Searching for the Holy Grail: market failures, impact and Finnvera

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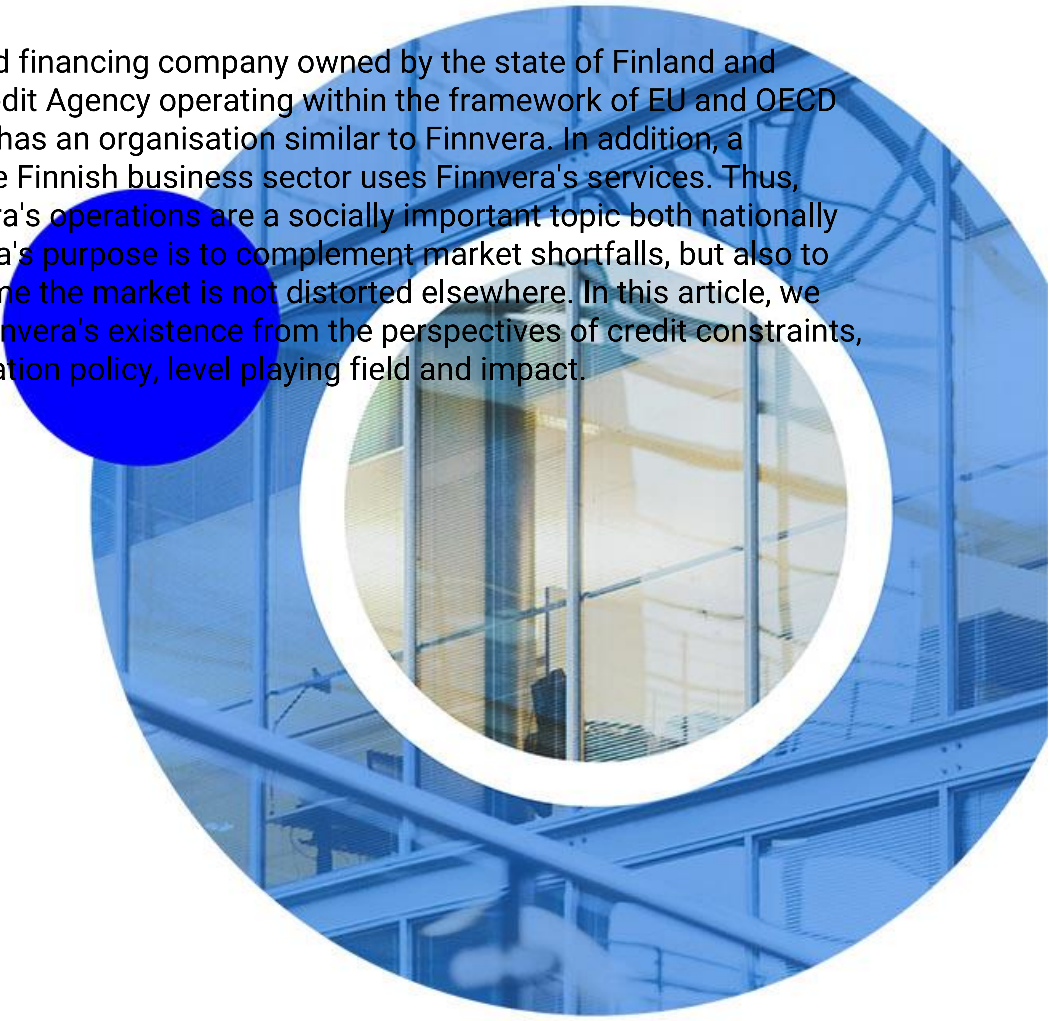
Abstract

Finnvera plc is a specialised financing company owned by the state of Finland and Finland’s official Export Credit Agency operating within the framework of EU and OECD rules. Nearly every country has an organisation similar to Finnvera. In addition, a significant proportion of the Finnish business sector uses Finnvera's services. Thus, problems related to Finnvera's operations are a socially important topic both nationally and internationally. Finnvera's purpose is to complement market shortfalls, but also to ensure that at that same time the market is not distorted elsewhere. In this article, we discuss the grounds for Finnvera's existence from the perspectives of credit constraints, market distortions, stabilisation policy, level playing field and impact.



