



An Economic Strategy Against the Crisis

Les notes du conseil d'analyse économique, no 57, July 2020

The lockdown measures put in place in response to the Covid-19 pandemic led to a sharp drop in economic activity. This resulted in a shock of an unprecedented nature, affecting both supply and demand, with highly asymmetric effects across sectors.

On average, French household income has been protected from the crisis fallout, in particular through an extensive furlough scheme (*chômage partiel*). Constraints to consumption during the lockdown have resulted in involuntary savings, however to a lesser degree for low-income households. A challenge for economic policy is to avoid forced saving morphing into permanent precautionary saving. Information from card transaction data is encouraging and suggests a swift return to normal, but at this stage there is no evidence that consumption forgone during the lockdown will result in pent-up demand.

On the business side, while the liquidity support schemes have been useful, two risks remain: a macroeconomic one, weighing on the demand outlook; and a financial one, weighing on firm solvency.

After having been protective at the time of the lockdown, French economic policy must now help lengthen the horizon of firms and households. It must prevent a transitory shock from becoming persistent due to

massive job losses and business failures. As part of the recovery plan, we recommend supporting employment through hiring subsidies concentrated on low-wage workers, with a top-up for young people; setting up an anti-bankruptcy shield targeted at sectors and companies in difficulty; transfers to help low-income households, whose propensity to consume is higher. The coronavirus crisis is also prompting a re-examination of national priorities. Environmental challenges, European economic sovereignty, digitalisation and increased health care efforts all call for new investments. All these measures entail significant budgetary costs.

A highly uncertainty economic outlook calls for a state-contingent strategy. Our assessment is that the recovery plan should amount to around 2 percentage points of GDP (excluding liquidity measures and European aid). We regard the risk of an economic slump as more severe to us than the risk of further public indebtedness. Structural factors and the ECB's monetary policy imply that interest rates should stay low in the medium term, thereby making higher debt levels sustainable. Even if the probability of an increase in interest rates is low, however, the government could partially insure against this risk by increasing the maturity of public debt.

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Economic analysis of the crisis

A supply and demand shock

The measures taken to curb the pandemic have had a brutal and massive impact on the economy. This resulted in a shock of a new nature, strongly differentiated across sectors, which led to the closure of markets in some sectors (hotels, restaurants, retail trade and transport) and to the halt or significant reduction of production in others (construction industry). As a result, national aggregates are no longer sufficient to analyse the macroeconomic situation.

Lockdown measures therefore combine supply and demand shocks. A supply shock reduces the capacity of the economy to produce goods and services at given prices. Measures that prevented employees from going to their workplaces or that led to disruptions in the production chain can be considered as supply shocks. In contrast, a demand shock reduces the ability or willingness of consumers to purchase goods and services. Examples of a demand shock are the decline in restaurant attendance for fear of contagion or the fall in demand for services by firms with reduced activity. The administrative closure of certain services should however be simultaneously regarded as a supply shock (for the consumer) and a demand shock (for the producer). Moreover, the fact that sectors are not affected in the same way opens up the possibility that the supply shock may give rise to a demand shock, which recent work dubs a Keynesian supply shock.¹

Price dynamics can measure the dominant nature of the shock. If the supply shock dominates in a sector, prices rise. The reverse happens when the negative demand shock dominates. Recent inflation forecasts show that, despite a rise in the price index in some sectors, the trend is clearly deflationary. The *Banque de France* even forecasts that inflation will temporarily move into negative territory, before rising again in 2021.² In the post-lockdown phase at least, the demand shock dominates.

Public health measures have led to a sharp drop in economic activity, something unprecedented in peacetime. At the same time, Governments activated emergency measures, providing liquidity facilities to businesses and direct and indirect transfers to households. Central banks have also taken strong measures, beyond those used in response to the global financial crisis, to prevent the economic and health crisis from turning into a financial crisis and to enable households, businesses and governments to refinance themselves at a lower cost.

In France, a stronger shock than elsewhere

GDP estimates for the first quarter of 2020 and business surveys indicate that the recessionary shock was particularly strong in France, more so than in other European countries. GDP is estimated to have fallen by 5.3% in the first quarter, which is comparable to the decline seen in Spain and Italy, but more than double the 2.2% drop in the German GDP.

This difference raises questions, even if one must remain cautious given the measurement uncertainty. Our analysis is that it is mainly explained by the greater stringency of the lockdown measures. However, lockdown stringency does not fully account for the drop in economic activity. Despite the weight of tourism, the sectoral structure of the French economy (a low share of manufacturing and a high share of public services) has not been particularly penalising. Other factors could have played a role:

- The uniformity of the administrative measures (in comparison with Germany, where they were differentiated by region) may have played a role;
- The relative generosity of the job furlough scheme, the low level of social trust between actors (which are not limited to labour relations within the company) and an addiction to norms could have amplified the impact of the shock.

Preliminary empirical estimates, however, do not indicate robust explanatory power for these other factors. Lockdown stringency remains the main explanation of the severity of the output fall.

Effective household protection

On average, French households experienced an income fall by only 5% during the eight weeks of lockdown. This compares with a fall in national income by nearly one-third. This very effective protection was mainly due to *chômage partiel*, the French job furlough scheme.³ It was however accompanied by wide disparities of situation within the labour force:

- The vast majority of participants (22 million) did not experience a significant deterioration in income;
- 6.6 million (employees on furlough, excluding minimum wage earners) experienced a limited loss of income;
- 1.6 million (self-employed, employees on short-term contracts and temporary workers) were hit hard.

Overall, households have accumulated significant excess savings (€55 billion after eight weeks of lockdown and

We would like to thank Hamza Bennani, Scientific Advisor, Étienne Fize and Baptiste Savatier, Economists, who followed-up of this work within the permanent team of the CAE, as well as Christophe Gouardo, David Bounie, Youssef Camara, John Galbraith, Camille Landais and Tatiana Pazem and the *Groupement cartes bancaires CB*.

¹ Guerrieri V., G. Lorenzoni, L. Straub and I. Werning (2020): "Macroeconomic Implications of COVID-19: Can Negative Supply Shocks Cause Demand Shortages?", *National Bureau of Economic Research*, no w26918.

² See Banque de France (2020): *Prévisions macroéconomiques*, June.

