

Arnoud Boot
Elena Carletti
Hans-Helmut Kotz
Jan Pieter Krahnen
Loriana Pelizzon
Marti Subrahmanyam

Corona and Financial Stability 4.0: Implementing a European Pandemic Equity Fund

SAFE Policy Letter No. 84 | April 2020

Leibniz Institute for Financial Research SAFE
Sustainable Architecture for Finance in Europe

policy_center@safe-frankfurt.de | www.safe-frankfurt.de

Corona and Financial Stability 4.0: Implementing a European Pandemic Equity Fund*

Arnoud Boot, University of Amsterdam

Elena Carletti, Bocconi University

Hans-Helmut Kotz, Harvard Center for European Studies and SAFE

Jan Pieter Krahnert, Goethe University Frankfurt and SAFE

Loriana Pelizzon, Goethe University Frankfurt and SAFE

Marti Subrahmanyam, NYU Stern Business School

April 2020

Abstract

This Policy Letter presents a proposal for designing a program of government assistance for firms hurt by the Coronavirus crisis in the European Union (EU). In our recent Policy Letter 81, we introduced a new, equity-type instrument, a cash-against-tax surcharge scheme, bundled across firms and countries in a European Pandemic Equity Fund (EPEF). The present Policy Letter 84 focuses on the principles and conditions relevant for the operationalization of a EPEF. Our proposal has several desirable features. It: a) offers better risk sharing opportunities, augmenting the resilience of businesses and EU economies; b) is need-based, thereby contributing to an effective use of resources; c) builds on conditions and credible controls, addressing adverse selection and moral hazard; d) is accessible to smaller and medium-sized firms, the backbone of Europe's economy; e) applies Europe-wide uniform eligibility criteria, strengthening support among member states; f) is a scheme of limited duration, reducing (perceived) government interference in businesses; g) creates a template for a growth-oriented public policy, aligning public and private sector interests; and h) builds on the existing institutional infrastructure and requires minimal legislative adjustments.

I. Introduction

This Policy Letter builds on earlier letters by the same authors on the Coronavirus crisis and its implications for financial stability.¹ In our earlier work, we have argued that massive financial support during the Corona crisis is warranted in order to bridge the almost universal cash flow shortfalls at

* SAFE Policy Letters represent the authors' personal opinion and do not necessarily reflect the views of the Leibniz Institute for Financial Research SAFE or its staff. We want to thank Johannes Kasinger and the SAFE Policy Center Team for their excellent guidance through the discussion and writing process.

¹ Boot/Carletti/Kotz/Krahnert/Pelizzon/Subrahmanyam (2020c): [Corona and Financial Stability 3.0: Try Equity – Risk sharing for companies, large and small, Safe Policy Letter 81](#). Boot/Carletti/Kotz/Krahnert/Pelizzon/Subrahmanyam (2020b): [Corona and Financial Stability 2.0: Act now but also think about tomorrow, SAFE Policy Letter 79](#), Boot/Carletti/Haselmann/Kotz/Krahnert/Pelizzon/Schaefer/Subrahmanyam (2020a): [The Coronavirus and Financial Stability, SAFE Policy Letter 78](#).

the firm level, and across the European Monetary Union (EMU) member states, caused by the series of shutdowns.

The provision of bridge financing is also necessary from a systemic risk perspective. Significant cash flow shortfalls, highly correlated across firms and countries in a deeply integrated economic zone, could quickly translate into solvency problems for firms and subsequently for banks, ultimately undermining the financial positions of the EMU member states. Current rescue programs have important side effects, as they are largely debt based, suggesting a rapid rise in debt levels at the firm level, not coordinated at a European level, and differ greatly in volume across EU member states.

Based on the above analysis, we propose a *European Pandemic Equity Fund (EPEF)*. The EPEF will undertake equity-like investments, particularly in small and medium sized enterprises (SMEs), which generally tend to oppose the outright dilution of existing control rights, which occurs if common equity is issued. Since such firms are the backbone of Europe's economy, their concerns are of paramount importance.

Our proposed scheme is simple: it basically trades an initial cash flow injection by the EPEF into the firm against a proportionate participation in future gross earnings ("value added") or net earnings ("profits"). The former can be implemented by conditioning on the firm's value added tax (VAT) remittances, while the latter relies on a tax surcharge, conditional on corporate tax payments. Moreover, the firm can terminate its annual payment of surcharges to the fund by paying, after a number of years, a fixed amount to the EPEF, as the exercise price of an option to terminate the assistance program.

The open questions posed by this proposed scheme and tackled in this Policy Letter, are the following:

- What are the **general conditions ("criteria")** that the EPEF needs to fulfill in order to be financially viable, effective and, at the same time, politically acceptable?
- What are **specific requirements relating to the implementation** and structuring of the cash (equity-like) investments in the firms, e.g., general eligibility criteria, and contract features?
- What are **suitable funding/sourcing options** for the EPEF?

