GROWINPRO

Growth Welfare Innovation Productivity

Working Paper

A mechanism to support SMEs in the COVID 19 crisis

Werner Hölzl
Austrian Institute of Economic Research (WIFO)

Philipp Schmidt-Dengler
Department of Economics, University of Vienna and Austrian Institute of Economic Research (WIFO)

16/2020 June

This project has received funding from the European Union Horizon 2020 Research and Innovation action under grant agreement No 822781

A mechanism to support SMEs in the COVID 19 crisis*

Werner Hölzl †
Austrian Institute of Economic Research (WIFO)

Philipp Schmidt-Dengler‡
Department of Economics, University of Vienna and
Austrian Institute of Economic Research (WIFO)

Abstract
We propose a mechanism - "profit-contingent repayable grants" - to support SMEs in the COVID 19 crisis. We argue that the mechanism can be implemented quickly, in a targeted way and with low administrative costs. The mechanism is characterised by a) profit-contingent repayment, b) limited repayment period (forgiveness), c) interest at market rates and d) administration by the tax authorities. Such a mechanism can provide an equity-like support for many SMEs that is both efficient and fiscally prudent. We discuss potential problems.

* We thank Jürgen Janger, Thomas Url and Thomas Friedrich for useful suggestions. All remaining errors and misconceptions are ours. W.H. acknowledges support from European Union's Horizon 2020 research and innovation programme under grant agreement No. 822781 GROWINPRO – Growth Welfare Innovation Productivity. A German version of the paper is published as WIFO Research Brief No. 7/2020
† Arsenal Object 20, 1030 Vienna, Austria; email: werner.hoelzl@wifo.ac.at
‡ Department of Economics, University of Vienna, Oskar-Morgenstern-Platz 1, 1090 Vienna, Austria; email: philipp.schmidt-dengler@univie.ac.at

1. Introduction

The COVID 19 pandemic and the confinement measures implemented by the authorities to contain the spread of the virus have led to an unprecedented economic slump and a significant increase in insolvency expectations (Hölzl and Kügler 2020, Garcia et al. 2020). The COVID 19 crisis particularly affects service industries with small-scale enterprise structures, which are normally less affected by economic downturns than manufacturing industries. This poses challenges for economic policy. Traditional concepts of anti-cyclical policies are not designed to support the solvency of many small companies in a quick and direct way.

We outline a mechanism that can support small (and medium-sized) enterprises quickly, in a targeted manner and with low administrative effort and costs. The mechanism can be described as a "profit-related repayable grant".

2. Background

Many governments, including the Austrian federal government, have very quickly implemented support programmes as accompanying measures to cushion the effects of the lockdown for the enterprises affected and to avoid insolvencies of in principle healthy and viable enterprises. The measures taken differ substantially in dimension and composition from the measures taken during the financial crisis of 2008/09. Support measures for companies in the form of grants, loan guarantees and tax deferrals play a much greater role. In addition, insolvency proceedings and various moratoria for the payment of fixed costs were also implemented. At the European level, the European Central Bank and the European Banking Authority have implemented measures to support the banking system's lending to companies (Pekanov, 2020).

Cascade effects along the value chains also affect companies in downstream and upstream industries (see Baqaee 2018; Guerrieri et al. 2020). Results from the special survey on the COVID-19 pandemic in the context of the WIFO Konjunkturtest (Hölzl - Klien -Kügler 2020b) for Austria show that enterprises in sectors that were not directly affected by lockdown measures are also threatened in their viability due to the COVID-19 pandemic. Table 1 shows the answers to the question of how long the liquidity reserves will last: for all companies and for the smaller companies in the services (SERV), construction (BUIL) and manufacturing sectors respectively. It confirms that cascades along the value chains play a role, especially in sectors where low liquidity reserves were already a problem before the pandemic.[1]

The survey results show that smaller companies have lower liquidity reserves. It must be noted that in this survey the smallest companies were not questioned at all. A particularly large number of "hand-to-mouth" companies are likely to be found among sole proprietorships and micro-enterprises (Pichler et al. 2020).