Content

Finnvera is a specialised financing company, the National Promotional Bank and Finland's Export Credit Agency (ECA). A significant proportion of Finnish SMEs are Finnvera's clients. All Western countries have an organisation equivalent to Finnvera or more than one, as special operations carried out abroad within the scope of the EU's competition regulations are usually separated from export credit agencies operating under the OECD's export credit agreement. Data is available on the scale covered by the OECD agreement, according to which the new funding for the longer term (MLT, i.e., more than two years) in 2021 was approximately $40 billion (OECD 2022). For example, China and India have not committed to the OECD's agreement, and for this reason, only around one third of global export financing was covered by the OECD's agreement (US ExIm 2022).

The justification for Finnvera's operations in the market economy is found in the market's imperfections, and its primary task is to supplement market failures and secure level playing field for companies in the export market. It is particularly important to draw attention to the fact that a public agent will not crowd-out private, market-based activities. For this reason, financing is granted in cooperation with financial institutions. It makes sense that in financing projects a private operator also has a financial contribution ("skin in the game") and thus an incentive to act in a responsible way. Only the direct export credit to the buyer set in force at the beginning of this year constitutes an exception to the financial instruments in use.

This article describes Finnvera's activities in the context of the aforementioned factors. Particular attention will be paid to the grounds for Finnvera's operations. We will discuss microfinance, a level playing field for companies in the export markets, bank regulation and Finnvera's competition with banks, export credit to the buyer, cyclical fluctuations, external impacts of exports, and Finnvera's impact. In addition, public corporate financing will be problematised in Finnvera's context.

1. Finnvera in a nutshell

There are many dimensions to Finnvera's activities. Our largest client group by numbers is SMEs; there are nearly 25,000. Approximately one in five Finnish loan-financed companies is Finnvera's client. At the end of 2022, the total exposure of SMEs mainly related to domestic financing amounted to EUR 2.7 billion. Finnvera has fewer large corporate clients, but their exposure amounted to EUR 23.9 billion, most of which are related to export credits. At the end of 2022, Finnvera's balance sheet total was EUR 12.6 billion.

Finnvera's key objective is to supplement the financial market to the extent that it is justifiably necessary. Finnvera does not grant direct business subsidies, although two financial instruments, Start Guarantees and SME Guarantees, may include a de minimis type state aid element. Public business subsidies account for a small sum in euros. Around EUR 20 million in de minimis aid was granted in 2022.

In domestic financing, the primary financing instrument is a guarantee, the share of which was approximately 80 per cent of funding in 2022. Loans can also be granted as part of overall funding.

In addition to domestic financing, Finnvera is Finland's official Export Credit Agency, whose operating principles are regulated by the OECD. The guiding principle of export credits is to mitigate financial frictions and thus help Finnish export activities by levelling the international playing field by means of competitive financing. The most significant instrument financially is the buyer credit guarantee, which is a guarantee to cover possible credit risks to the creditor against credit risks arising from a foreign buyer, the buyer's bank, or the buyer's country. The credit risk guarantee, bond guarantee, finance guarantees and letter of credit for short-term risks amount to hundreds of millions of euros each year.

Finnvera's key guideline is to complement the market, not distort the market. For this reason, Finnvera mainly operates through its private sector partners. In domestic financing, a financial institution will typically apply for Finnvera financing on behalf of its client. A significant exception to this rule is the export credit to the buyer (HE 119/2022), which entered into force in February 2023, and will be discussed later in this article. Under normal circumstances, Finnvera guarantees a maximum of 50–80 per cent of credit in domestic financing while the residual risk remains with the bank. In most cases, export credit guarantees cover 95% and up to 100% with political risk.

Pricing is based on many factors, but above all on the risk of the borrower, the regulation of Finnvera and competition in relation to other countries. In the long term, Finnvera operates in accordance with the principle of self-sustainability, i.e., the company's income covers the costs arising from the activities.

Finnvera receives support from central government in three different ways. The State provides compensation for 50% of Finnvera's domestic credit losses, which affects Finnvera's pricing. In 2020–2022, compensation for credit and guarantee losses was exceptionally 80% due to the coronavirus pandemic. In 2022, the credit loss compensation from the State was EUR 29 million. Second, Finnvera issues Euro medium term notes guaranteed by the central government free of charge. Third, Finnvera does not pay a dividend to its owner, so the return on capital requirement is the short-term market interest rate. Retained earnings remain in the company for the purpose of buffering possible future losses.

