

Corporate sector vulnerabilities during the Covid-19 outbreak: assessment and policy responses

by Lilas Demmou, OECD Economics Department, Guido Franco, OECD Economics Department, Sara Calligaris, OECD Directorate for Science, Technology & Innovation, and Dennis Dlugosch, OECD Economics Department

The health crisis caused by the COVID-19 outbreak has led public authorities to take unprecedented measures to contain the propagation of the virus. Administrative business shutdowns, quarantines and restrictions on mobility and social contacts have brought large parts of our economies almost to a standstill. Sales across many sectors have plummeted and are beginning to recover only slowly. Nevertheless, financial commitments with respect to suppliers, employees, lenders and investors remain, depleting liquidity buffers of firms.

The liquidity crisis may turn into a global corporate solvency crisis. With much less or no incoming revenues for an extended period of time and fewer options to deal with this shortfall, the long-term viability of firms has been impaired, and firm voluntary closure and bankruptcies may follow. In turn, a corporate solvency crisis could have serious long-term negative effects on our economies by dragging down employment, productivity, growth and well-being. Mindful of these risks, governments have adopted a range of emergency measures aimed at supporting firms' liquidity. Aside from monetary measures taken by central banks, fiscal interventions have included

direct and indirect financing of the wage bill, tax deferrals, debt moratoria and extension of state loan guarantees.

An issue note published in the latest issue of the [OECD Economic Outlook](#) evaluates the risk of a widespread liquidity crisis and discusses the pros and cons of different kinds of public support measures. Building on the methodology developed by Schivardi and Romano (2020) and on illustrative assumptions regarding the evolution of sales and costs during the epidemic, a simple accounting framework is used to calculate the percentage of firms that become illiquid month by month following the introduction of confinement measures. The key role of policies to avoid massive unnecessary bankruptcies is emphasised by comparing the share of firms that would turn illiquid under two scenarios: one where there is massive policy support for firms and one where there is no such support.

The risk of liquidity shortages is high for a large portion of healthy firms

The analysis relies on 2018 firm-level financial data, obtained from the latest vintage of the Orbis dataset (provided by Bureau Van Dijk), and covers a sample of almost one million firms located in 14 European countries, operating in both manufacturing and non-financial services sectors.

The economic shock from measures of physical distancing on firms' liquidity is modelled as a change in firms' operating cash flow, resulting from the decline in sales and from firms' limited ability to fully adjust their operating expenses. Next, the liquidity available to each firm is calculated as

the sum of the liquidity buffer held at the beginning of each month and the shock-adjusted cash-flow.

Measures on distancing and mobility restrictions have heterogeneous effects on different sectors. Therefore, we assume the decline in activity to be different across sectors, but identical across countries; for a set of severely hit sectors, the decline in output ranges between 50% and 100% of sales, while it is conservatively set at 15% for the other non-financial sectors. In line with the projections published in the [Economic Outlook](#), we consider two alternative scenarios with respect to the dynamic of the recovery:

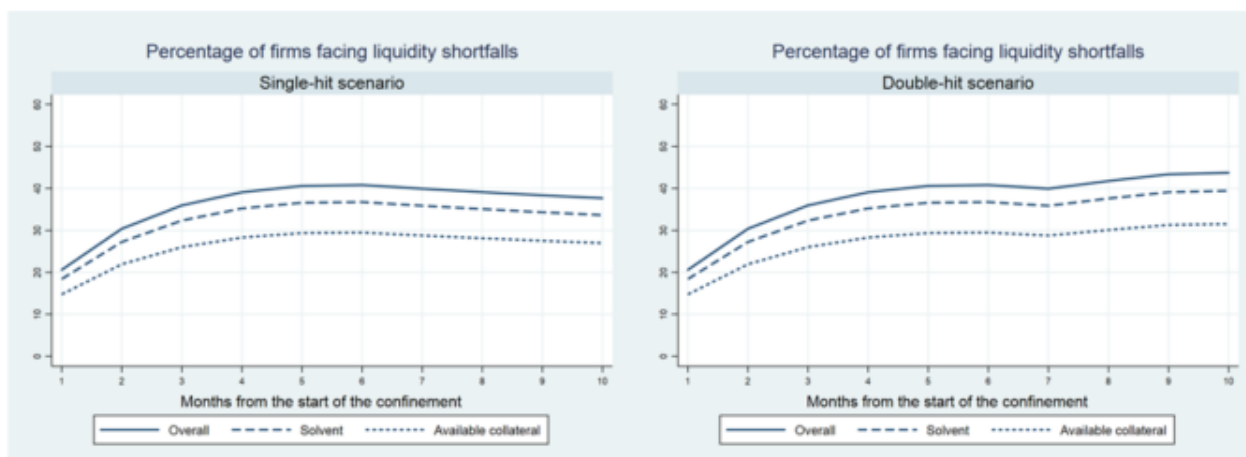
- A “single-hit” scenario, whereby a sharp drop in activity lasting two months is followed by a four-month progressive recovery, with a return to pre-crisis activity levels seven months after the start of the epidemic.
- A “double-hit” scenario, which overlaps with the single-hit scenario for the first seven months, but then assumes a second outbreak from the eighth month onwards.

