ECONSTOR
Make Your Publications Visible.

A Service of
ZBW
Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Boot, Arnoud W. A. et al.

Research Report

The Coronavirus and financial stability

SAFE Policy Letter, No. 78

Provided in Cooperation with:
Leibniz Institute for Financial Research SAFE

Suggested Citation: Boot, Arnoud W. A. et al. (2020) : The Coronavirus and financial stability, SAFE Policy Letter, No. 78, Leibniz Institute for Financial Research SAFE, Frankfurt a. M.

This Version is available at:
https://hdl.handle.net/10419/214882

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

WWW.ECONSTOR.EU

Mitglied der Leibniz-Gemeinschaft

Arnoud Boot
Elena Carletti
Rainer Haselmann
Hans-Helmut Kotz
Jan Pieter Krahnen
Loriana Pelizzon
Stephen Schaefer
Marti Subrahmanyam

The Coronavirus and Financial Stability

SAFE Policy Letter No. 78 | March 2020

Leibniz Institute for Financial Research SAFE
Sustainable Architecture for Finance in Europe
policy_center@safe-frankfurt.de | www.safe-frankfurt.de

The Coronavirus and Financial Stability

Arnoud Boot[1], University of Amsterdam
Elena Carletti, Bocconi University and Florence School of Banking & Finance
Rainer Haselmann, Goethe University Frankfurt
Hans-Helmut Kotz, Harvard Center for European Studies and SAFE
Jan Pieter Krahnen, Goethe University Frankfurt and SAFE
Loriana Pelizzon, Goethe University Frankfurt and SAFE
Stephen Schaefer, London Business School
Marti Subrahmanyam, NYU Stern Business School

March 2020

Abstract

The spreading of the Covid-19 virus causes a reduction in economic activity worldwide and may lead to new risks to financial stability. The authors draw attention to the urgency of the targeted mitigation strategies on the European level and suggest taking coordinated action on the fiscal side to provide liquidity to affected firms in the corporate sector. Otherwise, virus-related cashflow interruptions could lead to a new full-blown banking crisis. Monetary policy measures are unlikely to mitigate cash liquidity shortages at the level of individual firms. Coordinated action at European level is decisive to prevent markets from losing confidence in the resilience of banks, particularly in countries with limited fiscal capacity. In contrast to the euro crisis of 2011, the cause of the current crisis does not lie in the financial markets; therefore, the risk of moral hazard for banks or states is low.

I. The issue: Coronavirus and the real economy

Since the turn of the year, Covid-19 – a novel virus – is spreading globally. With a large number of infected people particularly in China, Korea, Italy, and Iran, the perception of an uncontrolled pandemic has already caused many to change their daily lives. The resulting reduction in economic activity worldwide is threatening to tip several countries into recession and do damage to financial stability. There is, as yet, no vaccine against the virus. To prevent further infection, several governments have mandated strict regulations to avoid unnecessary contact with those already infected, especially the vulnerable segments of the population, the sick and the old. This has prompted the pre-emptive closure of schools, universities, factories and businesses, casting a pall on the whole world in a manner not witnessed for decades.

[1] SAFE policy letters represent the authors' personal opinions and do not necessarily reflect the views of the Leibniz Institute for Financial Research SAFE or its staff.

The implications for economic activity – production and, on an increasing scale, consumption – are severe. Importantly, it affects supply chains all over the world, particularly relating to goods and components imported from China, creating shortages throughout the production and distribution cycles. Therefore, items that are widely used in mobile phones, car parts, and other products cannot be manufactured as usual. Once inventories are depleted, production may slow down or even grind to a halt. Starting locally, the consequences have spread quickly to ever larger regions, as is mirrored in the worldwide slide in stock prices.

It should be added that the impact of the virus is far from being limited to supply interruptions to the manufacturing sector. Massive interruptive effects can be observed in the services industries, including travel, tourism, mass events, fairs, as well as at schools and universities. Furthermore, anxiety among consumers and workers will bear on individual consumption and, in turn, firm revenues.

In contrast to the 2008 financial market crash, in 2020 the corporate sector has been massively affected, and the impact is rising by the day, due to the high level of interconnectedness of manufacturing and distribution around the world. While an interruption in economic activity initially would cause liquidity problems for firms and their banks, their interconnectedness would most likely transform the liquidity problem, if left untreated, into a solvency problem for firms and, concurrently, for banks.

II. The channel: Coronavirus, banking, and financial stability

With cashflows drastically reduced, companies struggle to pay their suppliers, their employees, and ultimately their bankers, even though the underlying business model of affected firms may not be in doubt. Yet, the coronavirus-induced fall in production is a temporary, *interruptive event*, as opposed to a lasting, disruptive event. Once the virus disappears, either because a medication has been found, or because the epidemic dies out naturally, earnings are likely to jump back to their pre-shock level.

