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The role of guarantee organisations in crisis management

In this study, we examined the role of guarantee programmes in crisis management and we have also examined their regional effects. We are presenting the guarantee programs of various institutions and their most important parameters. By differentiating the counties of Hungary, we have examined the correlation between loan transactions and guarantee programmes established in each region, and we have also analysed the data with a regression function and as a result we were able to formulate useful statements. The role of guarantee programmes is not negligible, they have a huge impact on the financing situation of micro, small and medium-sized enterprises (SMEs) because without these programmes SMEs would not be able to improve their investments and they would not be able to develop. The development of these enterprises is an essential macroeconomic task because 99.8 per cent of Hungary's enterprises belong to the group of SMEs. At the end of the study we are dealing with the current and near future role of the guarantee institutions and guarantee programmes and their prospects from the point of view of the SMEs.

Key Word: crisis, guarantee programmes, SME, finance, regional effect
JEL-classification: H12

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The role and importance of guarantee programmes, the essence of the guarantee in brief

The guarantee is an essential instrument to facilitate access to finance SMEs (Nagy, 2012). The institutional system of cash guarantees²⁶ makes it possible for viable SMEs to be financed – for those which do not have sufficient collateral to offer for accessing funds; otherwise, financing them would be considered excessively risky. The losses incurred by credit institutions in the event of default in the portfolio covered by the guarantee²⁷ shall be reduced according to the extent of the guarantee. For this reason, state guarantees allow the risk premium part of the rate of the loan to be reduced (Bihari, 2013).

The public financial instruments that are available to stimulate corporate financing may have an impact on both the demand and the supply side. The willingness for taking low risk by credit institutions²⁸ may be increased by a public institution taking over the risk in some measure from the lending bank. Two forms of risk-taking are possible (Fábián et al., 2011):

- Direct lending: a public institution takes over all or some parts of the lending function of banks. In this case, the state institution itself is also responsible for the losses deriving from the loaning process and for finding solutions for arising financing problems, such as MFB Hungarian Development Bank Private Limited

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²⁶ In the course of a guarantee, the guarantor (whether an institution or an individual) undertakes that if the borrower fails to meet his financial obligations, the guarantor will perform instead of the borrower. Guarantees, in particular if provided or supported by the State, may enable the borrower to have access to a source of financing which he or she would not have been able to initially use (Kende, 2016).

²⁷ During the time of a guarantee, the guarantor assumes a separate, independent obligation towards the creditor. The essence of the guarantee assumed by the state is that it assumes this independent obligation through the central budget. (Halász et al., 2016)

²⁸ In addition to credit institutions, financial companies are also willing to take low risk.

Company (hereinafter: MFB Zrt.) and Hungarian Export-Import Bank Zrt. (hereinafter: EXIM). However, we do not deal with this form of credit incentive in the context of the present study.

– Guarantee: in this case, the lending is still carried out by commercial banks, but a state (or in majority state-owned) institution guarantees some parts of the loans granted, thereby reducing the risk of the lending institution. In Hungary, several financial institutions perform such tasks under state counter-guarantees²⁹, the most prominent ones are the following: Garantiqa Hitelgarancia Private Limited Company (hereinafter: Garantiqa Zrt.), Agricultural Business Loan Guarantee Foundation (hereinafter: AVHGA). The basic tasks of the guarantee organisations are to help the SME sector to access financing by providing guarantees to financial institutions. The scheme of guarantee enables to ensure that SMEs be ranked into a lower risk category at the lending institution³⁰, thereby allowing for economic growth, even in a recessionary macroeconomic environment.

However, in both cases, and also in the case of instruments based on state counter-guarantees, fiscal costs arise; losses are partially shared with commercial banks immediately in the case of absorption of financing costs and with delays in the case of assumption of risks (Bihari, 2013). Although justifications of loan guarantee programmes typically begin with reference to one or more financial market imperfections or distortions, there is rarely any further analysis along these lines. Loan guarantee associations have been used in most countries in Europe and elsewhere, to stimulate lending for a variety of purposes, but most often to help SMEs (Levitsky and Prasad, 1987). The primary assumption behind these programmes is that some disadvantageous groups, like SMEs, are unable to access formal loans because of credit market imperfections (Camino et al., 1998). The 47 members of the European Association of Guarantee Institutions (hereinafter: AECM) operate in 30 European countries. Three guarantee organisations from Hungary are also members of AECM: Garantiqa Zrt. and the Hungarian Enterprise Development Foundation since 1996, and AVHGA since 1997. The mission of the members is to support SMEs in accessing finance. Guarantees are provided to SMEs that have an economically grounded project but do not have sufficient collateral for creditors. This is the so-called SME financing GAP, a market failure. By guaranteeing these companies, which do not have sufficient collateral for creditors, these guarantee institutions thus help to successfully address market failures and facilitate SMEs' access to finance through:

- Reduction of lending rates - based on the MNB's estimate in 2012, the average lending rate of SMEs in the guaranteed portfolio decreased by about 200 basis points as a result of state guarantees (MNB, 2012). But there is an even more important effect, which is not price-like.
- Softer coverage requirements - if a guarantee is valid, the financial institution may be more 'lenient' in relation to the coverage requirements, especially if it is an institutional guarantee and is supported by the state. In such cases, financial institutions may calculate the value of the collateral by its total market value and not by the collateral value of the movable or immovable property collateral.

Both banks and firms have reported that the borrowing conditions remained favourable largely due to the public guarantee schemes (Matyunina and Ongena, 2022). However, the social and

²⁹ The obligation to reimburse assumed on behalf of the State in the current Budget Act (currently in Act XC. of 2021 on Hungary's State Budget of 2022), within the framework of which the State provides a guarantee to the guarantor institution in the event that it was necessary for the latter institution to enforce the guarantee (Szamkó and Sándorné Új, 2019)

³⁰ According to Paragraph 7 of Hungarian Act CCXXXVII of 2013 on Credit Institutions and Financial Institutions, a Financial institution is a financial institution: a credit institution and a financial institution, and a form of organisation of credit institutions within the meaning of Paragraph 9 of this Article is a financial institution.

economic impact of the guarantee is much broader. Guaranteeing has much wider social and economic effects such as (EIF, 2019):

- Creating jobs and preserving jobs by guaranteed firms;
- Innovation and competition;
- Structural and risk diversification of the European economy;
- Efficiency in promoting credit growth (Matyunina and Ongena, 2022);
- **Regional development;**
- SMEs are more likely to survive following the granting of the guaranteed loan (EIF, 2019): *Countercyclical engagement in times of crisis (AECM, 2022).*

International (publicly supported) credit guarantee programmes

SMEs are considered the backbone of the economy not only in Hungary, but also in the rest of the world, and they are represented among the majority of companies in many other countries. Their main characteristics are that they employ more than half of the employed workforce in the countries, they are able to make fewer investments than their large company counterparts and the fluctuation of the workforce is also lower. Internationally, the most common form of supporting SMEs is the loan guarantee system, which typically provides a partial guarantee for the bank loan, which can be redeemed by the financing institutions when the debtor is not able to repay its loan. Globally supported loan guarantee programmes, many of which are publicly supported, indicate that a market deficiency was detected in the area of SME lending, and this was deemed sufficient for the state to intervene (OECD, 2017).

According to a meta-analysis made by EIF (the European Investment Fund), unfortunately, loan guarantee programmes are not equally popular among SMEs operating in the member states of the European Union.

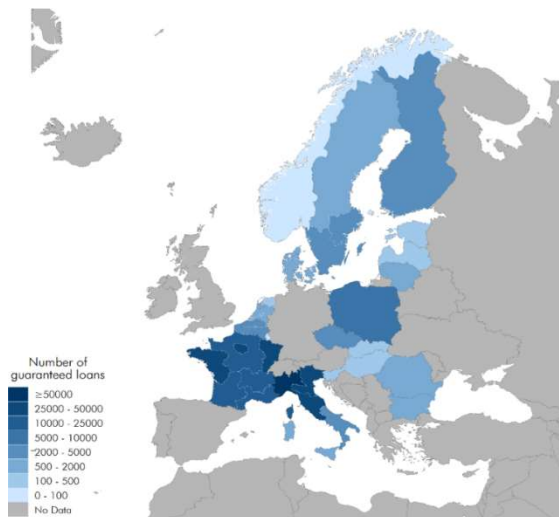


Figure 1. Geographical allocation of guaranteed loans analysed in EIF's meta-analysis

Source: European Investment Fund (2019)³¹

Figure 1 shows the proportion of loans having been guaranteed compared to the loan amount of the country. We can state that France and Italy have the highest number of guaranteed loans and Central European and Scandinavian countries have a slightly smaller amount (EIF, 2019).