II. General conditions ("criteria") for the operation of the EPEF

What are the general conditions ("criteria") that the EPEF needs to fulfill in order to be financially viable, effective and politically acceptable? We define eight criteria that need to be met:

1. *Commonality*: The EPEF's capital is jointly raised by member countries, allowing for some form of risk sharing across firms and countries;

2. *Need-based investments*: The disbursement key of the EPEF is defined by firm eligibility criteria, which may lead to a divergence between the sourcing and funding keys;
3. *Financial stability*: The risk absorbing capacity of the EPEF should be substantial, thus requiring the fund to have low leverage;
4. *Independence*: The EPEF organization would be kept at arms-length from the political process, run by professionals and bound by a mandate that is democratically legitimated, using existing institutional infrastructure where possible;
5. *Conditions and credible controls*: Eligibility criteria for investment by the EPEF should be carefully set, such that adverse selection concerns (e.g. firms that were most probably not viable even before the crisis hit) and moral hazard fears (e.g., avoidance of surcharges) are addressed;
6. *Informed decision making*: In deciding about its investments into firms, the EPEF should use local knowledge as available at “housebanks,” development banks, or other local expertise to assess expected firm performance;
7. *Temporary nature of the scheme*: The scheme needs to provide incentives for firms to buy-out the EPEF when the funds are no longer needed;
8. *Transparency*: Regular reporting and clarity on how/when/where EPEF’s money is at stake.

These eight criteria are reflected in the details of how the EPEF resources are allocated to firms, and also shape the financing structure of the EPEF, as explained in the subsequent section.

III. Investment structure and contract features

The general characteristics of the cash-against-surcharge scheme are as follows. Initial payments (from the EPEF to firms) are transfers, i.e., they carry no unconditional repayment obligation as a traditional debt claim would. Conditional on the firm being successful again in future years, the recipient firm would pay a surcharge to the fund, in addition to its present corporate tax payment and/or the firm’s actual VAT remittances. These payments flow directly into the EPEF, representing a conditional quasi-return to the EPEF and repayment of the initial cash transfer. The link to VAT remittances (rather than declared profits) may be needed, for example, if it better captures future success of the firms.²

To ensure that the instrument we propose remains attractive to the candidate firms, and reinforce the temporary nature of the scheme, firms would have the right to buy out the EPEF in the future (“termination option”). The investor, i.e. the EPEF, assumes both the risk of a loss of the initial

²Note that our proposal does not require any harmonization of tax systems across countries, but rather a uniform mechanism of implementing the surcharge.

transfer amount, and the potential for earning future gains, through receiving surcharges. The cash-against-surcharge contract makes its performance dependent and renders the scheme *equity-like*, without being equity in a strictly legal sense of the term. As a consequence of the initial transfer, firm leverage (and thus firm default risk) would decrease, in contrast to a loan of the same amount. Furthermore, the scheme allows the firm, at some later point, to end the tax surcharge obligation of its own volition, by buying out the EPEF at a pre-set price that appropriately compensates the EPEF. In that manner, the firm is not indefinitely tied to the EPEF, while the EPEF can expect to be appropriately compensated.

With respect to the contract terms, four variables have to be agreed upon initially: the size of the initial transfer payment to the firm (in Euro), the rate and base of the surcharge (in percentage points), the minimum number of years that the firm is obliged to pay the surcharge, if performance allows (before the termination option kicks in), and the exercise price to be paid when triggering the termination option. The surcharge will stay in place as long as the firm does not call the termination option written by the fund.

The calibration of the tradeoff between the annual surcharge and the exit cost would create incentives for highly successful firms to choose an early exit. The overall return of the EPEF will be the weighted average of the returns on all investments, those that turn out well and those that are less fortunate. Several implementation issues and conditions are necessary to make the scheme workable. We discuss some of the main issues below:

Defining eligibility: The EPEF should identify those SME firms that have good prospects to return to profitability once the pandemic will have eased. We suggest, as a starting point, to base that assessment on firm's performance *right before* the outbreak of the pandemic, say at year-end 2019. For that purpose, one may use accounting numbers, tax filings, and concurrent assessments by firm creditors (the internal ratings of banks), credit bureaus, trade creditors (e.g., using Hermes, and Dun & Bradstreet), or central bank ratings, to further refine and update these assessments. One may also consider information available with the tax authorities on reported profits and VAT remittances. The preferred assessment method may depend on established financial practice and, thus, may vary from country to country.

Choosing the size of the investment: For defining the size of the cash injection, one could look at 2019 earnings, or value added assessments. Balance sheet measures could also be considered for this assessment. A pragmatic way to calculate the net value added at the firm level are VAT remittances, i.e., the difference between VAT charged and VAT paid.

Size of the surcharge: This specification would need a calibration involving the annual surcharge, the minimum duration of the investment, and the buy-out clause conditions. The calculations would be based on the characteristics of a cross section of SME firms throughout Europe. As an illustrative example, one could envision a surcharge of, say, five percentage points, and a minimum duration of five years, before the buy-out clause kicks in. To terminate the relationship, a suitable buy-out price should be specified at the outset. To stimulate early exit, such a buyout price should not drop over time.