Many of the smaller companies are already on the brink of insolvency. Support measures appear necessary to prevent insolvency cascades and the destruction of production and employment potential.

[1] More detailed results show that sectors not directly affected by the lockdown also have a high proportion of companies reporting the lowest liquidity reserves. These include: Printing (Nace 18), Metalworking (Nace 25), Automotive (Nace 29), Furniture (Nace 31), Other manufacturing (Nace 32), Repair of machinery (Nace 33), Construction (Nace 41),Transport (Nace 49), Accommodation and gastronomy (Nace 55 and 56) Advertising (Nace 73) and Building maintenance; gardening and landscaping (Nace 81). The low liquidity reserves are partly structural and partly due to the COVID 19 shock (see Schneider -Waschiczek 2020)

Table 1 *How long do you estimate your liquidity reserves will be sufficient if your business situation remains at the level currently expected? Please also take into account possible state aid (short-time working, liquidity support, loan guarantees, etc.).*

	0-2 months	2-4 months	4-6 months	more than 6 months	no liquidity bottlenecks expected
Total Sample	7%	23%	19%	20%	32%
Services (up to 50 employees)	7%	30%	20%	16%	27%
Construction (up to 50 employees)	11%	29%	15%	18%	27%
Manufacturing (up to 50 employees)	12%	22%	24%	17%	24%

Q: WIFO Konjunkturtest, COVID special survey May 2020.

3. Challenges for the design of support measures

Some observers note that might be time to unpack the watering can to promote small businesses. However, not taking incentives and self-selection into account would lead to high deadweight effects and costs, which may put a strain on the fiscal performance of states. This would be particularly problematic if the COVID 19 supply shock turns into a deep demand-induced recession. In this case additional demand-stimulating policies will be be necessary.

A first challenge is to design support measures in such a way that they are **targeted**, implemented in a **fiscally appropriate** manner without major **deadweight effects**, and that they do not endanger the **financial stability of the SME sector** through overindebtedness (Boot et al. 2020).

In terms of impact, support measures should also help to reduce negative cascades over value chains and the uncertainty of companies. Hölzl - Kügler (2020) show using Austrian survey data that companies that are more strongly affected by the COVID crisis act very cautiously by cutting investments, operational business and employment. Bachmann et al. (2020) document that German companies facing high uncertainty as a result of COVID-19 are more likely to cut jobs.

This requires in addition that support should be implemented **quickly** and with **minimal administrative effort**. The design must ensure that as many resources as possible are channelled into rescuing enterprises in distress, rather than into the time-consuming and costly verification of eligibility, which in turn leads to dissatisfaction among those entitled to benefits because of the bureaucracy involved.