There is a lot of talk about Finnvera's risks, but the total exposure of approximately EUR 26 billion is an incomplete indicator for measuring it. The exposure drawn in 2022 totalled EUR 14.1 billion, which is already better, although still an incomplete indicator of risk. The tail risk borne by financial institutions is usually measured using the Expected Shortfall (ES) indicator. As regards Finnvera, the expected shortfall is 99.5%, meaning the tail risk, is about EUR 3.5 billion for export credits and about EUR 300 million for domestic financing. This is a computational estimate of the loss that is likely to arise once every 200 years.

Finnvera has actively developed the hedging of the long-term risks. In 2022, Finnvera's maximum reinsurance compensation amount was EUR 1.4 billion, or approximately 10% of the drawn liabilities.

2. Reality is imperfect

The red thread in Finnvera's operations is supplementing the market. The following section discusses the most essential market failures from Finnvera's perspective, which demonstrate why there are Finnvera-like organisations around the world.

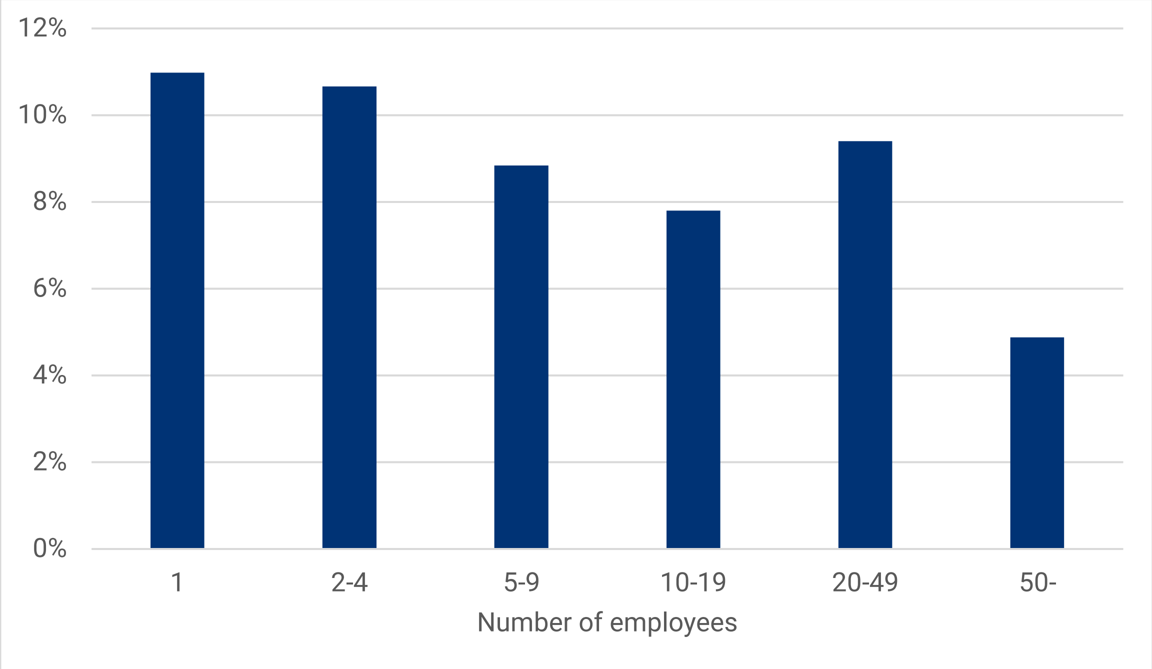
Microfinance

Economic research literature on credit constraints for small companies is extensive. There is a broad consensus on that there is a permanent market failure in microfinance (which typically involves financing needs of less than EUR 100,000 in small companies), and, in particular, younger companies are subject to credit constraints. The phenomenon is also evident in e.g., the European Central Bank's SAFE survey or the Finnish SME Barometer.

Somewhat commonly observed research finding in literature indicates that alleviating credit constraints leads to an improvement in the financial outcomes of SMEs (Martin-Garcia and Santor 2021; Clementi and Hopenheyn 2006; Musso and Schiavo 2008; Bottazzi et al. 2014 and Carbo-Valverde et al. 2016). This is due to such things as banks examining the financing of small or start-up companies as personal financing, because analysing the company is not cost-effective or because the analysis involves too much uncertainty. This is a case of imperfect information, which is why even good projects may not become funded. On the other hand, as banks require guarantees, only persons with previous assets could become entrepreneurs. Finnvera is correcting this market failure by granting loans and guarantees thereby reducing the risk involved in projects.

