A new policy toolkit is needed as countries exit COVID-19 lockdowns

Olivier Blanchard, omas Philippon and Jean Pisani-Ferry

Olivier Blanchard is a Senior Fellow at the Peterson Institute for International Economics

Jean Pisani-Ferry is a Senior Fellow at Bruegel and a Senior Fellow at the Peterson Institute for International Economics. omas Philippon is a Professor at NYU Stern School of Business

e authors thank Agnès Bénassy-Quéré, Nick Bloom, Laurence Boone, Benoît Cœuré, Jason Furman, Selma Mahfouz, Jeremy Stein, Jean-Luc Tavernier, and PIIE and Bruegel colleagues for comments

WhE7HbA6AAUYCFf•U7Y.YJU˜−YeUe7l&736$##Á23Qp2Qqe˚% 1&−ËAIqrCÀ(@q8(x(iÀQB€taAx9$h”.•8b•Da&!" fiÀ‘GP$€$%<BBHp€QÀ6&€

1

Initial responses to the coronavirus crisis were broadly similar across European countries, while the United States took a somewhat di erent approach.

In Europe, the main measure to help workers was the introduction or scaling up of job-retention schemes inspired by the *Kurzarbeit* (short-time work) scheme that Germany used ex-

In the United States, the government has relied instead on a combination of grants to all households below a certain income level and unemployment bene ts for those laid o . Reaching workers this way has proved di cult. Unemployment o ces, put in charge of paying bene ts, have often been overwhelmed by the increase in claims.

In Europe the measures put in place to help rms have taken the form of a combination of tax deferrals, guaranteed loans and equity injections. Germany launched a €600 billion economic stabilisation fund that combines €400 billion for liquidity guarantees, €100 billion for subsidised loans, and €100 billion for equity injections (Appendix A, table A2). In France the main tool (in terms of size) has been the provision of credit through bank loans, with a state guarantee to banks of 80 percent for loans to large rms (more than 5,000 employees) and 90 percent for loans to smaller rms. e price of the guarantee varies between 0.25 percent and 2 percent over time and banks have committed to lend at cost. By the end of May more than 3 percentage points of annual GDP had been granted in loans to more than 400,000 businesses[3].

e United States has again adopted a somewhat di erent approach. It has mostly relied on a programme of bank loans to SMEs, which can be partially or totally turned into government- nanced grants as a function of the proportion of workers kept by the rm (or laid o but rehired before June 30) and so acts as a combination of loans, grants and wage subsidies[4].

Implementation has been chaotic, however: signo on loans by the administrative authority and distribution by the banking system have been uneven; rms are served on a rst-come, rst-served basis without regard for size.

In addition to those measures, both the United States and Europe have introduced dedicated programmes, often in the form of grants, to support self-employed individuals and start-ups.

Unsurprisingly, the European schemes better protect workers and better preserve existing matches between rms and employees. ey have also proved to be more exible, as rms can, on a weekly basis, adapt their payrolls to actual demand and regulatory constraints.

e US scheme is more complex and less protective, especially as laid-o workers may lose access to health insurance, and it does not favour the preservation of the employer-employee match. But it includes stronger incentives to restart.

Whatever their di erences, all these support mechanisms raise the same questions: should exceptional job retention and credit schemes be discontinued or made less generous in the post-lockdown phase? Should they be made less attractive to employers, employees and lenders? Should new support instruments be introduced instead?

2

e challenge in the post-lockdown economy will be to combine protection and reallocation in a context in which the nature and duration of the shocks are highly uncertain, unemployment is initially very high and there are few opportunities to nd new jobs, rms have a hard time obtaining credit, many rms are likely insolvent or nonviable, and government interventions face the reality of limited public resources.

In this context, we explore the right mix of policies and argue that it should include a gradual phasing out of job-retention schemes and the phasing in of sectoral wage subsidies

3 Ministère de l'Économie et des Finances, 'Tableau de bord des mesures de soutien aux entreprises', 2 June 2020.

4 e United States also has an Employee Retention Credit scheme, but eligibility is strict and it covers only 50 percent of the wage cost up to $10,000. Tax deferrals have also been introduced.

to create incentives to resume production. Credit guarantees for new loans should continue, albeit with decreasing generosity and perhaps some equity participation by the state. Given the likely increase in the number of insolvencies, a process-light loan restructuring programme should be put in place. We propose an automatic restructuring process with public haircuts indexed to private ones but with a continuation premium to provide incentives to not close rms.