³ Under the special job furlough scheme put in place in response to the coronavirus crisis, employees on furlough received 84% of their net wage (100% for employees on the minimum wage). This allowance was paid by the employer but entirely taken charge of by the government and it was exempt from social insurance contributions.

probably nearly €80 billion at the beginning of July, after 16 weeks), most of which is held in the form of bank deposits.⁴ These savings should at least partly help fuel demand in the coming months, as they are primarily involuntary.

After the lockdown, the evolution of consumption will be shaped by two opposite forces:

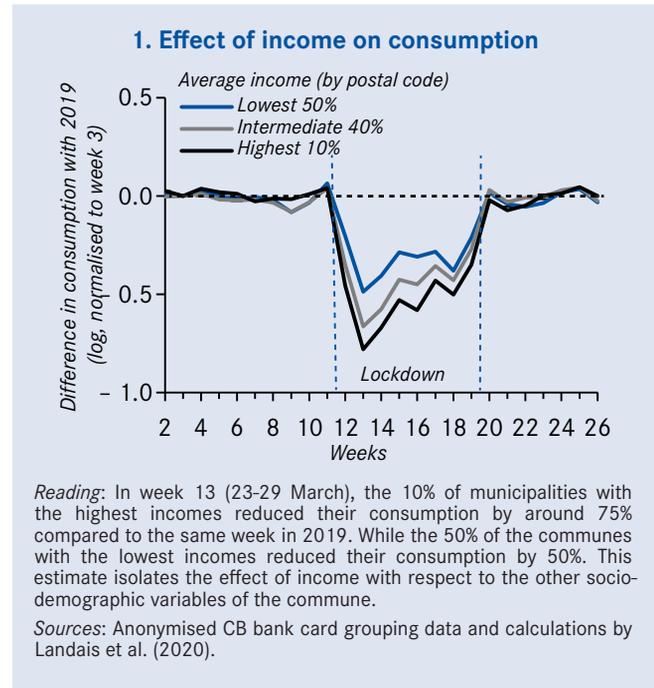
- A wealth effect: households have excess liquid savings that they could choose to consume quickly;
- A precautionary effect: in the face of economic and health uncertainty, households may be tempted to keep a larger proportion of these savings in their bank accounts.

Credit card transaction data provides valuable insights.⁵ Even if they cover only a portion (around 60%) of all transactions, they provide a high-frequency measure of household consumption.⁶ These transactions have now returned to a level close to or even slightly higher than a year ago. Given the decline in cash withdrawals at ATMs, we estimate that total consumption at retail outlets (aggregating credit cards and cash transaction) has rebounded but remained between mid-May and the end of June at a level slightly below its level a year ago (- 2%). This is encouraging but insufficient.⁷

The situation is not homogeneous across households. Work in progress shows that during the lockdown period, the fall in consumption was greater for high-income households (Graph 1): during the second week of lockdown it reached 75% for households in the top decile against around 50% for the bottom half of the household distribution.⁸ In proportion of income, involuntary savings by low-income households, and hence their ability to increase consumption in the coming months, are lower than for well-off households.

The evolution of consumption will be key for GDP and employment. In comparison to the earlier fall, a 2% decline in household consumption may appear small. Nevertheless, if it were to continue, it would lower GDP by 1% by the end of 2020 and lead to a similar reduction in employment.⁹ These orders of magnitude are indicative of the extent to which aggregate demand management will have impact employment.

Barring a new epidemic wave, it is likely that economic uncertainty and fear of unemployment will continue to be the



main obstacles to closing the remaining consumption gap.¹⁰ The challenge for economic policy is therefore to prevent involuntary savings accumulated during the lockdown period from turning into precautionary savings.

Lastly, public support for household income, particularly as a result of the job furlough scheme, and the loss of tax and social security revenues resulted in a sharp deterioration of the general government balance, which is estimated at €96 billion over four months. All developed countries are experiencing a massive increase in the public deficit, and France does not stand out in this respect.

A double risk for companies

The short-term outlook also depends on firm behaviour. Their financial situation has deteriorated sharply, with an estimated loss of income of €54 billion between mid-March and mid-July, and their prospects have worsened:

- Some of them (in manufacturing industry, tourism, etc.) are facing a demand shock that they anticipate to be long-lasting;

⁴ See Dauvin D., B. Ducoudré, É. Heyer, P. Madec, M. Plane, R. Sampognaro and X. Timbeau (2020): "Évaluation au 26 juin 2020 de l'impact économique de la pandémie de Covid-19 et des mesures du lockdown et du délockdown en France", *OFCE Policy Brief*, no 75, 26 June.

⁵ This is the aggregation of anonymised individual data, see Fize É. and H. Paris (2020): "Consommation des ménages pendant et après le confinement : que nous apprennent les données de cartes bancaires CB ?", *Focus du CAE*, no 44, July. In its 8 July 2020 Economic Review, INSEE estimates that in June, on a broader scale, consumption had almost returned to its pre-crisis level, down 3% on average.

⁶ Other means of payment are: cash, checks, transfers, direct debits, French cards other than CB cards, foreign cards.

⁷ For businesses that were closed during lockdown but have reopened since May 11 (non-essential businesses), there is, however, some form of catch-up.

⁸ Landais C., D. Bounie, Y. Camara, É. Fize, J. Galbraith, T. Pazem and L.B. Savatier (2020): "Dynamiques de la consommation et stratégies de relance : enseignements partir des données cartes bancaires", forthcoming.

⁹ Mobilised employment is defined by the Ministry of Labour as total employment less partial unemployment and exceptional leave for pandemic-related reasons (specific health risks, childcare).

¹⁰ See Landais et al. (2020), *op. cit.* This work shows, at the local level, a strongly negative correlation between the dynamics of consumption and the number of job seekers in April 2020.

- Others (hotels and restaurants, services to household, etc.) are facing a productivity and therefore cost shock that is probably transitory but dampens their activity;
- The manufacturing industry is particularly vulnerable because of its low margins and the specific shock to the aeronautics and automotive industries.

Many firms, therefore, suffered a double shock: first, a shock to their balance sheet, which will generate an increase in debt; second, a shock to their sales, which, for some, still persists.