In practice, every country, both industrialised and developing, has organisations that promote microfinance and fill in a lack of guarantees: A few examples of these are BPIFrance in France, Almi in Sweden, EIFO in Denmark and SBA in the United States. There are differences, some even major, in the activities of organisations in different countries, regarding such things as venture capital investments or direct subsidies. As time has gone by Finnvera, in Finland, has mainly focused on granting loans, guarantees and export credits. The granting of direct business subsidies has been allocated to ELY Centres and Business Finland, and capital investments have been allocated to the Climate Fund and Finnish Industry Investment.

Figure 1 Credit constraints faced by small and medium-sized enterprises (1/2023).*



* Share of SMEs that applied for funding but did not receive funding and companies that would have needed funding but did not apply for it.

A level playing field

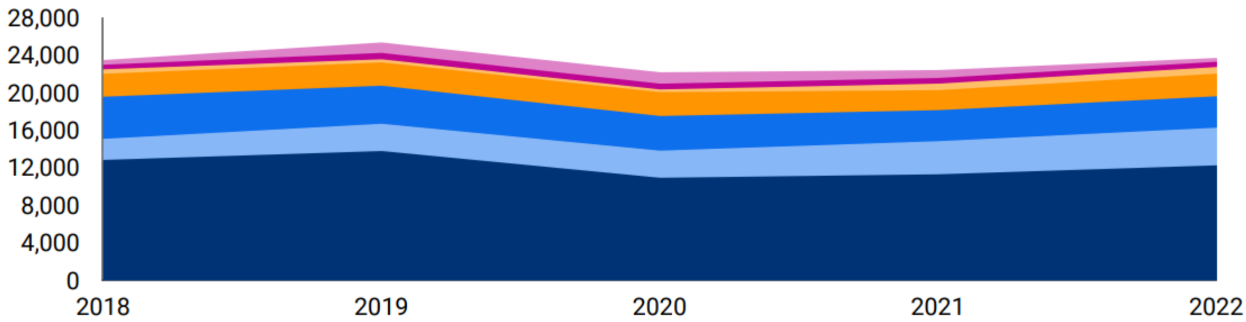
The idea of a level playing field is based on a potential lack in the national market of funding that is available in competing countries. While a level playing field may apply to many different forms of public service provision, but in Finnvera's case it is highlighted most clearly in export financing. In an ideal world, the characteristics of a sold product should determine who will be chosen to supply it, but the availability and price of funding may sometimes play a significant role in this.

There is a risk of unhealthy competition between countries, the race to the bottom. International regulation is implemented to intervene in this. Small countries in particular benefit from the regulation of available public funding. The rules on export financing are agreed on by the OECD countries. From Finland's perspective and that of others, a decline in the share of exports covered by the OECD's export credit agreement has been an unfortunate trend. In 2011, 50% of the relevant exports were covered by the OECD agreement, whereas in 2021 the corresponding figure was only 33% (US ExIm 2022). The single most important defining factor is subsidised Chinese exports which does not comply with the OECD Consensus. The regulation of Finnvera's domestic financing comes from the EU.

One counterargument to the notion of level playing field is to stop granting export credits and to enjoy goods financed by other countries. This would free up resources for other activities. In terms of direct business subsidies, the argument is a strong one, but in the case of export credits and, in particular, in buyer credits, the argument is not valid. Finnvera does not support Finnish export companies. Instead, it can be seen as providing market-based financing to the buyer of the product supplied by the exporting company. The scope of the OECD's export credit agreement does not allow for companies to receive public business subsidies.

Finnvera has been criticised for how concentrated its portfolio is, and this criticism contains a seed of truth. Approximately 80% of Finnvera's exposures have been concentrated in three sectors: cruise shipping, pulp and paper and telecommunications. The relatively narrow structure of Finnish industry is one explanation for the centralisation of the exposure - a more diverse sectoral structure would mean a more broad-scoped distribution of financing risks. A more versatile economic structure would be a worthwhile objective, but achieving it efficiently, i.e., on market terms, is difficult and slow, and naturally not within the scope of Finnvera's competence. The variety of sectors represented by Finnvera's clients reflects the distribution of the Finnish industry, which produces, in particular, valuable capital goods, and this will also the case in the future without new political decisions.