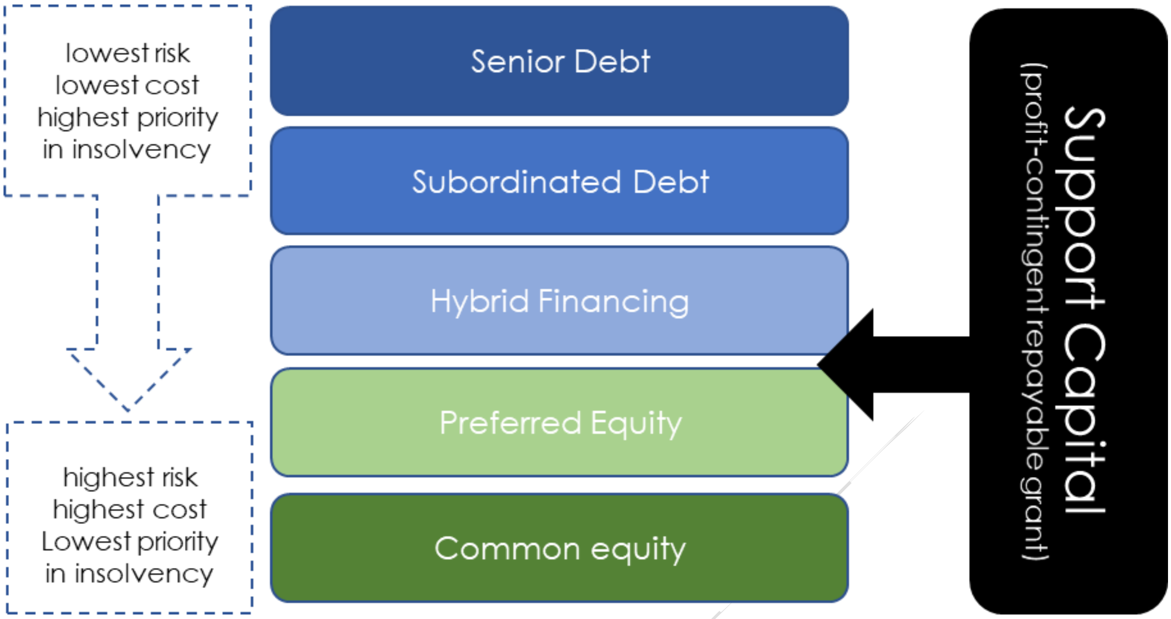
4. Profit-contingent repayable grants

Our proposal is to provide a grant that is repayable in principle, but which does not have to be repaid if the business is not successful in subsequent years. Any outstanding balance would be forfeited completely after a certain time (forgiveness). [2] The repayable grant is thus an equity-like instrument. It implicitly has the character of participation capital (see Figure 1). One

[2] The proposal was inspired by the income-contingent student loans in the UK, where students repay their tuition fees after graduation. As in the case of income-contingent student loans, the parameterization and design of the proposal are crucial for its effectiveness and cost. The parameters of the proposal must be specified for implementation and are not the subject of this paper. Experts from tax authorities, business development agencies and tax consultants should be able to provide important suggestions.

advantage is that this instrument makes equity-like capital available to many small and medium-sized enterprises that have no direct access to the capital markets. Three essential points characterise our proposal.

Figure 1 *Positioning the support capital in the hierarchy of corporate financing*



1. The support has an implicit insurance character

This is ensured by two features that are missing from loans or equity:

a) **Profit-contingent repayment**: Repayment is suspended if companies remain below an ex-ante specified profit threshold (absolute value or quota). For ease of calculation, these profit thresholds should be defined on the basis of information that is available in tax returns. Incentives for over-investment and other forms of profit reduction should be taken into account when developing the specific thresholds and profit definition.

b) **Limited repayment period:** The grant turns into a non-repayable subsidy after a certain period of time (up to 10 years depending on the volume). [3] This implies that it is not necessary to suspend interest on the subsidy in the (temporary) case of non-repayment (see point 2).

c) **Possibility of early repayment**

This ensures that the State does not acquire a say in the enterprise. The support alone leads to a form of profit sharing/repayment obligation. The design ensures that there is no need for full repayment if companies subsequently get into difficulties (or are unsuccessful). This means that - regardless of whether the subsidy is designated as a loan or participation - it should have little influence on the credit constraints of enterprises (depending on the specifically selected repayment conditions). The grant therefore **does not directly contribute to an over-indebtedness of the SME sector**, which may endanger financial stability. Moreover, the companies are hardly burdened in their economic capacities. The repayments should only have a minor impact on business activities during the upswing and after the crisis.

This construction is also intended to ensure that state support is subordinated. Banks and other debtors (commercial loans) know that they will receive repayments, while the state

[3] By taking into account European state aid rules.

must waive this for companies in distress (below profit thresholds) and the support has very low priority in the event of insolvency.