Instruments put in place to support business liquidity have been effective. The volume of state-guaranteed loans (the so-called *Prêts Garantis par l'État* or PGE) actually disbursed (€105 billion by June 26) is higher in proportion of GDP than in the other major European countries, with the exception of Spain. In addition to these loans, 5 billion in transfers under the Solidarity Fund and 34 billion in tax and social security deferrals have been extended to firms. Companies have used these facilities to accumulate cash: from March to the end of May, their debt increased by €136 billion and their cash position by €119 billion.¹¹

While liquidity risk has been addressed, however, solvency risk has not been eliminated. This is largely due to the debts accumulated during the lockdown period, the deterioration of operating accounts and the collapse of markets in specific sectors (aeronautics, tourism, entertainment, etc.). Despite short-time work and the PGE, the number of bankruptcies could rise sharply, by 60 to 80% by the end of the year.¹² This estimate remains fragile due to the difficulty of taking into account support measures, but it does indicate a significant risk.

A double threat, therefore, weighs on companies: macro-economic on the one hand, related to demand; financial on the other, related to their solvency risk. Both can contribute to a contraction in employment and help to block the recovery dynamic that has started.

A high level of uncertainty on the volume of employment and productive potential

At the peak of the lockdown, 9 million persons that were previously at work in the private economy were idle (either on leave, on sick leave for childcare, on short-time work, unemployed or inactive).¹³ This resulted in a significant reduction in potential output. For the time being, the rise in unemployment has been contained in comparison with the United States, but a deterioration is to be expected as a result of:¹⁴

- The lagged effects of the fall in demand on the employed workforce. The hiring freeze will particularly affect young people;
- The persistence of a lower than normal activity due to residual health precautions;
- Job destruction resulting from bankruptcies and the corresponding loss of economic potential.

Despite the rise in unemployment observed in April, the bulk of the shock to employment has so far continued to be absorbed within firms, with no break in the contractual employment relationship. In May, the volume of short-time work still amounted to 3 million full-time equivalents.¹⁵ The fate of these employees will be decisive for the dynamics of the recovery.

Unemployment and underemployment will, therefore, be simultaneously dealt with by supply-side measures, which should aim to contain bankruptcies, encourage the full mobilisation of the workforce while respecting health requirements and organising the inevitable reallocations between sectors; and by keeping aggregate demand as close as possible to a necessarily evolving potential.

Effective support measures put in place in response to the health crisis can also act as a brake on necessary reallocations. Furlough keeps employees attached to the same company, and the PGE keeps firms liquid, even though some of them no longer have any prospects, or should have ceased their activity altogether because of insufficient demand, even in the absence of a health crisis (see Guerini *et al.*, 2020, *op. cit.*).

We consider that, given the magnitude of the shock and the extreme uncertainty on the market outlook, it is preferable to err on the side of caution and to protect jobs that may turn out to be doomed. Beyond their short-term impact, the lasting cost of economic crises is the destruction of human, physical and intangible capital. Focusing today on reallocation, when companies have sharply reduced their investment and the mechanism for matching labour supply and demand is being clogged, means taking the risk of permanent stigma for the labour force. This especially applies to young people, whose career prospects can be lastingly clouded by a bumpy entry into the labour force. To put it another way, the social cost of labour today is much lower than its private cost.

The more actively macroeconomic policy supports demand, the sooner it will be possible to let the mechanisms for reallocating capital, labour and technology to firms with

¹¹ Banque de France data.

¹² See Guerini M., L. Nesta, X. Ragot and S. Schiavo (2020): "Dynamique des défaillances d'entreprises en France et crise de la Covid-19", *OFCE Policy Brief*, no 73, 19 June.

¹³ No estimates are available for the public sector.

¹⁴ Cohen-Setton J. and J. Pisani-Ferry (2020): "When More Delivers Less: Comparing the US and French COVID-19 Crisis Responses", *Peterson Institute Policy Brief*, no 20-9, juin.

¹⁵ According to the DARES Acemo-Covid investigation in June.

higher potential come into play. Conversely, the more deficient demand management is, the greater will be the temptation for public policy to focus on preserving existing jobs, at the risk of curtailing the economy's potential.

An estimate of the output gap

Against this background, what could be the level of activity at the end of 2020 in the absence of new measures? Our assessment (which is subject to a large margin of uncertainty) is that it should be at least 5 points below normal activity.

This estimate assumes that favourable epidemiological conditions are maintained. It is also based on the assumption of a sustained consumption surge fuelling a swift return towards pre-crisis output.

The five percentage points gap would stem from both a demand deficit and a (at least temporary) decline in productive potential. The former would result from consumption being close to, but below its pre-crisis level; from a downward shift in business investment; and from a limited but persistent trade deficit. On the supply side, sanitary constraints should reduce the productive potential by an amount that can be put *a minima* around 2.5%, considering constraints on access to services and the foreseeable changes in the structure of consumption (see Box 4 in Dauvin *et al.*, 2020, *op. cit.*).

Under these conditions, the output gap would be around 2 to 3% at the end of 2020. Assuming a fiscal multiplier close to unity, in line with empirical estimates, the support plan needed to close the output gap within one year would, therefore, amount to 2 to 3 percentage points of GDP, considering only its cyclical dimension.¹⁶

What economic strategy?

Explicit objectives and a clear sequencing

In a post-traumatic phase marked by uncertainty, economic policy must be both reactive –to adapt to a changing context– and extremely readable –to steer the expectations of households and firms– and improve confidence. This same requirement can be translated into different strategies, as illustrated by the cases of France and Germany (Box).¹⁷

Having sheltered and reassured firms and households at the time of the lockdown, French economic policy must now help them to lengthen their horizon. This involves being, on the one hand, very explicit about the policy objectives and phases and, on the other hand, very flexible in implementing the strategy. After having ensured incomes during the crisis,

Germany and France: Two different strategies

Germany announced a €130 billion plan on 4 June 2020. This plan includes measures to support businesses, but also measures to support purchasing power, such as a six-month VAT rate cut whose cost is assessed to be €20 billion.^a The amounts announced are commitment ceilings, with some outlays dependent on economic activity. This massive and prompt response partly bets on announcement effects. The expected gain is to reassure economic actors and to anchor expectations by preventing the risk of a deep fall in activity. The downside is that it will have a significant financial cost, even if growth returns.