³¹ The figure is the processing of the study authors based on Asdrubali and Signore (2015), Bertoni et al. (2018) and Bertoni et al. (2019).

According to recent studies the share of outstanding guarantee volume in GDP is the highest in Portugal (4.7%), in France (4.5%) and also in Hungary (4.3%). In conclusion we can state that guarantee programmes are becoming essential factors in the gross domestic product year by year (AECM, 2021).

We have studied guarantee programmes not only in Europe but in South Korea, too (we carried out an interview with members of Korean Development Institute) and the Korean guarantee programmes are much extended. South Korea has three hundred different types of guarantee programmes for SMEs whose main goals are also to support SMEs. They do not have only credit guarantees, they have bank guarantees and also tender guarantees, etc. Hungary and Europe also issue these types of guarantees but they are not as popular as credit guarantees.

The involvement of guarantee institutions in the crisis (Money and capital markets crisis and the COVID-19 pandemic)

In times of crisis, the aforementioned supply is also present in the decline in the growth rate of credit and lending, both due to demand and stricter lending policies. During the money and capital market crisis, in an analysis made in 2010, Fábíán et al. (Fábíán, 2010) attempted to determine which countries had stronger credit supply constraints in a regional comparison when there was declining demand. Based on their lending surveys, they found that in countries where the stock of corporate loans decreased by a bigger extent, like in Hungary, bank credit supply constraints played a greater role. They found that banks' supply behaviour was related to the country's reliance on foreign funds and vulnerabilities, which had a negative impact on both the willingness to take risks and lending capacity. The attitude towards lending by the banks is an important aspect during each crisis; during the 2008 crisis, the measures applied in Hungary were collected by Jeneiné (2022), and the fact that the crisis management measures of individual countries depend to a large extent on their fiscal and monetary policies has also been confirmed.

The cyclical slowdown in the euro area, which began in 2007, turned into a recession in the first half of 2008 and a sharp contraction in the winter of 2008-2009. During money and capital market crisis in 2008, the deterioration of the outlook for international activity was mainly due to three major shocks:

- The conditions for obtaining credit have tightened.
- As financing opportunities narrowed, households and firms themselves adjusted their consumption and investment decisions to reduce the performance of the economy. The decline in asset and home prices mostly dampened household consumption and aggregate demand through the wealth effect.
- Extremely high commodity prices also cause significant cost shocks, which also had an impact on the slowdown in the economy (MNB, 2008).

The banking system faced deteriorating loan portfolio quality and increasing credit losses, the bankruptcy rate of companies significantly rose by about 3%, and the share of non-performing corporate loans increased throughout 2008-2010 to around 15 per cent. The domestic banking system responded to the situation by reducing lending (encouraging deposition).

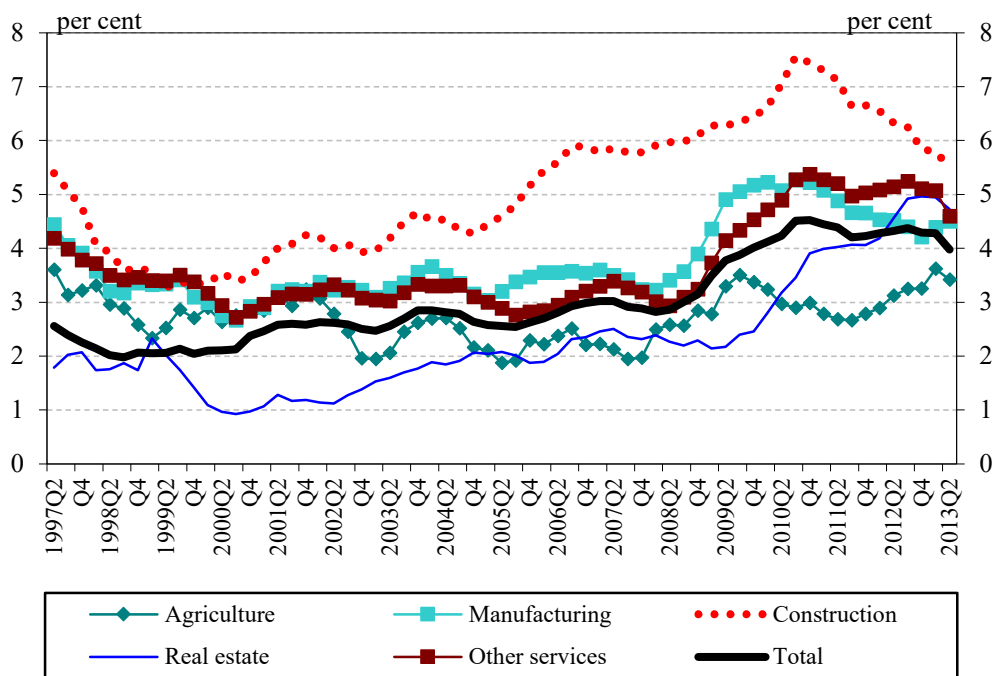


Figure 2. Sectoral bankruptcy rates. 2007-2009

Source: Own editing based on MNB data.