Only those companies that are successful again in the next few years make repayments and those that are not successful never face the risk of insolvency as a result of the support. It cannot be the aim of a support scheme to drive companies into insolvency later.

The limited repayment period and the possibility of early repayment also serve to establish a transparent and clear **exit mechanism** for the support (participation capital or loan) by the state. Especially for SMEs, an exit of minority participations is often associated with difficulties.[4]

The mechanism can also be interpreted as reverse insurance: Claims are paid at the beginning of the insurance contract, premium payments follow afterwards conditional on success.

2. The support bears an interest at the market rate + a premium.

This ensures that the support is **targeted**: liquidity is strengthened where necessary, while companies that do not need the support have little incentive to take up the support. Credit constraints are usually not due to the market price (interest) being too high, but due to the lack of collateral.

This implements a form of self-selection, which should limit windfall gains. This also helps to keep the volume within a fiscally appropriate range. This can leave funds for economic stimulus measures. The measure can be designed in such a way that it also helps those companies that are affected by the COVID 19 crisis with a time lag.

The use of market interest rates as well as a premium would ensure that the support leads to little distortions in the market for corporate debt and provides incentives for early repayment (see above).

3. The support should be administered by the tax authorities

The grant should be credited to the tax account of the company. This way the money ends up in the companies **quickly and without any detours**. The repayment should also be made through the tax accounts as part of the tax return. This also minimises the **administrative costs**.

The criteria for eligibility for the support should be clear and simple (checklist) and should be able to be checked quickly by the tax administration based on the information available. In exceptional situations with high volumes, an external audit with cost sharing by the company could be considered.

5. Possible problems: Zombie companies, incentives and dilution

Possible points of criticism could be:

1. The incentives to take the support are highest for overindebted and already insolvent companies This is to be cushioned by criteria, but must be accepted to some extent, because the quality of companies cannot be inferred from reading financial information alone. The proposal could therefore be accused of keeping zombie companies alive. That could be, but zombie companies are a problem or second order now. If a cascade of

[4] A sale of the company should not be hindered by the support. Regarding the merger of the company, appropriate mechanisms should be implemented to make this possible, but not at the taxpayer's expenses.

bankruptcies were to be set in motion, it would also bring down many in principle financially sound enterprises. Moreover, it is not a task of tax authorities to decide whether a company has potential or not.

2. The requirement of repayment could increase the incentive not to report taxable income. Evasion could be countered by tighter controls. However, this is a general problem, not one of the proposal as such.
3. In addition, companies could try to avoid repayments by using legal optimisation measures:
   - by making too many long-term investments (a well-known problem with capital regulation),
   - by moving their activities abroad where payments are not due (also a problem with the tuition fee model mentioned above),
   - by paying excessive salaries (e.g. to owner managers),
   - by outsourcing profits to companies established for that purpose, or
   - by taking out loans, the servicing of which has priority over the repayment of the grant (tax deductibility of interest on loans).

   These incentive problems should be considered in a possible concrete design. They can be reduced by appropriate provisions and should be less frequent in SMEs.
4. On the other hand, it could be argued that the proposed support measure is too complicated, offers many possibilities for avoidance of repayments and thus encourages undesirable behaviour. The many parameters could lead to a dilution of the mechanism through too much detail and concessions to heterogeneous interests. This would also result in implementation taking longer. This could have the consequence that a significant proportion of firms could have used up their liquidity reserves before the measure takes effect. If speed is the primary concern, a simpler mechanism that is more in the direction of a watering can and provides liquidity to all companies could be better. However, we believe that the mechanism has many advantages that qualify it for consideration.

6. … and the European dimension?

The support measure should be designed in compliance to the European aid guidelines. Support measures in favour of smaller companies should not lead to distortions of competition in the domestic market or at the European level. A "beggar-thy neighbour policy" would be inappropriate and counterproductive in the COVID 19 crisis (Motta - Peitz 2020). Therefore, this proposal should not be seen as a competitor to other proposals, such as those of Boot et al. (2020a and 2020b), but as a complement. Boot et al. (2020b) propose the creation of a European fund to support SMEs. We believe that this proposal is complementary to the one proposed here. Our proposal should be primarily seen as a short-term support to save smaller enterprises during an economic crisis that leads to the danger of mass insolvencies.