The French approach is more evolutionary: the support plans for industrial sectors, or the evolution of the compensation fund for the self-employed have been the subject of step-by-step revisions. This gradual and contingent strategy takes into account changes in the economic situation and doses efforts according to needs. The gain is a cost reduction, the disadvantage for the economic agents is more uncertainty over the future economic policy environment.

The distribution of guaranteed loans to companies illustrates this disparity: according to Bruegel's estimates, the total amount of the German plan is more than €900 billion, that of the French plan is just under €350 billion, but as of June 15, the amount of credit guarantees granted was three times larger in France (€104 billion) than in Germany (€32 billion).^b

^a See Heyer É, X. Timbeau, C. Antonin, C. Blot, M. Dauvin, B. Ducoudré, A. Falah, S. Le Bayon, P. Madec, P. Malliet, C. Mathieu, H. Pélérax, M. Plane, C. Riffart and R. Sampognaro (2020): "Assessment of the Economic Impact of the COVID-19 Pandemic and Lockdown Measures on the Global Economy in April 2020", *OFCE Policy Brief*, no 69, June.

^b See Anderson J., F. Papadia and N. Veron (2020): *Government-Guaranteed Bank Lending: Beyond the Headline Numbers*, Bruegel Blog Post, forthcoming.

the government should now shoulder take up the role of a reinsurer of domestic demand. It also needs new tools to strengthen supply.

The central economic policy objectives for the coming period should be to:

- Help the recovery to get through the risky period of autumn-winter 2020;
- Break the vicious circle between deteriorating employment prospects, loss of household confidence and weakening demand;
- Prevent permanent scars affecting economic potential;

¹⁶ We should not expect a strong spillover effect from other countries' stimulus packages. For example, French goods and services account for 7.6% of German imports, which in turn account for 4.1% of German GDP. A 1% increase in German GDP would only have a direct effect of 0.03% on French GDP.

¹⁷ For a comparison between France and the United States, see Cohen-Setton and Pisani-Ferry (2020) *op. cit.*



- Address the vulnerability of households most affected by the shock and the difficulties of young labour market entrants;
- Help lengthen the horizon of economic agents and promote investment by credibly setting out post-crisis prospects: environmental transition, industrial retooling and reinvestment in public services.

For the next eighteen months, these objectives will have to continue to take precedence over the rebalancing of public finances –even if they will, of course, have to be efficient in the use of budgetary resources.

The choice is not between supply and demand policy, or between production and redistribution. The above objectives will have to be pursued simultaneously by using instruments to strengthen firms, support employment, provide targeted support to the most vulnerable households, and steer aggregate demand.

With regard to the overall objective, we recommend, on the assumption that public health conditions continue to improve, to set the targets of returning within one year to the end-2019 output level and of eliminating the employment deficit by the end of 2021. This may seem ambitious, but these targets correspond to the mild scenario published by the ECB on June 4, which assumes that the pandemic risk is contained and that an appropriate economic policy response is put in place. But our recommendation is first and foremost proactive, in that it is intended to guide the economic policy response, in line with a strategy defined by its aims rather than by its means. Such a strategy implies doing more if the outcome falls short of the objective.

Recommendation 1. Calibrate a contingent economic policy response with a view to regaining the level of activity at the end of 2019 within one year and to closing the employment deficit by the end of 2021.

Instruments: Combining supply and demand

We propose to roll out the economic strategy on four fronts: the firms, to avoid a retrenchment in supply; employment, to prevent a violent rise in unemployment; the households' purchasing power, to help the most vulnerable among them and support demand; and the redirection of growth, to provide a clear perspective for investment. We advocate retaining the option of additional measures to support activity, in case the recovery proves too weak in the coming months.

An anti-bankruptcy shield

Under normal circumstances, the exit of the least efficient firms contributes positively to productivity and growth: by freeing up economic factors (labour, capital, premises, etc.) that are sub-optimally used, exit broadens the scope for growth of the more efficient firms and the arrival of new entrants, and thus the reallocation of these factors towards jobs that are more beneficial to the community.

This mechanism works if, on the one hand, the firms that go bankrupt are the least efficient ones and if, on the other hand, factors of production, especially labour, are quickly and efficiently reallocated. Neither of these conditions is currently likely to be met. In the circumstances of the coming months, the economic cost of bankruptcies is therefore likely to be magnified.

Viable companies –i.e. those likely to produce a track record of profits with a present positive value– should be preserved, even if increased indebtedness and temporarily deteriorated operating conditions have made them insolvent. Ongoing research suggests that aid can be effective if it is well-targeted.¹⁸ It would be most useful in manufacturing and trade, which are major sources of employment risk.

Two different methods can be relied on to complement the sectoral recovery plans launched by the government, which target the most affected sectors but leave out a large part of the population of firms. One provides an *ex ante* solution, the other one an *ex post* solution:

- *Ex ante* method: a way out implemented in Germany is to compensate firms for the fixed costs incurred during the period of lockdown (such as the maintenance of unused capital, in particular in manufacturing, rents, etc.). It can be implemented preventively, without waiting for the financial situation of the companies to have resulted in a drop in investment. Its budgetary cost can be estimated at around €17 billion. Manufacturing would receive 36% of the total budget for 17% of the value added;¹⁹
- *Ex post* method: the second, less costly solution is to focus on companies threatened with insolvency by the shock to their balance sheet and to restructure their debts (through rescheduling, debt write-offs or conversion into equity). The government, which is directly or indirectly the creditor of these firms to the tune of 140 billion, should offer private creditors, first of all banks, to restructure its claims on companies at risk on the condition that they carry out a parallel restructuring of their own claims. Because it attaches a price to the survival of companies, the government

¹⁸ Gourinchas P-O., S. Kalemli-Özcan, V. Penciakova and N. Sander (2020): “COVID-19 and Business Failures”, *UC Berkeley Working Paper*, forthcoming.

¹⁹ See the assessments in Plane M. (2020): *Covid-19 et entreprises : comment éviter le pire*, OFCE Blog.

should even go beyond *pari passu* and accept to cut its own claims more than those of the private creditors. For small, medium and very small enterprises, the decision would be entirely delegated to the banks, which this incentive contract would transform into agents of the public interest. For larger companies, negotiations would be held on the same principle (Blanchard, Philippon and Pisani-Ferry, 2020).