As the functioning of the financial system had severely been disrupted, the European Central Bank took measures to support lending to ensure that monetary policy impulses were properly spread. The aim was to improve financing conditions, thereby supporting the supply of credit to the economy in other ways than by reducing reference interest rates. The measures were adapted to the specific financial structure of the euro area economy (banks have a leading role in financing households and companies), to help to maintain the flow of credit into the economy (ECB, 2009). Most countries had had crisis prevention packages having been adopted both in 2008 and before COVID, the combination of which in different proportions, both in 2008 and in the present, has proven to be suitable for mitigating the effects of both the 2008 and the ‘health’ crisis. During the money and capital market crisis in 2008, rescue measures by euro area governments could be divided into three main categories: guarantees on bank liabilities, capital injections, and asset insurance schemes. State aid during the crisis was mainly focused on the liabilities side of bank balance sheets, such as the provision of state guarantees for interbank loans and newly issued bank debt securities; recapitalisation of distressed financial institutions through capital injections and loans; and increasing the coverage of retail deposit guarantee schemes. The combined impact of operations stabilising the financial sector on public debt and contingent liabilities reached 20.1% of GDP by the end of 2009, measured on the basis of resources spent on guarantee schemes (excluding public guarantees on retail deposits), while their explicit contingent liabilities, measured by the guarantees actually used by banks, amounted to 9.4% of GDP. Effective bank deposit issuance backed by a government guarantee was much lower than the government-backed guarantee. In 2009, the OECD issued recommendations based on the conclusion that timely and appropriate responses (Jenein , 2022) are of the utmost importance, including with regard to guarantee programmes. During the pandemic-related crisis that started in 2019, crisis

prevention, crisis management measures and programmes had already been introduced in the knowledge and consideration of these facts.

In order to avoid the impact of the pandemic shock on the economy and inflation in 2019, and the faced risks of financial stability, individual governments responded promptly and with great commitment through monetary and fiscal policy instruments, resulting in effective resistance to the tightening of financial conditions caused by the pandemic shock. In addition to providing fiscal support to businesses, euro area countries also provided significant loan guarantees to support the liquidity status of firms, in particular domestic SMEs. In total, guarantees accounted for around 17% of GDP in the euro area as a whole. Hungarian economic policy has avoided limiting job losses and a surge in the number of company closures with the aforementioned crisis management measures, including loan guarantee programmes. The bankruptcy rate of companies remained below 2%.

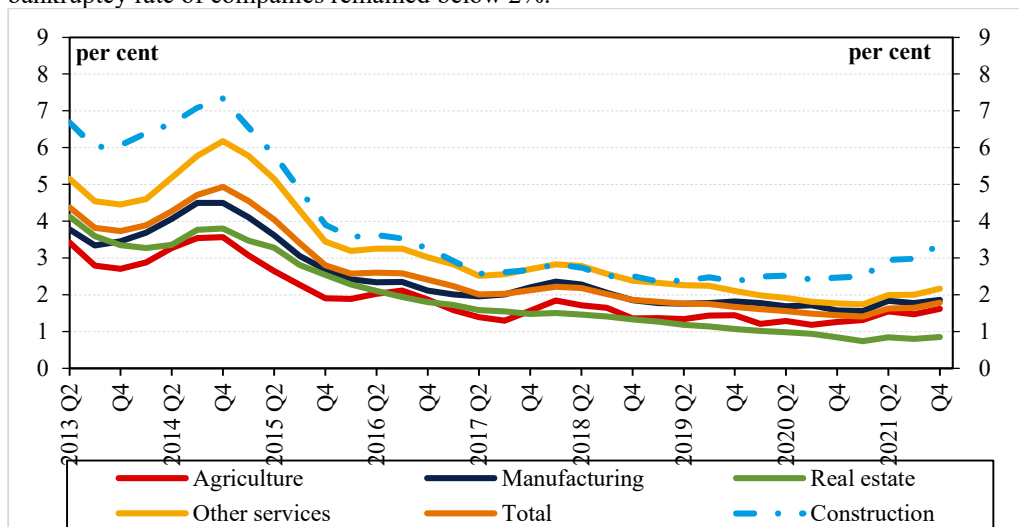


Figure 3. Sectoral bankruptcy rates, 2013-2021

Source: Own editing based on MNB data.