7. Summary

We propose a mechanism "profit-contingent repayable grant" to support SMEs in the COVID 19 crisis. We are convinced that this mechanism can be implemented quickly, in a targeted manner and with low administrative effort and costs. The potential problems of the proposed mechanism that we have mentioned show that the concrete design of the mechanism is crucial for the effectiveness of the support measure.

Our proposal can be seen as a reverse insurance: The payment due to the claim is at the beginning of the insurance, the premium payment is conditional on success afterwards. This is ensured by the first three of the four central aspects of our proposal:

a) profit-contingent repayments ,
b) limited repayment period,
c) maket interest plus premium, and

d) administration by tax authorities.

These features make it possible to provide public "support capital" for many SMEs in an incentive-compatible, efficient and responsible manner to counteract insolvency cascades and the destruction of production and employment capacities.

8. References:

Bachmann, R., Carstensen, K., Lautenbacher, S., Schneider, M. „Unsicherheit und Beschäftigungsabbau in der Coronakrise", ifo Schnelldienst Digital, 9/2020.

Baqaee, R. Cascading Failures in Production Networks, Econometrica, 2018, 86(5), S. 1819-1838.

Boot, A, E Carletti, H-H Kotz, J-P Krahnen, L Pelizzon and M Subrahmanyam (2020), "Coronavirus and financial stability 3.0: Try equity – risk sharing for companies, large and small", VoxEU, 3 April.

Boot, A, E Carletti, H-H Kotz, J-P Krahnen, L Pelizzon and M Subrahmanyam (2020), "Corona and Financial Stability 4.0: Implementing a European Pandemic Equity Fund", VoxEU, 25 April.

García, R., Gayer, C., Hölzl, W.,, Payo, S., Reuter, A. Wohlrabe, K., „The Impact of the COVID-19 Crisis on European Businesses: Evidence from Surveys in Austria, Germany and Spain" EconPol Policy Brief No. 31, May 2020 https://www.econpol.eu/publications/policy_brief_31

Guerrieri, V, Lorenzoni, G., Straub, L., Werning, I., Macroeconomic Implications of COVID-19: Can negative Supply Shocks Cause Demand Shortages? NBER Working Paper Nr. 26918, Cambridge, 2020

Hölzl, W., Klien, M., Kügler, A., „Liquiditätsengpässe und Erwartungen bezüglich der Normalisierung: Ergebnisse der zweiten Sonderbefragung im Rahmen des WIFO-Konjunkturtests", WIFO-Konjunkturtest Sondernummer 02/2020, WIFO.

Hölzl, W., Kügler, A., " Reaktionen der Unternehmen auf die COVID-19-Krise", WIFO-Monatsberichte, 2020, 93(5), S.347-353.