The choice between these two strategies must be based on budgetary considerations but also on economic impact. The first mechanism has the drawback of not targeting companies at risk. It can, therefore, be costly but may not be sufficient to prevent avoidable losses. The second is more targeted, but would only intervene after a financial deterioration in companies that is likely to weigh on their investment and thus on the pace of the recovery.

An intermediate approach would be to make equity or quasi-equity contributions to companies that have suffered a sharp decline in activity as a result of the pandemic crisis. It could be less costly than the first approach but would carry the risk of indirectly bailing out banks, which would see the market value of their claims increase as the equity is injected.

The cash position of the companies now makes it possible to postpone the decision on these mechanisms until the PGE expires (March 2021 at the earliest). The risk of a wait-and-see attitude is, however, to keep alive companies with no possibility of development. Instead, we recommend that the issue be decided in the fall.

Recommendation 2. Rapidly set up an anti-bankruptcy shield targeted at sectors and companies in difficulty.

In addition, consistent with the recent *Note du CAE* on Production Taxes,²⁰ we recommend the elimination of the *Contribution sociale de solidarité des sociétés* (C3S), a tax that penalises exports and subsidises imports of intermediate goods. This tax also contributes to increasing the probability of bankruptcy, which is important in the current context of SME fragility.

An employment accelerator

The largest part of furloughed employees are by now back to work but a sizeable minority remains idle. It is important that they continue returning to work, either with the same or another employer. Job creation and destruction will have a

major impact on household consumption behaviour (and the reverse relationship will also be at work).

Even in companies facing difficulties in terms of sales or productivity, the natural turnover of the workforce (on the occasion of the end of fixed-term contracts, resignations, or retirements) implies a certain volume of hiring. To avoid a large reduction in hiring volume, a reduction in the cost of labour can be an effective tool. In fact, hiring subsidies have a greater effect on employment when firms face a difficult situation, as demonstrated during the 2009 crisis. Empirical research shows that for a same volume of jobs saved, hiring subsidies cost 20 to 40% of reductions on social contributions, since the former only finance the flow of new hiring while the latter finance the entire stock.²¹ Because it affects flows, a hiring subsidy also facilitates mobility between companies and between sectors, which is particularly appropriate in the current crisis.

Moreover, youth unemployment increases more sharply in crises, as was the case in 2009 when the 15-24 age group experienced the largest increase in unemployment. They will be the first victims of a drying up of hiring, and this is why we consider that hiring subsidies must be more generous for them. But subsidies exclusively benefitting young people run the risk of too great a substitution at the threshold of eligible age. Finally, empirical work on labour cost reductions has repeatedly shown that their short-term impact on employment is all the stronger as they are concentrated on low wage earners.²²

The measure we are supporting should, for a budget of about €5 billion:

- Take the form of a lump-sum bonus for all new recruits up to 1.5 minimum wage (SMIC) of €200 per month, increased to €300 for those under 25 years of age;
- Be announced for one year (hires from September 1st, 2020 to September 1st, 2021);
- Cover both the hiring and return to work of employees on short-time work;
- Apply to permanent and fixed-term contracts of more than one month.

Recommendation 3. Rapidly support employment through lump-sum subsidies for hiring concentrated on low-wage jobs, with a top-up for young employees.

Moreover, qualified young people (bachelor's level) will also enter a depressed job market at a time when the national

²⁰ Martin P. and A. Trannoy (2019): "Taxes on Production: The Good, the Bad and the Ugly", *Note du CAE*, no 53, June.

²¹ See Cahuc P., S. Carcillo and T. Le Barbanchon (2019): "The Effectiveness of Hiring Credits", *Review of Economic Studies*, vol. 86, no 2, on the zero-cost scheme, which exempted hirings at the SMIC level from employer contributions. A 1% reduction in labour costs led to a 2% increase in employment after one year, and the impact on employment appears as early as 3 months.

²² For a recent study see L'Horty Y., P. Martin and T. Mayer (2019): "The French Policy of Payroll Tax Reductions", *Note du CAE*, no 49, January.

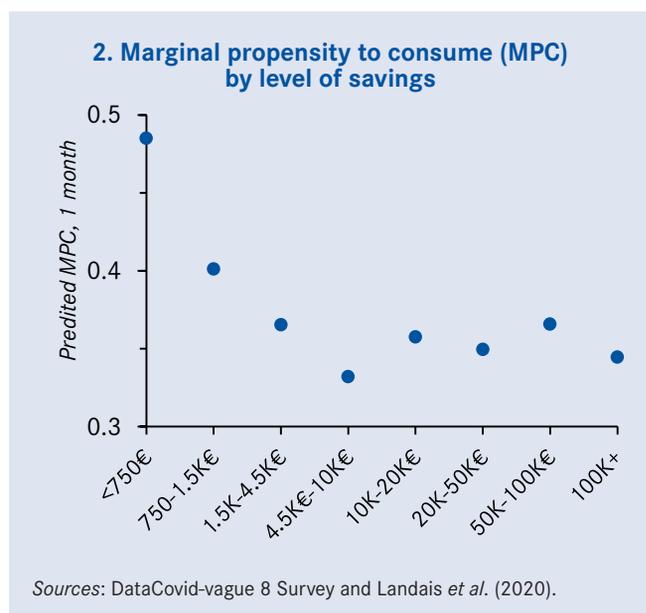
education system is facing the problem of students who dropped out during the lockdown. They could usefully benefit from tutoring hours. We estimate the cost of these tutoring jobs over one year at around €3 billion.

Recommendation 4. Offer qualified young people a temporary contract with the French National Education system to tutor young students who have dropped out of school during the lockdown.

We also recommend mobilising the tools put in place as part of the vocational training reform to facilitate professional change. This must be thought of in the context of a sharp increase in short-time work.