*Figure 2 Export credit guarantees and special guarantees, 5-year-trend of exposure by sector, MEUR**



Exposure on 31 Dec	2018	2019	2020	2021	2022
Cruise shipping	12,835	13,786	10,938	11,308	12,262
Pulp and paper	2,243	2,901	2,886	3,526	4,008
Telecommunications	4,487	4,055	3,688	3,303	3,345
Other*	2,440	2,478	2,539	2,129	2,409
Mining and metals	478	332	290	693	707
Energy	492	684	616	606	559
Other industries	497	1,108	1,215	840	407
Total	**23,473**	**25,344**	**22,172**	**22,405**	**23,697**

* Including other risks such as state and bank risks and reinsurance risk transfer.

Bank regulation and competition with banks

During this millennium, tightened bank regulation has led banks to withdraw from both export financing and SME financing, which has meant that ensuring the availability of financing has increased the role of Finnvera and its foreign counterpart organisations or required the EU to undertake measures.

Do public authorities have to "compensate" the market failures they cause through bank regulation? It is tragicomical that public authorities cause a market failure that is per se justified by means of regulation, which is then corrected by public or semi-public organisations. The current situation reflects a diabolical political challenge, in which the decision-maker wants to simultaneously limit the possibility of a systemic crisis and minimise the efficiency disadvantages caused by regulation.

An excellent example is the financing of export credits, which was discontinued in Finland in 1997. It was necessary to return to the matter in 2009 as, due to the financial crisis, liquidity from banks was not available and because the export companies of the countries that had retained their "national bank" (e.g., SEK in Sweden and KfW in Germany) gained an advantage. At that time, the situation was thought to be temporary.

However, after the financial crisis, bank regulation was increased without taking into account the effects on export financing. Banks communicated that even if the risk were chiefly covered by an export credit guarantee, the financing of large and long-term transactions was not profitable enough for them in many cases. In particular, the regulation indicators Gross Leverage Ratio and Net Stable Funding Ratio are often mentioned. Many countries had to build or expand existing public systems for financing export credits due to bank regulation.

Some of Finnvera's counterpart organisations around the world compete with banks. According to the consultancy firm Roland Berger, 42% of the world's specialized financing companies compete with commercial banks at least in some client segment. Finnvera is not in this group. Competition between a state-owned financing company and commercial banks is not healthy. Even so, actors in some countries hope that their “local Finnvera” will generate revenue for the state in this way. In Denmark, for example, EIFO pays half of its annual profit to the State in dividends, but no more than DKK 175 million. Some special financiers may have ended up in competition with banks for example, because the board and management hired from the private sector have not received a clear communication from the owner about what they should and should not do.

In Finland, current legislation clearly states that Finnvera's task is to supplement the market (Act on the State-Owned Specialised Financing Company 1998/443). The fact that Finnvera mainly acts in cooperation with banks is likely to reduce the market distortion caused by Finnvera.

Export credit to the buyer

Export credit to the buyer is a financing instrument introduced by a legislative amendment in February 2023, the purpose of which is to facilitate the financing of export transactions worth EUR 1–20 million (HE 119/2022). It differs from Finnvera's normal practices in that Finnvera can finance a client directly without the presence of a partnering bank. What is this product needed for, does it not distort the market and crowd out private lending? In short, the answer is no.

The legislative amendment was prepared with an in-depth study on the need for and availability of buyer credit (Andersson and Pakkanen 2020). According to the study, this is a market failure: financial institutions have not been interested in financing small export projects. The reasons for this is thought to be the increase in regulation resulting in increased costs and profitability pressures as well as changes in banks' strategies. Most Nordic banks have completely stopped granting buyer credits to foreign actors. At the same time, many of Finnvera's foreign counterparts, including Denmark's EIFO, grant similar direct export credits, placing Finnish companies in a weaker competitive position than others.

Cyclical fluctuations

In practice, all of Finnvera's foreign counterpart organisations are given additional tasks during recession periods. This was also the case in Finland, most recently at the beginning of the pandemic. This is naturally justified in Keynesian terms: the central government's task is to balance out the impact of fluctuations and prevent a landslide of unnecessary bankruptcies. The activities of the rest of the financial sector, especially banks, have been seen to be pro-cyclical: the availability of funding is tightened as the economy stalls (Huizinga and Laven 2019).

This issue will not go without criticism either. Cyclical fluctuations are necessary at times. In an overheating economy, prices rise too fast, and a recession corrects them downwards. This applies, in particular, to the construction sector and housing market. In addition, the silver lining of recessions is that they clear unprofitable companies from the market freeing up resources for more efficient use elsewhere.