In December 2019, the global macroeconomic environment was characterised, among other features, by rising recession fears in some regions, a decline in inflation, and a slowdown in growth. Although the expansion of the global economy since 2010 continued in 2019, the performance of the global economy was 2.9% higher than in 2018, but the pace of growth slowed down compared to previous years (MNB, 2019; KSH 2020). The stability report published by the MNB in May 2020 already discussed the effects of the COVID-19 epidemic in December 2019 in the Chinese province of Wuhan on the world economy and on our country. In 2020, global developments were determined by the coronavirus pandemic, the performance of the global economy was 3.3% lower than in the previous year, and the decline in 2020 was greater than in 2009 during the financial and economic crisis (KSH, 2021). The expansion of the Hungarian economy continued in the first quarter of 2020, but the pace of growth slowed significantly in the economic environment, which radically changed from March due to the coronavirus pandemic. Overall, due to the pandemic, the volume of GDP in 2020 was 5.0% lower than in the previous year. In 2020, the performance of the economy was essentially the same as in 2018 (KSH 2020; KSH 2021). As is a well-known fact, more than 99% of the enterprises operating in Hungary are qualified as SMEs, and their share has hardly changed for years. The economic weight of SMEs in the performance of all enterprises decreased both in 2019 and 2020. In 2020, 0.9% fewer enterprises were registered compared to a year earlier, the number of enterprises started to grow in the second half of 2020, and by

the first half of 2021, with the expansion of the Hungarian economy by 7.6%, 1.8 million enterprises were registered until the end of July 2021, 2.3% more than a year earlier and before the outbreak of the epidemic in February 2020 (KSH, 2021). The impact of the economic crisis caused by COVID-19 has slowed down the previously outstanding corporate loan dynamics by roughly half, to 8.5% (MNB, 2020, 2022). The growth rate of SME loans was milder, decreasing by roughly 4 percentage points and slowing down to 9.3 per cent by the first quarter of 2020, but after that, owing to the programmes launched under the Economic Protection Action Plan (Ministry of Finance, 2021), including certain Hungarian Central Bank and state loan and guarantee programmes, it started to grow again from the second half of 2022. By experiencing the global financial crisis of 2008, the shock of 2020 hit banks that were in a significantly more stable state and better prepared (also partly due to the Basel III regulation, which aims to provide sufficient capital to cover risks). During the crisis in 2008, banks immediately tightened their lending conditions, deepening the economic crisis, and in the first half of 2022 lending conditions eased only in countries announcing large-volume guarantee schemes, including Hungary. The guarantee programmes introduced during the crisis are summarised below.

Guarantee programmes during COVID

The results of The European Guarantee Programmes are outstanding in the financing of domestic SMEs

The volume of newly granted guarantees was EUR 90.9 billion in 2021, lower than the crisis level of EUR 279.8 billion in 2020, but still well above the pre-pandemic level of 38.8 billion in 2019. The new guarantee volume was almost evenly distributed in the first and second half of 2021, with Garantiqa Zrt. (+EUR 891.7 million) accounting for its largest increase compared to 2020, according to AECM records, followed by Strategic Banking Corporation of Ireland (+EUR 401.0 million). The portfolio of Garantiqa Zrt. has steadily been growing as a result of the COVID-19 crisis programmes. Demand was fully determined by the Garantiqa Crisis Guarantee Programme. Since the launch of the programme in 2020, the demand for other guarantee products of Garantiqa Zrt. has also shifted towards this product range. COVID-19 measures have increased the need for funding and thus the activities of the AVHGA (AECM, 2022). The existing PGS framework allowed for prompt response to the companies' increased liquidity needs through expanding the guarantee programmes.