Targeted support for purchasing power

Low-income households saved less during the lockdown than better-off households (see above) and will be more exposed to the risk of unemployment and job insecurity. They also have a higher marginal propensity to consume transfers than wealthier households. This was verified during this crisis by the results of wave 8 of the DataCovid survey (Graph 2). When asked how much of an unexpected financial transfer they would consume in the month following the transfer, the poorest households answer that they would spend 50% of it immediately, against 35 to 40 per cent for wealthier households.²³



Thus, for both social and economic reasons, we advocate financial assistance to low-income households at risk of job insecurity. Instruments could be:

- Targeted aid such as the doubling of the back-to-school allowance and an additional allowance for students and on-demand workers (€4 billion);
- A voucher to low-income households in the form of vouchers to be spent before 2021, which could be targeted on goods and services labelled in accordance with environmental transition objectives. The basket must be large enough to put green goods in competition with each other and thus reduce the risk that this subsidy will lead to a price increase (2 billion).

Recommendation 5. Support the purchasing power of low-income households through targeted transfers and vouchers for goods and services in line with the environmental transition.

If the recovery of consumption continues, further support will not be necessary. The trade deficit also puts France in a very different situation from Germany, which has cut VAT. However, the definition of contingent plans is useful in the current environment. If consumption were to fall, the case for a temporary VAT rate cut would have to be reassessed. The temporary nature of the tax cut, though, which is necessary to hasten purchasing decisions, raises the question of the credibility of the subsequent increase: we therefore consider that such a cut should be shorter and more pronounced than in Germany. At this stage, however, such a measure is not appropriate in the French situation.

The possibility of a subsidy for business investment was also discussed. In times of crisis, private investment is constrained by three factors: cash flow, demand prospects and uncertainty. The PGE, tax and sectoral support measures, anti-bankruptcy measures and lower interest rates are the right instruments to ease financial constraints. One challenge for the recovery plan is that it should be sufficiently ambitious and clear enough to reassure about the outlook for demand and reduce uncertainty.²⁴ In the short term, however, the cost of capital will be a very secondary driver of investment. This is why a measure such as accelerated depreciation does look appropriate in the short term.²⁵ It may make more sense in the reconstruction phase to guide business investment towards the reorganisation of work, decarbonisation and robotisation.

²³ Empirical work shows that responses to this type of questionnaire are consistent with observed behaviours, see Parker J.A. and N.S. Souleles (2019): "Reported Effects vs. Revealed Preference Estimates: Evidence from the Propensity to Spend Tax Rebates", *American Economic Review: Insights*, vol. 1, no 3, December.

²⁴ Empirical evidence shows that fiscal expansion has a positive impact on business investment, see, for example, Romer C.D. and D.H. Romer (2010): "The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks", *American Economic Review*, no 100, June, pp. 763-801.

²⁵ In 2009, companies in France did not make massive use of the possibility of bonus depreciation because it mainly benefits companies that make profits. The evaluation of the bonus depreciation carried out in the United States in 2009 also shows that its impact only concerned profitable companies, see Zwick E. and J. Mahon (2017): "Tax Policy and Heterogeneous Investment Behavior", *American Economic Review*, vol. 107, no 1.

Reorienting growth

The health crisis cannot be defined only through the lens of the macroeconomic shock analysed in the first part. It will certainly also lead to a re-examination of our collective priorities and thus to a change in the growth regime of the advanced economies that was established in the 1980s. The economy of the coming years should thus be characterised by a reinforced requirement for reducing carbon emissions, an emphasis on economic sovereignty at the EU level, an intensification of the digitisation of society and a greater effort in favour of health and services that contribute to collective well-being.

The first three of these shifts will result in an accelerated obsolescence of the existing capital stock, and they simultaneously call for increased investment in technologies, sectors and products associated with the new priorities. They will, therefore, imply a decline in productive potential and its rebuilding on the basis of new investment. The effect on growth will be ambiguous; the effect on welfare will be temporarily negative. Trial and error will be necessary to produce a change of this magnitude. In a context of extreme uncertainty, it is important for economic policy to provide private actors with clear and credible benchmarks. This is necessary so as to stabilize their expectations and guide their investment decisions. Uncertainty about future policies is indeed unfavourable to investment and entails a high macroeconomic cost.²⁶

This observation takes on its full significance in the disturbing context following the health crisis. A lack of clarity on future prospects, whether due to a lack of consensus on the associated instruments (such as for CO₂ taxation), or due to an imprecise definition of the objectives themselves (such as for economic sovereignty) would be macro-economically penalising. On the other hand, a clarification of objectives, of regulatory provisions, and of the fiscal framework is likely to encourage long-term investments. The “return on being clear” is high today.

A detailed description of the regulations and investments required for this reorientation of growth is beyond the scope of this *Note*. We consider, however, that the issue of the renovation of public buildings as well as investment in universities, research and health should have a central place in the investment plan. However, it should be clear that green investment should not be seen as a short-term stimulus to jobs and the economy but as a long-term transformation.²⁷

How much?

The support needed for the economy can now be estimated on the basis of the required measures mentioned above. We provide the amounts for a period of 18 months, covering the end of the year 2020 and the year 2021. Short-term measures amount to €24 billion: hiring subsidies (€5 billion), tutoring in national education (€3 billion) purchasing power of low-income households (€6 billion). The anti-bankruptcy shield, the amount of which will depend on the fate of companies, should be budgeted at around €10 billion. The aim of these measures is to manage the economic and social emergency.

The measures for a perennial growth reorientation to be implemented in the short-term amount to €24 billion. These comprise public spending on the energy transition (€7 billion over one year), a plan for universities, training and research of €3 billion, a reduction in production taxes of €4 billion and, finally, the additional €10 billion for the health sector which are already planned.

This plan to support the economy and energy transition, therefore, represents around 2 percentage points of GDP. This figure is consistent with the objective of closing the output gap of around 2 to 3% within one year and a unitary fiscal multiplier. Note that it is a fiscal impulse that excludes liquidity support measures.

The great uncertainty about the economic situation also leads us to consider, if there is a risk that the recovery weakens, the possibility of additional support. This is part of our preferred contingent strategy.

Recommendation 6. Implement a recovery plan of the order of 2 percentage points of GDP over 18 months (excluding liquidity measures and EU support), which can be increased if the recovery momentum weakens.

Financing the support

A sharp increase in public debt

Macroeconomic shocks always leave a persistent imprint on public finances. Even more so than in the early 1990s or following the 2008 financial crisis, the public debt ratio is set to rise sharply. In the absence of a second pandemic

²⁶ See Fried S., K. Novan and W. Peterman (2020): *The Macro Effects of Climate Policy Uncertainty*, Mimeo, March.