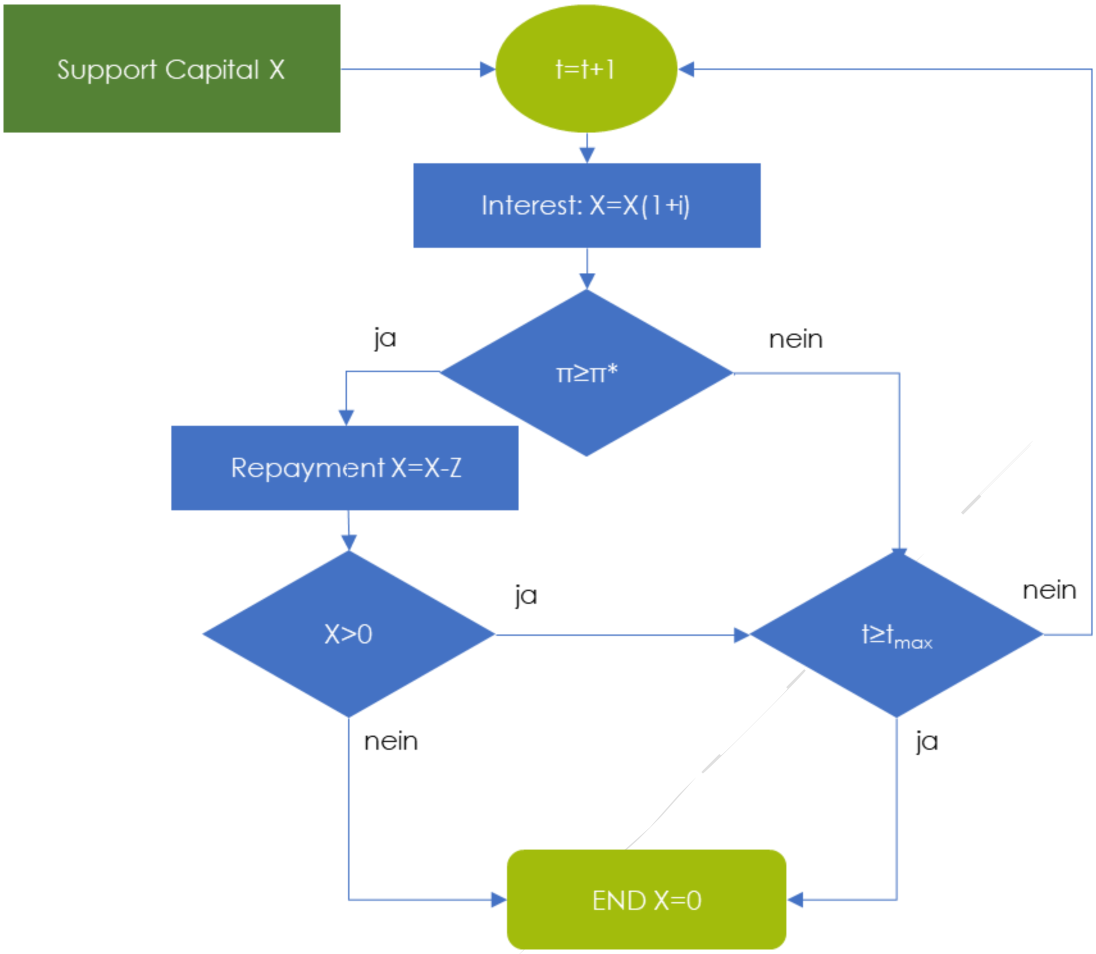
Motta, M and M Peitz (2020), "EU state aid policies in the times of COVID-19 ", VoxEU.org, 18 April.

Pekanov A., Antworten der internationalen Wirtschaftspolitik auf die COVID-19-Krise, WIFO-Monatsberichte, 2020, 93(4), S. 275-284.

Pichler, P, Schmidt-Dengler, P., Zulehner, C. (2020) Blogreihe: EPU und Kleinstunternehmen in der Corona-Krise. https://econ.univie.ac.at/in-the-media/econ-blog-corona/.

Schneider, M., Waschiczek, W. Betroffenheit der österreichischen Unternehmen durch die COVID-19 Pandemie nach Branchen, Konjunktur Aktuell, Sonderheft April 2020, OeNB, https://www.oenb.at/Publikationen/Volkswirtschaft/konjunktur-aktuell.html.

Figure 2: The working of the scheme



Notes: *X* denotes the support capital, *i* is the interest rate, *Z* the repayment, π profit, π* the profit threshold, *t* time and t_{max} the maximum repayment period. Interest is paid on the support capital every year, and there is also a potential repayment every year; this is obligatory if the company's profit is above the profit threshold. The support capital ceases to exist after the repayment has been made or after the end of the planned duration.