Thus, in an ideal world with full information and perfect financial markets, the virus epidemic poses a major liquidity problem for the real economy and its firms, not one of long-run viability. In reality, however, information spreads slowly and imperfectly, and access to funding may well be denied. Firms facing a liquidity squeeze due to the interruption may quickly face a solvency problem, once their inventories and cash reserves are depleted. Some affected firms that have no ready access to funding may face default or even bankruptcy. In many countries, particularly in Europe, the main creditors of firms typically are banks – which, in turn, have to build loan loss provisions, and will thus suffer deterioration in their capital adequacy positions. We are already witnessing this chain of events in Europe; in particular in Italy, where banks have started to grant moratoria on their outstanding loans, in an attempt to provide relief to their corporate clients, to avoid a looming default. In turn, the

cashflow shortfall at the firm level translates into a cashflow loss at the level of the banks. But the infection chain does not necessarily stop here. Next in line may be those governments trying to offer a helping hand to the banks in their countries (on top of the direct support to non-financial firms and families). If sovereign debt levels are as high as in Italy, for example, the extra funding capacity of the state is quite limited, as the debt terms of the sovereign will spiral downwards as well. When push comes to shove, the doom loop between the escalation of bank default risk and sovereign default risk, the source of the 2011 euro crisis, returns ominously.

Note, however, that the 2020 virus situation cannot simply be compared with the 2011 euro crisis, because today's increasing default expectations in countries such as Italy are not driven by the same questionable lending standards as back then. The strong exogeneity of the current crisis reduces greatly the role of moral hazard concerns, if not eliminating it altogether, that prevented a coordinated action and international risk sharing back in 2011.

The potential stress for the banking system may also be exacerbated from the deposit side. Absent a credible European deposit insurance, there may be doubt about the resilience of a national, largely pay-as-you-go backed deposit insurance system, particularly in smaller and weaker countries. Depositors may join the flight to quality, asking for redemption – and a bank run may get under way. Non-protected institutional depositors will run in any case, and wholesale funding will dry up. This is how the current health crisis may translate into a full-blown banking crisis.

III. The answer: mitigation strategies

The general lesson of our situational analysis is this: The virus epidemic carries the risk of a financial pandemic, a form of systemic risk. Moreover, the financial pandemic may even spiral into a global phenomenon, yielding a case for some form of a joint and mutual insurance scheme – compensating firms for crisis-induced cashflow shortfalls, though not for "legacy" poor performance, and thus limiting (or avoiding) the knock-on effects in production, consumption and banking.

We hasten to emphasize a sense of urgency at the European level. While the diagnosis of common action is straightforward, the implementation is an immensely complex challenge. If it fails, we may look at the current episode as a run-up to the next financial crisis in Europe. However, if it is managed well, it may pave the way towards a European Hamiltonian moment. This common action may define the type of risk sharing that renders Europe's Banking Union sustainable and shows solidarity without being hit by the typical moral hazard and transfer union framing.

Almost daily now, governments are taking political and financial actions aiming to stabilize the economy. At the beginning of last week, the Group of Seven (G7) – Germany, France, Italy, Japan,

Canada, the United Kingdom, and the United States – agreed to work together and to find appropriate political actions to mitigate damage to global growth. A few days later, the US Federal Reserve cut its interest rate and other central banks followed. Among other measures, the Bank of Japan increased the purchase of government bonds in an attempt to maintain liquidity in the market. So far, the ECB has taken no action but has stated that it would be ready to intervene.

Following our above analysis, we would suggest taking joint action on the fiscal side, and letting monetary policy take a more limited role. Given the reasons for the looming insolvency of firms in the corporate sector, lower interest rates or increased asset purchases are unlikely instruments to deal with the cash liquidity shortage at the level of individual firms, mostly because banks are constrained by capital requirements on top of their liquidity buffers. What is really needed is a quick and targeted provision of liquid funds to those firms that face a break in production and/or their supply chain, and also to those that have suffered a large decline in demand.

The current challenge for Europe has two dimensions: first, to find instruments to measure, in a timely manner, the corona-induced cashflow shortfall at the level of firms; and second, to find a way to effectively channel funds to the affected individuals, firms, and banks.

A tried and trusted way to reach firms directly, and in targeted way, could be via *Kurzarbeit*-schemes, which are well established in Germany. In such schemes, firms with cashflow shortfalls can temporarily externalize part of the wage bill. Under this scheme, employees work part-time rather than full-time, 60% for example, and receive 84% of their usual pay, since the national unemployment insurance scheme, funded by social security contributions, covers 60% of the wage reduction. Thus, there is, for a limited period, employment risk sharing among workers, conditional on the firm being eligible. The eligibility criteria limits exposure to moral hazard – a precondition for the scheme to be both, economically efficient and politically acceptable.

Alternative schemes are conceivable that meet similar criteria. For example, a firm-level cashflow shortfall may be estimated from reported value-added tax (VAT) payments. Using previously paid VAT payments as a benchmark, a firm's liquidity shortfall can be estimated. The shortfall amount may then be offered – fully or partly – to the firm as a government-backed loan.

State development banks, like the KfW in Germany, and similar institutions in France and some other European countries, may serve as channels to reach eligible solvent firms. Supranational financial institutions, notably the European Investment Bank and the European Bank for Reconstruction and Development, through their access to banks and capital markets across Europe, may provide the necessary funding. The scheme, if applied successfully, would provide a bridge over the corona period, to help affected firms escape bankruptcy proceedings.