²⁷ On the American experience, see, Popp D., F. Vona, G. Marin and Z. Chen (2020): “The Employment Impact of Green Fiscal Push: Evidence from the American Recovery Act”, *NBER Working Paper*, no w27321.

²⁸ European Fiscal Board (2020): *Assessment of the Fiscal Stance Appropriate for the Euro Area*, Report European Commission, 1st July.

wave, recent forecasts (*Banque de France*, OECD, IMF) put the public debt ratio at around 120% of GDP at the end of 2020 and at roughly the same level at the end of 2021, given the combination of a remaining very high deficit level and a rebound in economic activity.

In the longer term, the *Cour des Comptes* (Court of Auditors) predicts that the public debt ratio would approach 100% of GDP over a ten-year horizon in the absence of a persistent deterioration in potential output. It would stabilise at around 120% of GDP in the event of a limited decline (estimated at 3% or two years of growth), and continue to increase in the event of a weakening of potential growth.

In assessing the level of public debt, the main reference for some 30 years has been the 60% of GDP norm set in the late 1980s in a protocol annexed to the Maastricht Treaty. This norm is now obsolete: given the predicted debt levels for the euro area, but also an interest rate and growth environments completely different from that of the 1980s, it is no longer a useful reference for guiding national policies. The pandemic crisis definitely requires a thorough redefinition of the European fiscal framework. Following the recommendations of many economists, the European Fiscal Board has started to work on this issue.²⁸

Thus, the fiscal strategy cannot merely forecast gradual convergence towards a path consistent with the requirements of the Stability and Growth Pact. It must take into account both a radically new context and the full range of economic and financial risks to which fiscal policy must respond.

Low-interest rates are here to stay

At the beginning of July 2020, nominal risk-free rates are below zero for all maturities below 20 years and the average OAT (French Treasury bonds) rate since the beginning of the year is -0.06%. Real interest rates are therefore clearly negative, and the spread between growth rates and real interest rates is at least two points. This low-interest rate is a global phenomenon affecting all asset classes and whose origins²⁹ pre-date the quantitative easing policies implemented by central banks (whose contribution to long rates has been estimated by the Fed and the ECB at around 100 basis points).³⁰

This global decline in asset returns is mainly due to structural factors:

- Increase in savings due to the distortion of income distribution in favour of firms, increased inequality

of wealth between households, ageing and, at the international level, distortion of the savings-investment balance with reserve accumulation policies implemented after the 1997 Asian crisis and the reduction in the current account deficits of Southern European countries after the euro area crisis. The United States is currently the only country to maintain a large external deficit;

- Lower investment demand, driven by technology (which is more capital-efficient), demographics (which reduces demand for residential capital) and a contraction in public investment.

All in all, the structural features of the fall in interest rates suggest that it will persist over the medium term. In the short term, the excess supply prevailing in the world economy is reinforcing the imbalance on the savings market and thus amplifying the phenomenon. In the medium term, the increased investment needs induced by the ecological transition or the increase in public debt can certainly lead to corrections. However, these phenomena do not lead us to consider a scenario of a marked rise in interest rates. The Covid-19 crisis itself has led the central banks of the rich countries (for example, the ECB with its Pandemic Emergency Purchase Programme, PEPP) to massively increase their asset purchase programmes, to reach between 15 and 23% of GDP by the end of 2020.³¹ These actions, which are more significant than during the 2009 financial crisis, imply that, compared with the situation before Covid-19, the prospect of a rise in interest rates is even further delayed.

The fall in interest rates has had a considerable effect on European public finances. Between 1999 and 2019, aggregate public debt in the euro area had more than doubled, but the interest burden had fallen by 2.5 points of GDP. In France, too, the fall in interest rates more than offset the increase in debt. From 2009 to 2019, the interest burden fell by 1.1 percentage points of GDP, despite a significant increase in the debt ratio, from 69% of GDP at the beginning of 2009 to 98% at the beginning of 2019. These developments were very poorly taken into account in the preparation of the Stability programmes and budget laws, which systematically assumed a rapid rise in long-term interest rates, an assumption that was regularly contradicted by the facts.

It is against this backdrop that the risks should be analysed. The first risk is obviously that of excessive public debt. The economic literature does not provide a stable normative benchmark for setting an optimal level of debt. In an important presidential address to the American Economic

²⁹ Jordà Ò., K. Knoll, D. Kuvshinov, M. Schularick and A. Taylor (2019): "The Rate of Return on Everything, 1870-2015", *The Quarterly Journal of Economics*, vol. 134, no 3.

³⁰ Voir Eser F., W. Lemke, K. Nyholm, S. Radde and A.L. Vladu (2019): "Tracing the Impact of the ECB's Asset Purchase Programme on the Yield Curve", *European Central Bank Working Paper Series*, no 2293 and Ihrig J., E. Klee, C. Li, M. Wei and J. Kachovec (2018): "Expectations about the Federal Reserve's Balance Sheet and the Term Structure of Interest Rates", *International Journal of Central Banking*, vol. 14, no 2, mars.

³¹ See Cavallino P. and F. De Fiore (2020): "Central Banks' Response to Covid-19 in Advanced Economies", *BIS Bulletin*, no 21, June.

Association, Blanchard (2019)³² pointed out that in a context where the interest rate (r) is lower than the growth rate of the economy (g) any level of debt is sustainable, at least in the absence of a negative shock to the budget balance (prolonged recessions) or to debt (banking crisis, materialisation of contingent liabilities).³³ He also showed that there is likely to be a macroeconomic cost to maintaining high levels of public debt, but that this cost is low.

A decrease in the interest rate lowers the primary balance required to stabilise a given debt ratio and thus allows for a higher debt level. This primary balance can be interpreted as the excess of the tax levies on the value of the services and transfers provided by the public sector to which present generations consent. For that reason, there is a political economy limit to the surplus in the primary balance: consent to taxation is eroded if it is not the counterpart of collective or individualised consumption from which households benefit directly.