Calibration: A detailed exercise can be used to understand better, how the cash payment, the surcharge and the terminal conditions interact; and how these conditions and probabilistic assumptions on firm survival and profitability, based on firm- and industry-level data in Europe, would translate into an expected return for the EPEF that is deemed acceptable.

Operational issues: To make the scheme effective, a precise channel for the cash flows between the EPEF and the local businesses is required. Efficiency might call for delegated management at the national level. Existing channels include the banking system, with its close ties to and deep knowledge of SMEs, as well as public agencies with similar levels of information about firms, such as national or regional development banks, tax authorities and their administrative networks. These institutions and/or networks could be involved in the disbursement and collection of funds, as well as in the design of individual contracts.

There are also serious moral hazard issues that need to be addressed. One important concern is that companies could seek to avoid the annual surcharges by behaving strategically with respect to their obligations, for example by siphoning out income to owners. To address this concern, the contract has to be designed in a manner that properly incentivizes the firm to act in the right spirit of the scheme, e.g. through covenants that limit management compensation during the life of the scheme.

IV. Funding/sourcing structure

A proper funding/sourcing structure should address five main characteristics: its legal status, the agency concept, its equity structure, its debt structure, and its relationship to capital markets. We discuss potential options below.

Legal status: The EPEF should be a legal entity with its own standing. Any risk that the fund may invest in is eventually borne by the investors holding the claims on the fund, i.e. the fund equity holders, as well as its debt holders, in the case of a leveraged fund.

Agency concept: From the perspective of speed and accountability it may be helpful to entrust a well-established European agency with setting up, and eventually managing the EPEF. The agency

may then act as a trustee, and the EPEF may not be part of the agency's balance sheet. The most likely candidate for filling this role is the European Investment Bank (EIB). The EIB has a long history of carrying out public and industry related programs. It has access to a European network of commercial and public sector banks. It has financed firms, particularly SMEs, over many years. It is owned by the EU member states, according to a particular key, and it is ultimately backed by the EU budget. . Irrespective of how the funding concept is designed, it eventually has to find approval by the European Council.

Equity structure: The backing by the EU budget might also be applied to the EPEF itself. The possibility of the European Commission (EC) to pledge current and future allocations from the EU budget towards its capital is one way the EPEF might obtain direct funding. Another way would be contributions via (or by) the EIB itself. We see both sources as potential providers of the equity to the EPEF. These sources of equity funds for the EPEF could be augmented by voluntary (additional) contributions from some member states. This may open up the possibility that relatively richer countries could take over a larger share of the EPEF's equity than the minimum required by the agreed EIB key. Importantly, these would not be transfers between countries, because to the extent that the parameters of the scheme would allow for positive value generation by the EPEF, over the years, those returns would also be shared in proportion to the EPEF shareholdings.

Debt structure: In addition to its paid-in equity capital, the EPEF could also issue its own bonds. Again, it is important to emphasize that running the EPEF in a professional manner with appropriate returns would avoid creating a transfer mechanism between member states. Since there is no co-liability assumed by EIB or other institutions, it would depend on the parameters of the scheme, whether or not the issuance of the EPEF bonds on the capital market would be feasible.

Capital markets: The EPEF could, at a later stage, be opened for risk-bearing equity contributions by private investors, e.g. institutional investors in Europe, such as pension funds and others. Today, these institutional investors have no direct, equity-based access to Europe's SME market and its returns – and the EPEF could deliver just that.

V. Conclusion

As we highlighted in Policy Letter 81 (Corona and financial stability 3.0), the wide participation in an equity-like scheme via the European Pandemic Equity Fund (EPEF) would allow all EU citizens to participate not only in the common risks, but also in the potential post-crisis rewards of a broad-based participation in Europe's industry, particularly its SME sector.

The overall payoff profile of the proposed scheme is largely similar to an equity contract: a claim, contingent on the success of the project. The "cash-against-surcharge contract" makes it

performance dependent and renders the scheme equity-like, without being equity in a strictly legal sense of the term. Furthermore, the scheme allows the firm to end the tax surcharge obligation of its own volition, by buying out the EPEF at a pre-set price that appropriately compensates the EPEF. In that manner, the firm is not indefinitely tied to the EPEF, while the EPEF can be appropriately compensated.

In the present Policy Letter, we have focused on the principles and conditions relevant for the operationalization of the EPEF. We also specified the investment structure, the contract features for the support for businesses, and the sourcing of the EPEF. As we also alluded to in the earlier Policy letter, by designing a broad-based European equity-like participation scheme, funded by public investors from all over the European Union, potentially augmented by private investors, we would create a strong perception of shared success.

Equity participations in the backbone of the European economies – Europe’s smaller and medium sized businesses – would enhance entrepreneurial spirits and may contribute to a reemergence of prosperity in Europe.