Finnvera's role during recessions should not be "expansionary", instead it should see to the working capital needs created by the situation. In other words, Finnvera does its part to ensure that liquidity is maintained. On the other hand, Finnvera's existence evens out cyclical fluctuations in itself: in a downturn, as risk levels increase, demand for Finnvera's guarantees increases, which evens out cyclical fluctuations.

During the last few recessions, Finnvera introduced loans, which were used to finance companies in a situation where banks were paralysed. The pandemic was due to external economic reasons, not to normal economic fluctuations, and two assumptions were made:

- Demand for financing will be so extensive in numbers that Finnvera will not be able to meet it with its own financing.
- There was no reason to assume that the banking system would cease to function.

For these reasons, guaranteeing bank loans was selected as the operating model, and due to the high demand, a new fast track operating model was created for small financing needs. In retrospect, it appears that these choices were correct. Even so, it is clear that each crisis is to some extent unique and requires both the utilisation of old experiences and a new assessment of the situation and new conclusions.

There is some economics research available on the role played by actors such as Finnvera in smoothing cyclical fluctuations. Martin-Garcia and Santor (2019) found with Spanish data that guarantees even out cyclical fluctuations in terms of turnover and investments. They also identified a positive causal link between public guarantees and the economic development of companies. Barrot et al. (2019) also observed both positive employment effects and net-positive cost effects from the perspective of general government finances in France during the financial crisis which were due to the guarantee instrument aimed at mitigating credit constraints. In other words, the public guarantee reduced the credit constraints of SMEs, as a result of which the companies were not forced to lay off their employees.

Economic research literature does not dismiss the role of public specialised financing companies in evening out cyclical fluctuations. However, there should be caution with regard to action: here too, the devil is in details. The risk is that specialised financing companies will come up with new tasks that are economically ineffective but politically attractive, which will remain a permanent part of the operating field after the recession.

Externalities in exports

Fitzgerald and Monson (1989) justify the existence of export credits with their positive externalities on exports. As a company enters a new market, it will also open the way for other companies. Companies share information and thus disseminate their learning (in Finland through networks such as FinnCham). This reduces barriers for starting or expanding export activities.

Product development projects also generate expertise, which is more permanent than an individual project and the funding for which can be profitable from the perspective of the national economy, even if an individual project is not on market terms. The environmental impacts of the project are an example of either positive or negative externalities. The project may generate either benefits or harm to parties other than the party conducting the project and the provider of financing.

Atkin et al. (2017) provide recent evidence of a causal increase in human capital in exporting, as they reported significant learning-by-exporting effect. The research has been carried out in the context of a developing market, but the same mechanism can also apply in developed countries.

What shouldn't we support?

According to some opinions, the central government should undertake measures to increase the supply of finance generally, as this creates more economic activity. One of Finnvera's predecessor organisations was also tasked with "sowing money". The risk was and is that the funding will not be channelled to the most cost-effective and productive projects but will tie down resources to unprofitable projects.

In export financing, the focus is on how much Finnvera's risk management is emphasised in comparison to how much export promotion is emphasised, e.g., in a situation where the financing of a competitor country is very inexpensive. We often hear that Sweden and Germany place more emphasis on promoting exports than Finland does. Of course, due to their differing histories and larger national economies they also have stronger capacity to bear risks.

In Finland, Finnvera occasionally encounters problems when a large employer in a region is facing a profitability crisis. Pressure from the region and politicians can be severe. But should we maintain operations if we do not believe that the company's profitability will improve? If we financed it and the company survived, we were possibly able to correct a market failure. If we financed it and the company eventually went bankrupt, we were guilty of a government failure.

An annual target for financing granted is also a problematic question for public corporate financing. Its maximisation may lead to unnecessary crowding-out of private financing.

Some of Finnvera's European counterpart organisations consider direct political project-level steering of government to be a major problem. Finnvera has mostly avoided this phenomenon in recent years. Once again, the slippery slope is the issue. The involvement of political decision-makers in project-level decision-making is problematic, as this will negatively impact the coherence and equality of activities. The situation could end up in an equilibrium where political winds determine which projects are funded regardless of economic aspects.

In addition, the legitimacy and ownership of the organisation and its experts will deteriorate if there is a suspicion that a political decision can influence funding decisions. What is the use of investing in high-quality risk assessment if political will may steamroll this assessment at any time? From Finnvera's perspective, it would be preferrable if policy, in particular regional policy, and the assessment of funding were kept as separate as possible. As has been said over the past decade, the problem has been smaller and less significant in Finland than in some other countries.