Some risks, of low probability, must nevertheless be taken into account:

- Risks of new shocks to debt levels following crises of various kinds. After experiencing a financial crisis and a health crisis in succession, we cannot rule out the possibility that we may experience an environmental or geopolitical crisis of similar or even greater magnitude;
- Risk of contagion of doubts about the solvency of other advanced countries. This risk takes a particular dimension in the euro area, where experience has shown that sovereigns can face self-fulfilling expectations of insolvency and where risk premia on government debt reflect both restructuring expectations and expectations of redenomination following exit from the monetary union;
- Risk of a rise in interest rates due to a return of inflation expectations, itself induced by the temptation to monetise public debt.

These risks are now very low, especially the last one, but they must be taken into account. They call for a margin of safety to be maintained in the management of public debt. Despite the introduction of dedicated instruments (ESM credit lines, conditional assistance programmes, ECB's MTO facility), this margin must be higher in the euro area than in countries issuing their national currency, where the central bank can intervene in a discretionary manner to block self-fulfilling speculation.

Essential trade-offs

Fiscal policy today is faced with far-reaching strategic choices. The first relates to the preservation of economic potential, the second to the environmental issue.

The question today is which of the two risks of excessive debt and the collapse of economic potential is more serious for the French economy and the sustainability of public finances. The fiscal response to the pandemic has so far been based on the assumption that it is preferable to choose the former in order to prevent the latter. The Court of Auditors' simulations indicate that a permanent fall in potential output of three percentage points of GDP induced by the pandemic shock would result, all other things being equal, in a public debt ratio fifteen percentage points higher by 2030. In other words, investing up to €5 billion to raise the growth potential by €1 billion on a sustainable basis is a positive action for public finances over a ten-year horizon. Investment in higher education and research, vocational training, modernisation of infrastructure, keeping viable but indebted companies in business that are at risk of bankruptcy, programmes supporting digitisation: the list of actions that can pass such a test is long.³⁴ Because they prevent unemployment hysteresis or loss of skills and technology, short-term stabilisation initiatives (transfers to households, public spending with no direct impact on growth potential) are also justified.

Conversely, the risk of economic collapse is potentially very damaging to public finances. This is illustrated by a comparison between France and Italy, whose GDP per capita in 2019 was at the same level as in 1999: if France had recorded the same sequence of primary balances as Italy over the same period, its public debt at the end of 2019 would have been 36% of GDP instead of 98%. The fact that the French debt does not exceed the Italian level is not due to greater fiscal rigour. It is because we have better preserved our economic potential.

The second trade-off concerns the choice between financial debt and environmental debt: mobilizing fiscal resources to finance a programme to reduce greenhouse gas emissions increases the former but reduces the latter.

From a socio-economic point of view, these investments should be undertaken if their long-term net present value is positive, given the collective benefits they induce and based on a carbon price trajectory consistent with the objectives of

³² Blanchard O. (2019): "Public Debt and Low Interest Rates", *American Economic Review*, vol. 109, no 4, April, pp. 1197-1229.

³³ The change in government debt as a ratio of GDP d_t between two years $t-1$ and t can indeed be written as follows $d_t - d_{t-1} = dp_t + d_{t-1} \frac{i_t - g_t}{1 + g_t}$ where dp_t is the primary deficit as a ratio of GDP, i_t the nominal interest rate and g_t the nominal growth rate of the economy. When the interest rate i_t is lower than the GDP growth rate g_t , the debt as a percentage of GDP can therefore be stabilised even with a primary deficit or can be reduced with a zero primary balance. The reason is that in this case the impact of interest payments ($i_t d_{t-1}$) on the increase in debt is more than offset by the increase in GDP (g_t), i.e. the denominator of the debt-to-GDP ratio d_t .

³⁴ This argument is in line with the European Fiscal Board's plea for public investment in areas conducive to potential growth.

the Paris Agreement (and, beyond that, of climate neutrality by 2050). For very long-term projects (more than 30 years), there is no risk-free securities market, and the discount rate is much higher than the market interest rates that could be taken into account for project evaluation. This choice leads to the crowding out of projects and is not economically consistent with the quantitative emission reduction objectives over a 30-year horizon. It should, therefore, be revised.

Recommendation 7. Reduce the discount rate using market interest rates to evaluate green transition investment projects.

If the ecological transition was based on a carbon price trajectory consistent with the quantitative targets, this price would be a necessary element in the calculation of the socio-economic profitability of the projects. In the absence of such a reference, the alternative is to rely on a shadow price of carbon,³⁵ i.e. the fictitious price corresponding to the emission reduction objectives. However, such a method does not take into account the sustainability of public finances. In this context, the debt financing of investments for ecological transition must be analysed as a choice of burden-sharing between present and future generations. This choice, distinct from that of the investments themselves, must be the subject of an explicit decision and be enshrined in a specific law (“*loi de programmation*”).

Extend debt maturity

The risk of a sharp rise in interest rates on the cost of refinancing French debt appears very low over the next five years. Beyond this horizon, it remains low but cannot be ruled out. In the current context of low-interest rates, France can

partly insure itself against this risk by gradually increasing the maturity of its debt.³⁶ So far, it has not done so: the average maturity of OATs (French Treasury bonds) issued has not increased over the past five years and is around 11 years. Buying out this insurance certainly has a cost, since the French State currently borrows at around - 0.5% at 5 years, 0% at 10 years and 0.6% at 30 years maturity. However, because of the very low rates, even in the long term, the cost of this insurance remains very low.³⁷

Recommendation 8. To insure against the risk of rising interest rates, extend the maturity of French debt.

Our analysis of the situation leads us to favour measures that, on both the supply and demand sides, respond to the immediate risk of economic collapse. This is the best way to restore our long-term growth potential and ensure balanced public finances. This strategy implies that the mistake of 2011-2013 of an early fiscal adjustment should not be repeated. But it also calls for the redefinition, together with our European partners, of a fiscal framework that includes a credible medium-to-long-term public debt anchor and provides a framework for controlling our public finances. ●

³⁵ Quinet A. (2019): *La valeur de l'action pour le climat. Une valeur tutélaire du carbone pour évaluer les investissements et les politiques publiques*, France Stratégie Report.

³⁶ An example is Austria, which recently issued a 100-year bond with an interest rate of 0.88%.

³⁷ A counter-argument sometimes put forward is that the ECB only buys government debt for up to thirty years. However, these purchases lower overall rates and there is no discontinuity after 30 years.

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