Let's start with the special nature of the shocks. So long as physical distancing remains needed, many rms, especially in the service sector, will face both adverse productivity and demand shocks. Productivity shocks and at least part of the demand shocks should, however, largely disappear as rms adapt and when better drugs are discovered or vaccines become widely available. e issue then is whether these rms should be largely kept alive until this is the case. Other shocks, however, are likely to be longer lasting. e increase in teleworking, which was triggered by the crisis, may become partly permanent, with implications for transportation, urbanisation, and the like, which we are just starting to discover.

In normal times, policies should help the reallocation process, letting some rms fail and others expand, and helping the reallocation of workers across sectors. ese are not normal times, however. Many rms may fail because they are insolvent even if they are viable. Given the very high uncertainty, banks may be reluctant to advance credit. Unemployment is extremely high, making it di cult for laid-o workers to nd other jobs. For these reasons we think that protection (of workers) and preservation (of rms) should be given a higher priority than in normal times. At the very least, policymakers should proceed with caution and shift only gradually the emphasis onto reallocation and liquidation.

[illegible]

Currently, job-retention schemes probably enrol a fourth to a third of private sector employees in several European countries. e schemes are typically more generous than general unemployment insurance and have a somewhat di erent goal. ey aim to provide income to nonworking employees while protecting the employment relationship. Conceptually, they protect mostly the worker, but also the rm.

ese schemes worked well during the lockdown. Protection did not come at the cost of job search, as job o ers collapsed and there was little point in searching. Where job retention schemes are in place, they should be maintained rather than discontinued. But three types of adjustments are in order.

First, allowances to workers on these schemes should gradually converge to the standard level of unemployment bene ts. As vacancies increase and unemployment decreases, job

Tightening the screw on job-retention schemes could precipitate layo s. We believe instead that wage subsidies are a better way to proceed, and we return to this below.

e third adjustment, which is less important conceptually but turns out to be empirically relevant, concerns fraud. *Kurzarbeit* and *chômage partiel* were initially designed for manufacturing companies wanting to adapt to a drop in output by temporarily reducing working time. e problem with its application to a large number of SMEs is that it makes fraud particularly easy. An employer can, for example, claim bene ts for half the time of a given employee while asking her or him to work full time. is suggests a gradual tightening of eligibility for job retention when it applies to only a fraction of the working time[5].

Even after the lockdown has ended, rms will often su er from negative demand and productivity shocks. Many rms will need to introduce special arrangements to protect employees and customers, decreasing productivity. In certain sectors, regulations will mandate service at a fraction of normal levels. ese constraints will most likely last in some form until vaccines are widely available.

Should these rms be helped until physical distancing constraints are removed? A formal analysis is given in Appendix B, but the conclusions are easy to state: in normal times, the answer would be to let the rms survive or close and let laid-o workers reallocate. In today's environment, there is, however, a strong case for wage subsidies, based both on the high unemployment rate and the temporary nature of the productivity and demand shocks due to physical distancing.

With the exceptionally high level of unemployment from which economies start after lockdown, workers who are laid o are likely to have a hard time nding another job and thus could remain unemployed for a long time. Put more formally, the shadow price of labour is very low. From a social e ciency point of view, rms should make decisions based on a comparison between the marginal product of a worker and this shadow price rather than on the comparison between the marginal product and the wage. If the wage cannot be cut, or at least cut substantially (and for the same reason as there are unemployment bene ts, wages should not be cut substantially), wage subsidies are needed to lead rms to take the socially e cient decision.

To the extent that some of the shocks are clearly temporary – even if their duration is uncertain – there is a second argument for introducing wage subsidies. Suppose that in the absence of such subsidies, most of the rms in a particular sector did not survive, but, when the shocks were gone, the sector went back roughly to its pre-crisis state, requiring the creation of many new rms. e costs involved in this process of destruction-creation might be very high. If the expected duration of the shock is not too long, allowing most of the rms to survive is likely to be a better social alternative. Restaurants provide a clear example. By decreasing the number of customers restaurants can accommodate, physical distancing constraints imply a substantial decline in productivity and many restaurants are unlikely to survive a sustained period of lower productivity and lower demand6. Decreasing their costs and allowing most of them to survive until the shock is gone probably dominates widespread bankruptcies and later wide-scale reconstruction.

