too long;

– the third lever is better efficiency and control of our public spending, which is the highest in Europe and even in all developed countries.

This control of expenditure is necessary to reduce debt. Indeed, a growth in real expenditure reduced to +0.5% per annum (instead of +1.1%) would reduce the debt to about 100% of GDP, and France's nominal debt would start to decline in 2026. The target to be set is a matter for the democratic debate, not for central banks. But then compliance with it will be key. A set of expenditure rules would be consistent with the financing of public expenditure that increases long-term growth, including education, training, research, healthcare, and the energy transition. Consolidation of expenditure must also be supported by improvements in its economic and social efficiency.

Central banks' commitment to fighting climate change

The involvement of central banks in the climate cause may seem obvious today. But it was not a given five years ago, when the Network of Central Banks and Supervisors for the Greening of the Financial System (NGFS) was launched, and few issues have seen such quick and radical change in thinking and action. It is one of the innovations introduced by the Eurosystem's strategic monetary policy review. But to be credible and legitimate, this commitment must be consistent with our mandate.

Taking climate change into account is not overstepping our mission, nor is it simply a militant conviction or a passing fad. It is imperative: climate change is already driving financial risks, and affecting our ability to achieve price stability, the basis of our mandate. Climate change shocks, physical risks and transition risks can cause both upward pressure on prices and a slowdown in business activity[8]. As macroeconomic changes have a negative impact on productivity, they tend to slow down investments, thereby lowering the natural rate of interest (Kahn *et al.*, 2019).

Central banks cannot do everything: nothing will replace an appropriate carbon price and therefore a carbon tax[9]. But we can do a lot. By being responsible about our investment policy for instance.

That leaves the greening of monetary policy itself: it is our next step. The Eurosystem's accommodative monetary policy is already supporting climate change financing, thanks to low interest rates and abundant liquidity. The greening of the Central Bank's action is therefore not a case of further monetary policy easing but of recalibration of its tools. The strategic review is focusing on three priorities:

– we need to increase our understanding and modelling of the effects of climate change, not only on prices and financial stability but also on growth, and over much longer time spans than usual. A lot of progress has already been made, particularly in developing climate and economic scenarios. However, a great deal of methodological work remains to be done, namely to examine in greater depth the impact of the energy transition on economic and financial dynamics. From this standpoint, for the first time in 2021, the Banque de France and the ACPR, tested the resistance of French financial institutions to climate scenarios up to 2050 (ACPR, 2021);

– our climate ambition implies more transparency for all our counterparties, not only for financial but also for corporate counterparties, for collateral as well as for asset purchases programmes. The Eurosystem should require issuers to disclose their climate risk exposure according to a harmonised metric. The standardisation of data and the draft European Corporate Sustainability Reporting Directive (CSRD) are therefore a current priority;

– last but not least, through our monetary policy operations we will have to gradually decarbonise the Eurosystem's balance sheet and substantially reduce our climate risk. The Eurosystem will adjust the valuation of all its assets, whether they are held on the central bank's balance sheet (purchases) or taken as collateral (Villeroy de Galhau, 2021). An assessment of their decarbonisation commitments, which is dynamic over time and related to each sector, is a better incentive than the exclusion logic; it would avoid penalising all the emitters belonging to carbon-intensive sectors.

Central banking action on employment and inequality

Rising inequality has become a major economic and social issue[10]. On the economic front, international institutions, such as the OECD and the IMF, have made it clear that excessive inequality reduces the long-term growth potential of economies. It is in this context that the BIS[11] and several other institutions are assessing the redistributive effects of monetary policy[12].

While a rise in 'primary' inequality – before redistribution – has taken place in all developed countries since the 1980s, the welfare systems of many European countries have been able to reduce income inequality significantly (Dossche *et al.*, 2021). In France, for example, after taking into account redistribution, income inequality has remained stable. Over the long term, however, the health crisis could have negative consequences for the young and the lesser-qualified workforce. Education inequality, for instance, greatly increased during the pandemic: children from the most vulnerable backgrounds were those who experienced the highest negative impact on their learning achievements (Stantcheva, 2021).