Where direct project-level steering by the state owner may be problematic, so is the lack of ownership steering. One wrong path can be "buying customer satisfaction", forgetting that even in the case of loan financing, the final bill is partially paid by the State, not only through the loss compensation mechanism, but also through the "free" government guarantee for acquisition of funds and zero price for equity. Another aspect that has already been discussed is competition with private operators. According to Lerner (2009), the biggest mistake is to think that profitable market activities could be combined with public promotional activities: when you try to do this, you will fail at least at one, if not both. The possibility of crowding-out private activities should be taken seriously, and, in most cases, an effort should be made to minimise it.

Studies conducted by the Research Institute of the Finnish Economy in the 2000s as well as Finnvera's international evaluation in 2012, criticised Finnvera for an "unhealthy symbiosis" with then regular customers (Heinonen et al. 2012). Financing the same companies year after year will form a comfort zone but will not produce impact. Finnvera should actively strive for exactly the opposite: to actively be in contact with new potential clients and to steer previously financed companies to pure market financing once their operations are established. Of course, due to cyclical fluctuations, it may be possible that market financing is not always available on reasonable terms, as is in the case for direct export credit to the buyer shown in our analysis.

3. Market failure and Finnvera's impact

An optimal indicator for impact would be both controllable and observable. As a rule, the indicators used are only one or the other. The input indicators, such as how much money has been spent, can be controlled, but the results produced by them cannot be observed with certainty. On the other hand, performance indicators, such as the growth of a client's turnover or exports, can be observed, but their creation cannot be controlled from certain inputs. Input-output calculations can be made, but it is difficult to build a control group and would perhaps be based on overly strong assumptions.

Numerous researchers and some of Finnvera's counterpart organisations have tried to solve the matter using causal methods in which the selection of Finnvera's (or the responsible organisation's) clients has not been taken into account. These studies examine companies that have been financed in relation to a control group that has not been funded but whose certain other characteristics, such as key figures in the balance sheet, are similar. In this case, it is possible to determine the impact of one distinguishing factor - i.e., whether or not the company has been publicly financed - on certain outcomes, such as the development of turnover or productivity.

Unfortunately, the model described above is imperfect. In Finnvera's case, this would mean comparing the companies it finances with companies that have similar balance sheets but are financed by banks. There is no reason to assume Finnvera financing has the "Midas touch". There is another reason for this. In other words, it is a serious mistake to ignore the selection process through which banks decide to recommend Finnvera guarantees for some projects but not for others. The best possible research design would be a randomised field experiment, but this would unfortunately not be legal or even desirable from the perspective of Finnvera's operations.

These days, natural experiments are utilised in line with mainstream economics, and these have also been utilised by Finnvera's sister organisations, especially BPIFrance. An example of this is Gazaniol et al. (2022), whose extensive report examines BPIFrance's impact.   In the first part of the report, the researchers compare companies whose financing is guaranteed by BPIFrance to companies without a guarantee. Researchers rightly note that this is a correlation analysis, and it is not possible to talk about impact in terms of causality because of selection. This is therefore the same warning that we referred to in the previous paragraph.

In the natural experimental design evaluated by Gazaniol et al., applications for less than EUR 100,000 processed before 2015 ended up in the 'automatic process', but after the reform carried out in 2015, projects between EUR 100,000 and EUR 200,000 also ended up within the scope of this automated application process. With an automated process, the guarantee coverage was 10 percentage points higher, the price was 20% lower, and the entire application process was considerably faster. The researchers ended up estimating a differences-in-differences model, which analysed financing projects valued between EUR 100,000 and EUR 200,000 and these were compared to projects valued between EUR 50,000 and EUR 100,000 and between EUR 200,000 and EUR 300,000.

According to the results, the euro sum of projects valued between EUR 100,000 and EUR 200,000 increased after the reform by six per cent in total. Profitability, claims or number of bankruptcies did not change as a result of the reform, but more companies were set up and employment increased with the unit cost being EUR 6,000 per employed person.

In Finland, good experimental setups have been scarce - or perhaps they have not yet been invented. Additionally, the problem with natural experimental setups is that they usually focus on a small aspect of the phenomenon under investigation, and generalizability of the results may be difficult. Considering Finnvera's diverse customer base and the various financing instruments, relying solely on a natural experimental setup would inevitably provide only a partial perspective on Finnvera's overall impact. Of course, even that would be better than nothing, provided that the setup enabling causal inference is credible.