Without a shadow cost to public spending, re ecting the lower shadow price of labour and thus subsidising all rms, whether or not they were subject to shocks, would be desirable. It would, however, be extremely costly scally, and thus the focus should primarily be on rms that are su ering temporary shocks and are unlikely to survive without nancial help.

5 In France, this also calls for lowering the ceiling for eligibility to *chômage partiel*: For workers paid 4.5 times the

e list of such sectors is nearly identical in all countries: accommodation and food services; arts, entertainment, and recreation; passenger transportation, especially airlines; retail trade, partially; and, to a lesser extent, construction. Depending on the perimeter, these sectors represent between 4 and 9 percent of GDP7. Assuming a wage share, including social insurance contributions, of 70 percent and a subsidy rate of, say, 30 percent, implies a gross scal cost of 0.8 to 1.9 percent of GDP.

e net scal cost is likely to be much smaller, however, even plausibly negative if the subsidies are well targeted. If each wage subsidy led to the employment of an additional worker, the state would save in both reduced unemployment bene ts and increased social contributions. Together, these would most likely exceed the wage subsidy by a large amount. In reality, targeting is likely to be far from perfect, some rms may bene t from the wage subsidies but not increase employment, but the net scal cost is nevertheless likely to be small.

e logic of our argument implies that, as unemployment decreases and vacancies increase, these wage subsidies should be reduced over time and that they should obviously end if and when physical distancing constraints are removed. In principle, the adjustment should be state-contingent and stopped if lockdowns must be implemented again, or if unemployment remains very high.

[illegible]

State guarantees on bank loans to rms were introduced to ensure emergency access to liquidity. But even after the lockdown ends, there is a strong case for maintaining partial guarantees on loans[8]. In the current environment, which rms will survive and which will have to close is di cult to assess, and if banks cannot fully diversify credit risk, they will ask for too high a risk premium or refuse to lend altogether. Also, because of the e ects of the lockdown, most banks have seen a decrease in their capital ratios, making them more reluctant to lend even to viable rms that may be short on liquidity. e government can alleviate this problem by providing partial loan guarantees. It is in general in a better position than banks to diversify credit risk and to absorb the macro risk due to uncertainty about the evolution of the pandemic and the availability of a vaccine. It should o er partial guarantees rather than full guarantees or direct government lending: when banks share losses they do not have incentives to lend to bad credit.

Most countries implemented such programmes during the lockdown. As countries exit the lockdown phase, these loan guarantee programmes should be continued, with two modi cations.

First, the generosity of the guarantees should decrease over time. As with job-retention schemes and wage subsidies, the decrease should be contingent on the state of the economy. e guarantees are justi ed by the extreme macroeconomic and microeconomic uncertainty created by the pandemic. As the pandemic risk becomes easier to manage, the guarantees should be phased out.

Second, the use of state guarantees should be linked to restrictions on dividend payments and/or higher future corporate income taxes. Dividend restrictions are already commonly imposed on large rms that require government support.

ere might be excessive uptake from rms that do not need the guarantee but, because they have good credit, this would not be costly to the government. e scal cost of guarantees decreases steeply as they become less generous because of the direct e ect as well as the indirect e ect via bank incentives. If the guarantees are reduced over time, maintaining a loan

7

guarantee programme is unlikely to create a problem for public nances. e main danger is the transfer of pre-existing exposures. A bank with an exposure to a rm could ask it to use the guaranteed debt to repay its existing loans. is would be a transfer of risk to the state. A simple remedy (which is already in use) is to require banks to maintain their existing exposure as a condition for making a guaranteed loan.

Firms could be o ered the option to convert guaranteed credit into equity or quasi-equity in the form of preferred shares or, for privately held rms, higher pro t taxes in the future. e advantage for shareholders or rm owners would be to improve their balance sheets by lowering debt and increasing the equity bu er. e advantage for the state would be to improve the viability of rms and lower the risk of costly defaults. For smaller rms, quasi-equity in the form of an agreement to pay higher taxes in the future might be preferred to proper equity, as the latter requires more monitoring and there is a limit to the extent to which the state can manage a large number of small equity claims.

Note that, like wage subsidies, guaranteed loans are not designed to save all rms. By re ecting the low shadow price of labour, and by pricing credit more correctly, they are designed to induce rms to take socially e cient decisions. Even with the subsidies and the loans, some rms are likely to be insolvent or unviable. us, the last leg of our architecture focuses on restructuring.