Fiscal and tax policy should remain the main tool to fight inequality because it is, by nature, more targeted than monetary policy and has more political legitimacy with regard to redistribution challenges. This is particularly true in Europe, thanks to our social model. In view of the risk of widening inequalities in terms of education, both for young people and for low-skilled workers, apprenticeship and vocational training are an essential tool.

However, monetary policy can and should take these challenges into account within the scope of its mandate. Firstly, over the long term, price stability is a necessary condition for full employment. Secondly, thanks to its medium-term inflation target, the Eurosystem has some flexibility to avoid undesirable excessive fluctuations in employment and financial variables in the event of a shock.

On the effects, by pursuing its price stability mandate, the Central Bank contributes over time to reducing income inequality (Carstens, 2021). The fall in inflation since the 1980s has better preserved the purchasing power of the poorest. The question is regularly on the table with the accommodative monetary policy, conducted since the 2007 crisis. This policy has helped to reduce income inequality mainly through increased employment (Lenza and Slacalek, 2018). From 2013 to 2019, the euro area created more than eleven million jobs, three million of which come from the impact of monetary policy[13]. Moreover, in times of recession, such as during the Covid crisis, monetary policy has prevented many job losses. Conversely, lower returns on savings have affected the most privileged individuals. For the euro area as a whole, the significant effects of monetary policy on employment and labour income lead to an overall reduction in income inequality.[14]

As for assets, the effects are more complex to analyse. Undoubtedly, the decrease in interest rates is one of the factors behind the rise in property and share prices, which has increased inequality. However, this increase in house prices benefits all homeowners, who represent

more than half of the households in the euro area (Garbinti et Savignac, 2018).

The question of wealth inequalities is linked to another debate on the risks of overvaluation of financial and real estate assets: very accommodative monetary policies and abundant liquidity would encourage "bubbles" which could themselves generate future financial crises. The Eurosystem already assesses precisely financial cycles and vulnerabilities in markets or in financial institutions twice a year through the ECB's *Financial Stability Review* (ECB, 2021) and the Banque de France's French Financial System Risk Assessment (Banque de France, 2021). The ECB will now better integrate financial stability issues by replacing its traditional "monetary pillar with a monetary and financial analysis. This analysis may include indicators relating to corporate or household debt, or to share and property prices. This will promote the proportionality of our measures, a closer monitoring of the transmission mechanisms of monetary policy, and a better hedging of financial risks.

NOTES

1. The natural rate of interest was defined by Knut Wicksell (1898) as the rate of interest that keeps inflation stable while ensuring a level of demand that allows full employment.

2. See the macroeconomique projections published by the Banque de France (Andaloussi *et al.*, 2021).

3. This quartet of unconventional instruments includes: (1) negative interest rates; 2) forward guidance that clarifies the conditions for keeping interest rates low; (3) purchases of securities under the asset purchase programme (APP) in place since 2015; and (4) the provision of liquidity to banks (TLTRO) under the fixed rate – full allotment rule for them to finance the economy Within the quartet of unconventional instruments, two instruments have a greater impact on present and future short-term rates: negative rates and forward guidance. Two instruments have more of an impact on the quantity of liquidity and on long-term rates: TLTROs and asset purchases. The combination of these instruments is particularly effective in maintaining favourable financing conditions, with a positive impact on growth, prices and employment.

4. See the work Borio *et al.* (2017).

5. These interest rates have been calculated from the nominal rates given by the OIS at a maturity of 1 or 10 years and have been deflated using the expected inflation rates as given by the ILS of the same maturity.

6. For a general discussion, see Garnier *et al.* (2019).

7. For more information, see Parts 1 and 3 Banque de France (2021b).

8. See, for example, Weber and Calza (2021) and Drudi *et al.* (2021).

9. See in particular Gollier and Reguant (2021).

10. For more information, see Part 3 of Banque de France (2021b).

11. See, for example, BIS (2021).

12. See, for example, Bonifacio *et al.* (2021).

13. The employment effect is deduced with elasticities from Hartmann and Smets (2018).

14. Ampudia *et al.* (2018) also find that indirect effects *via* employment and labour income are quantitatively larger than direct effects *via* asset prices, leading to an overall reduction in income inequality.

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