An excellent natural experimental design was created in the United States when the Export-Import Bank of the United States (USExIm), which is responsible for export financing, was unable to function for political reasons in 2015–2020. This can credibly be considered an exogenous surprise, and, thus, causal inference is possible if a credible control group can be formed. According to modelling carried out by Kurban (2022), US exports decreased by 2.2% during this period due to the political shock in question. The results are not directly generalisable at Finnvera but provide an indication of the scale of the impacts.

The third study highlighted here is Agarwal et al. (2018, 2019), in which researchers utilise Swedish register data when studying export credit guarantees provided by the Swedish Export Credit Agency (EKN). Due to comprehensive data, the researchers are able to use econometric matching methods, which aim to take the selection-into-treatment into account.

According to the results, export credit guarantees increase the probability of exports by 18 percentage points or many times this in the case of small companies, and the researchers also noted the causal link with export growth. In general, researchers cannot find an impact on employment or productivity, except in the case of those companies drawing their first export guarantee, which increases value-added, employment and productivity. The result can be due to factors such as the learning effects of new markets, as the barrier for entering the market is lowered by export credit guarantees. A broader interpretation of the research results is that established operators in the export market are unlikely to get productivity gains from export credit guarantees (unlike an increase in exports), but productivity growth can be accelerated in the case of companies entering the export market and thus expanding their operations.

At the other extreme of empirical "hard data" research, impact can be assessed further with softer means: surveys. In the case of public funding, the problem is that the surveyed may be dependent on the funding in question. Despite this, the surveys are not useless, as company decision-makers are able to describe the impacts in e.g., the company's internal choices.

Calculations that estimate non-causal impacts may also be useful. For example, Kuusi and Ali-Yrkkö (2018) used the input-output model to study the value-added and employment effects of large export financing projects. The study does not provide answers for what would have happened without Finnvera. Instead, the study shows the scale of value-added, and employment generated by Nokia’s and Meyer's activities. According to calculations, an export credit guarantee project valued at EUR 1 billion would mean that Meyer and its value chain would create EUR 635 million in added value in Finland, whereas the corresponding estimate for Nokia was EUR 320 million.

The conclusion is that measuring the impact of a public financier such as Finnvera's is like the Holy Grail, which must be constantly sought but which may never be found. Different controllable and observable indicators as well as quantitative and qualitative studies must be combined.

4. Summary

Finnvera is a special financing company owned by the State of Finland. Finnvera has official Export Credit Agency (ECA) status. Almost every country has a similar organisation of its own. Finnvera's domestic financing operates within the framework of EU rules, while export credits are subject to OECD agreements. The international rule-based environment is valuable for a small open economy.

Finnvera exists because of market imperfections, so the key objective of Finnvera's operations is to supplement the market. In other words, Finnvera's objective is to allocate financing to areas of market failure without distorting competition and to level out the international playing field from the perspective of Finnish companies.

The economic environment of corporate financing is far from perfect. Market failures can largely be attributed to imperfect and asymmetric information and adverse selection.

In this article, we have highlighted several themes closely linked to Finnvera's operations. In the case of microfinance, credit constraints are a generally recognised problem and justify public sector intervention. In the case of a public intervention, it must always be ensured that the market is not distorted unnecessarily. At Finnvera, we minimise market distortions by acting mainly through our banking partners. A public or publicly owned financial institution must not compete with private financial institutions.

Stabilization of the business cycle is always present in the operations of public financial institutions, which is also the case for Finnvera. In other words, Finnvera should not practice traditional stabilization policies that directly increase overall demand. On the other hand, ensuring the functioning and liquidity of the financial markets is related to Finnvera's operations. In addition, Finnvera's products reduce the risk for banks, which means that in a downturn, Finnvera's operations enable more extensive lending by banks, thus mitigating the impacts of negative business cycle shocks.

International coordination is important for a small open economy. Finnvera's operations are largely regulated by both the OECD and the EU, which aim to rein in inefficient or excessive state aid. International agreements have formulated Finnvera’s role in levelling the playing field, especially in export financing. Foreign companies would have a competitive advantage over Finnish companies if Finnvera did not level the playing field by offering similar financial services.

There is little research evidence exceeding certain quality standards of Finnvera's operations. This situation is partly due to the lack of credible research designs. In addition, the selection-into-treatment is also perplexing in this case. However, one step at a time, we strive to improve Finnvera's impact assessment framework both to support political decision-making and to develop the company's operations. This article is one part of this process.

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