[illegible]

Dealing with the legacy debts from the crisis will be complex and expensive. ere are various ways in which restructuring can be organised, depending on the seniority structure of private and public claims, information problems and administrative burden.

As they exit the lockdown, rms will di er in their health and some will have excessive debt levels. Firms in the post-pandemic environment can be thought of as being in one of three baskets:

- Privately viable (the present value of their pro ts exceeds recovery value) and solvent (the present value of pro ts exceeds current debt);
- Not viable and thus not solvent; and
- Viable but have been made insolvent by the shock and thus need debt restructuring.

If the rm is viable and has little or no debt, then the only issue is to make sure that it can access liquidity to nance its operations. e guarantees described above should take care of this. We thus focus here on the case where liabilities are large – the rm is insolvent and may or may not be viable.

Even with wage subsidies and loan guarantees, the social value of a rm as a going concern may substantially exceed its private value. Even for rms that receive them, wage subsidies may be too small to cover the di erence between the wage and the shadow value of unemployment. Also, network e ects in a fragile and depressed economy are more relevant than usual, as the bankruptcy of a rm may have major e ects on its suppliers and their consumers. e implication is that private creditors will, by themselves, close too many rms because they consider only the private value of the rm.

In addition, the number of rms needing debt restructuring is likely to be large and the courts are likely to be overwhelmed, so standard insolvency procedures will not work. e government, as one of the creditors, has neither the information nor the administrative capacity to implement e cient restructuring by itself. It must work with private creditors (typically banks in the case of SMEs) that have more granular information and a better capacity to use it. e process should thus be as quick and simple as possible, ie quasi-automatic. A large number of parties should not be involved in complex bargaining.

Given these constraints, we propose the following scheme:

- If a rm is closed, the government claims the full extent of its rights as a creditor. is

3 [illegible]

e measures taken by governments to protect vulnerable rms and employees during the lockdown have largely met their goals – more so in Europe than in the United States.

	US	UK	Germany	France
Name	Paycheck Protection Program	Coronavirus Job Retention Scheme	Kurzarbeitgeld	Chômage partiel / activité partielle
Principle	Guaranteed banq1(o)-2 (gr)10 (am)T	J9.203 1.224h7rod banq1(o)-2 (gr)10i7qEs J11q1(86J-41.49 -1.6cro)978 -		

	US	UK	Germany	France
Name	Paycheck Protection Program	Coronavirus Business Interruption Loan Scheme	Wirtschaftsstabiliesierungsfond + KfW Special Program	Prêt garanti par l'État
Principle	Government- nanced bank loans to SMEs convertible into grants if employer retains or rehires workers	Guarantees	Guarantees on bank loans + subsidized KfW credits	Guarantees on bank loans
Coverage of guarantee	100%	100% up to GPB 250K, 80% above	90% for small rms; 70% for large ones	90% for small rms; 80% for larger ones
Rate	1% xed rates. Lenders compensated by government	Interest holiday for 12 months. ereafter terms set by lender	Several sub-schemes with di erent rates	Interest holiday for 6 months Low rates thereafter
Maturity	2 years	Up to 6 years	Up to 5 years	1 year, extendable to 5 years
Eligibility	SMEs (less than 500 employees)	SMEs	All rms	All rms
Termination	30 June 2020			31 December 2020

A B

Wage subsidies

Consider the following much simpli ed economy.

Decompose time into four periods: pre-lockdown, lockdown, post-lockdown but pre-vaccine, and post-vaccine.

-loa1nsideur50.gh r50.tr pn1w

socially optimal, the subsidy must be equal to S = 1 – B' + C.

Under the assumptions in the table, as Y"< 1 and wage (W) = 1, rms in the third group will close post-vaccine. e question is whether they should stay open in the post-lockdown period. e same reasoning as above implies that they should stay open if Y' > B', while the private decision implies that they will stay open if Y' + S > 1. us, for the outcome to be socially optimal, the subsidy to the third group of rms must be equal to S = 1 – B'.

Suppose now that we do not know if a rm belongs to the second or the third group. Assume that there is probability p that it belongs to the second group, probability (1 – p) that it

to close, recovery would be R. Assuming *pari passu* risk sharing, banks and private creditors would recover D/(D + L)*R and the government would recover L/(D + L)*R.