The solid lines in the left and right panels of Figure 1 report the main results of the exercise: in the absence of government intervention, 20% of firms in the sample would likely run out of liquidity after one month and 30% after two months. As the economy is expected to recover only slowly after the two months of collapse in activity, the percentage of firms facing liquidity shortfalls would reach 40% after six months, and starts to decline from the seventh month onwards, when the economy returns to the pre-crisis level of production (“single hit” scenario). In the case of a second episode of widespread confinement, this share would increase instead to 45% (“double-hit” scenario).

The analysis also shows that firms facing a high risk of experiencing liquidity shortages are mostly profitable and viable companies (Figure 1, dashed lines). At the same time, even though solvent, a sizeable share of these firms might face difficulties in accessing new bank financing to bridge a shortfall in liquidity, as they lack the collateral to tap into additional debt. (Figure 1, dotted lines).

The exercise is based on several assumptions, which calls for cautious interpretations. Even so, it underlines the merit of swift and decisive public intervention to safeguard companies and avoid potential bankruptcies of otherwise healthy companies. This intervention is crucial to avoid that the temporary shock implied by the COVID-19 crisis permanently scars the corporate landscape, with serious consequences for the shape of the recovery and long-run growth prospects.

Figure 1: Liquidity shortfalls without government intervention



Note: The figure shows the percentage of firms facing liquidity shortfalls in the single-hit (left panel) and the double-hit (right panel) scenarios. In particular, it reports: the overall percentage of firms turning illiquid (solid line); the percentage of firms facing liquidity shortages but still potentially solvent, i.e., if the value of their assets is larger than the value of the liabilities (dashed line); the percentage of firms facing liquidity shortages but having collateral to pledge to obtain additional bank financing, i.e., if the value of their fixed assets is larger than the value of their non-current liabilities (dotted line).

Source: OECD calculations based on Orbis® data.

Public policies to reduce liquidity shortages and curb bankruptcy risk

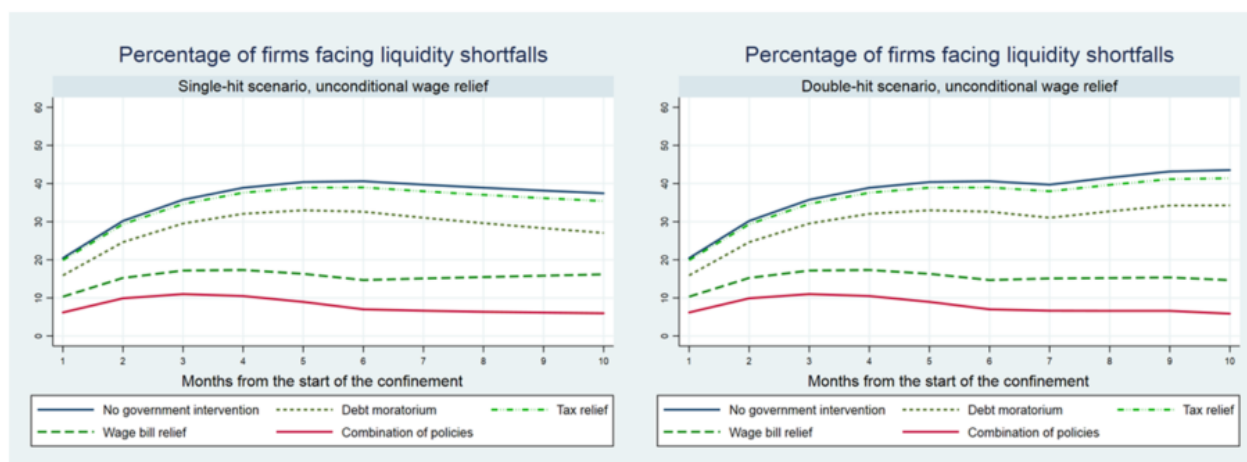
Countries have already introduced a wide range of measures to help firms to cope with the disruptions associated with COVID-19. We used our accounting model also to illustrate the expected impact of stylised policy interventions in three areas:

- *Deferral of taxes.* To support business during the epidemic, several countries have introduced tax deferrals. We model the tax deferral as the moratorium of the (hypothetical) monthly tax payments.
- *Financial support for debt repayment.* A large number of countries have also established legislative frameworks that temporarily allow firms to postpone their debt payments or alternatively, that offer State guarantees to facilitate access to short-term debt facilities. The potential impact of such policies is modelled as a moratorium on short-term debt.
- *Temporary support to wage payments.* A critical response to avoid widespread liquidity shortfalls consists of relaxing firms' financial commitments vis-à-vis their employees. Schemes such as a shortening of working time, wage subsidies, temporary lay-offs and sick leave have been introduced across countries, though in different combinations. All these measures reduce the wage bill firms have to pay. The labour support is modelled as an unconditional reduction of the wage bill by 80% in all sectors.

Figure 2 illustrates the extent to which each measure curbs the risk of a liquidity crisis compared to the no-policy

intervention situation. Tax deferral has the lowest impact on firms' liquidity positions, followed by debt moratorium policies. Subsidies to the wage bill seem to be the most powerful measure (yet potentially costly), in line with the fact that wages and salaries are often the most important component of operating expenses. Adding up the three different measures, public intervention after two months, for instance, would decrease the number of firms running out of liquidity from 30% to 10%.

Figure 2: The impact of policies



Note: The figure shows the percentage of firms facing liquidity shortfalls: in absence of policy intervention (blue solid line); in case of deferral of tax (green dash-dotted line); in case of a moratorium on short-term debt (green dotted line); in case of temporary support to wage payments, assuming an unconditional reduction of the wage bill by 80% in all sectors (green dashed line); a combination of all the previous measures (red solid line).

Source: OECD calculations based on Orbis® data.

Challenges in the design of policies

Public intervention on such a massive scale raises several challenges related to the design of policies. In particular:

- Country-specific dimensions. Country-specific institutional settings may shape the extent and the efficiency of the policy response. Given the importance

of labour market policies highlighted in the note, it is likely that countries with already well-developed labour market support schemes are able to provide a quick response with less distortive effects.

- **Conditionality.** In some countries, loans forbearance and wage subsidies are conditioned on the actual reduction in payroll, with the requirement to be used to cover fixed costs only or to rehire fired employees after the crisis. The design of transfers and subsidized loans to corporations should ensure that firms preserve jobs when possible and do not divert resources towards exclusively private interests (e.g., to boost CEO compensation or dividend payments).
- **Short-term versus medium-term policy answer.** Given the need of an urgent policy response during the so-called “phase one” of the crisis, policy has often not been particularly targeted in the short term. Going forward, short-term, cross-cutting policies might need to be better refined to ensure that public support does not contribute to resources misallocation. Moreover, policies will also need to account for the heterogeneous impact of the shock, as firms will not be on the same foot to face the crisis other than for liquidity reasons when the activity will slightly recover in the medium-term (see also Gopinath, 2020).
- **New normal.** The extent to which the COVID-19 crisis will disrupt the economies is still uncertain. In European countries a large set of policies, in particular in the labour market, is tailored on the principle to protect the pre-crisis allocation of resources. In other countries, like in the U.S., the adjustment largely hinges on payroll reduction via layoffs. Their relative efficiency during the recovery and beyond may be related to whether economies will structurally change coming out of the COVID-19 crisis.

Notes:

1. The detailed analysis in the [Economic Outlook](#) includes also a “prolonged confinement” scenario, which is agnostic on the length of the confinement and avoids modelling the recovery.
2. The issue note published in the [Economic Outlook](#) also provides the outcome of an alternative labour support, whose generosity is conditional on the sectoral size of the shock. This option, while of course being less costly from a fiscal perspective, is found to reduce less the risk of a liquidity crisis.

References

Gopinath G. (2020), “Limiting the economic fallout of the coronavirus with large targeted policies”, in R. Baldwin and B. Weder di Mauro (eds.), *Mitigating the COVID economic crisis: Act fast and do whatever it takes*, VoxEU.org eBook, CEPR Press.

OECD (2020a), “[Corporate sector vulnerabilities during the Covid-19 outbreak: assessment and policy responses](#)”, *Tackling Coronavirus Series*.

OECD, (2020b), “[Evaluating the initial impact of COVID-19 containment measures on economic activity](#)”, *Tackling Coronavirus Series*.

Schivardi, F., and G. Romano, (2020), “[A simple method to compute liquidity shortfalls during the COVID-19 crisis with an application to Italy](#)”, mimeo.