For rms that should survive, if V > L + D then all is ne. If V < L + D then a haircut (h) is needed. Assuming pari passu we would set (1 − h)*(L + D) = V − E to get the haircut and leave the rm with enough equity to operate. Firms where V > L + D > V − E are excessively leveraged and might need pre-emptive restructuring. So an alternative is to treat all rms with V − E < L + D as needing a haircut.

Implementation with limited information

e main issue is that the government does not know V or R. Banks and rms know a lot more about V and R than the government does.

is implies that the government needs the help of banks to implement e cient triage. However, letting the banks make privately optimal decisions would lead to excessive closures. Banks have three options:

1. Continue nancing the rm if V > L + D; no haircut.
2. Close the rm and recover D/(D + L)*R.
3. Continue nancing but if V < L + D then accept haircut h such that (1 − h)*

(L + D) = V − E. Hence the bank gets (1 − h)*D = D/(D + L)*(V − E), which is its *pari passu* share of the pledgeable value.

From the bank's perspective the decision to close under *pari passu* is thus

D/(D + L)*(V − E) < D/(D + L)*R, which is equivalent to V – E < R.

Comparing this to the optimal decision V + Z < R shows that two ine ciencies lead to excessive closure:

1. Equity value E is 'not pledgeable' in the sense of standard corporate nance. is is a private ine ciency that is well known.
2. Z is not internalised by the banks. is is a public externality issue.

Let us now gure out how to implement socially e cient restructuring. Suppose that the government agrees to take a higher haircut (H > h) than the banks under continuation. Under liquidation the government maintains its pari passu status. e haircut making a bank indifferent between closing and continuation is 1 − h = R/(D + L). is then requires

(1 − H)*L = V − E − R*D/(D + L)

To implement the socially e cient triage, this condition needs to hold when V + Z = R.

erefore (1 − H)*L = R − Z − E − R*D/(D + L). e haircut accepted by the government is given by 1 − H = R/(D + L) − (Z + E)/L. erefore

H = h + (Z + E)/L.

Proposition: Implementation under limited information. e following scheme implements the rst best allocation:

- If a rm is closed, then government loans (L) and private loans (D) are treated *pari passu*.
- If a rm continues but needs debt forgiveness then the government accepts to take a higher haircut than the banks, given by H = h + (Z + E)/L.

e key point here is that H does not depend directly on V or R, thus it is feasible even if the government does not know V or R. e government indexes its haircut (H) to that of the private sector (h) precisely in order to extract information.

is programme costs more money to the government than under full information because it has to give up more of its claims to induce e cient continuation. But it achieves the e cient outcome.

When the government also gives out wage subsidies, then the net present value of these

subsidies should be deducted from Z.

Fiscal equity

Governments have scal equity in all rms: the present value of future income taxes. ey have an incentive to keep the rm alive. In theory, scal equity could be adjusted to increase the e ciency of the programme.

One way to make the programme less expensive is for the government to get relatively more equity in exchange for accepting a higher haircut. For large rms this can be nonvoting preferred stock; for small rms, it could take the form of a higher tax rate on future pro ts for rms that need restructuring than for those that do not. For instance, suppose the government forgives all corporate taxes due during the lockdown. All rms bene t from this measure. ose that default on their loans would agree to waive some of the corporate tax break. at would be scal equity.

An example

Consider a rm before the lockdown with sales of 100 per year, non-labour costs of 50 including maintenance, and labour cost of 40. Its total costs were 90, net pro ts 10, discount at 10%. Firm value was V0 = 100. Debt was D = 50. Entrepreneur had equity E0 = 50.

During the crisis the rm gets an emergency loan from the government equal to L = 50. Total debt is now D + L = 100.

After the crisis the value of the rm is lower. Future sales are only 75. It manages to lower its non-labour costs to 40 and its labour cost to 30. Its total costs are now 70; pro ts are 5. e new rm value V = 50. Since 50 < 100 the rm is insolvent.

Suppose that the minimum required equity is E = 10. e pledgeable continuation value V − E is only 40. In addition, if workers are red, their outside value is not 30 because the labour market is depressed. It is only 20. at means Z = 10.

Dt tSd t.9 (quit)-1 E0 = 5010t would bi3 (e t)1 (o w)4 (quit)-0.9 Td[its non-l)2(v)3 (n0 -1.4epr)þ7.7ians Z b