Garantiqa Zrt. is the most popular Hungarian guarantee institution. Its guarantee offer is extremely wide, as in addition to traditional loans, it also guarantees leasing and factoring transactions. The guarantor institution does not come into direct contact with the enterprises, who can access the offered products through the financial institutions. Within the framework of the Economic Protection Action Plan, the guarantee programmes of Garantiqa Zrt. — introduced during the crisis and operated until the expiry of the Temporary Framework³² on June 30, 2022 - were available to Hungarian SMEs as following:

1. Garantiqa Crisis Guarantee Programme: With the outbreak of the pandemic, not only the SME sector, but also large companies could enlist in this product of Garantiqa Zrt. within the framework of the Garantiqa Crisis Guarantee Programme. The guarantee for up to 90% of the loan amount taken is considered to be extremely high, also the state counter-guarantee rate is 90%. The state also provided support for the guarantee fee to be paid monthly by enterprises: 1% of the total loan amount per year (Government Decision 1778/2018 (XII.21)).
2. Garantiqa Crisis Guarantee – Investment Loan Guarantee: The Investment Loan Guarantee was a sub-product of the Garantiqa Crisis Guarantee Scheme, which guarantees investment

³² Communication of the European Commission COM(2020) 112 final published on March 13, 2020 on the coordinated economic response to the COVID-19 epidemic.

loans taken by SME sector up to a maximum of 80% of the loan amount borrowed, with a 90% state counter-guarantee. The guarantee fee support provided by the state was annually 1% of the total loan amount up to a loan amount of HUF 100 million, while over HUF 100 million it was annually 2% of the total loan amount (Government Decision No 1778/2018 of 21 December 2018).

The below-mentioned programmes were not introduced within the framework of the Economic Protection Action Plan, but these guarantee products were continuously available to businesses during and after the crisis:

3. Cash-paying guarantee provided with a budgetary counter-guarantee (provided under De minimis State aid³³): Garantiqa Zrt. guarantees up to 80% of the loan amount with an 85% state counter-guarantee within the framework of the form of support available to SMEs. The subsidy on the guarantee fee is 0.4% (Government Decision No. 1778/2018 of 21 December 2018)

4. COSME Programme: COSME is a counter-guarantee programme designed to support the competitiveness of enterprises and SMEs, provided by the European Fund for Strategic Investments. The programme provides both guarantees to business organisations and counter-guarantees to financial institutions. Garantiqa Zrt. undertakes an EU-backed guarantee for 90% of the principal amount of the loan under its COSME programme. Given that this is an EU counter-guarantee programme, it does not contain state aid from the Hungarian State.

From 2020 to 2021, the number of new guarantee contracts increased by 16%, or by almost a fifth, which means that as a result of the pandemic, more enterprises used the products of Garantiqa Zrt. The increase is due to the popularity of the Garantiqa Crisis Guarantee Programme and its sub-programme Garantiqa Crisis Investment Guarantee Programme. At the same time, it is an interesting fact that in most cases the guarantee was requested for short-term sources of financing, in particular for overdrafts (Garantiqa Zrt., 2021). Another interesting fact is that during the pandemic, the guarantee portfolio used for financing sources more than doubled (to 222%). Consequently, with the increased size of the guaranteed loan portfolio, the number of guarantees redeemed (after non-fulfilment of the financial obligations set out in the loan agreement) has also increased. In the guarantee stock redeemed in 2021, business organisations engaged in transportation, services and trade have a significant weight; these companies were the most vulnerable to the recession caused by the pandemic (Garantiqa Zrt., 2021).

The Agricultural Business Loan Guarantee Foundation is a financial enterprise that has been operating in the form of a foundation since its establishment in 1991. Since 1998, the state has provided an 85% counter-guarantee for guarantees provided by the AVHGA. The AVHGA's main objective is to help SMEs to be active in agriculture to achieve their goals. The inclusion of the guarantee provided by the AVHGA has a positive effect on the capital adequacy of financial institutions through the counter-guarantee and results in an onerous commitment.³⁴ The guarantee provided by AVHGA is available not only for classic loans, but also – like at Garantiqa Zrt., for factoring and leasing transactions. Guarantees undertaken by AVHGA are also supported by the state (Nagy, 2012). During the crisis, the largest guarantor institution, Garantiqa Zrt., has more than doubled its guarantee holdings, while AVHGA's³⁵ guarantee holdings have increased by a quarter of the previous value in 2020 by the end of

³³ No. 1407/2013/EU regulation on small amounts of state aid.

³⁴ In the case of a refundable commitment, part of the risk related to the financial institution's claim against the enterprise is borne by the guarantor institution.

³⁵ This can be attributed to the fact that while Garantiqa Zrt. can reach a wider range of businesses with its products, since its portfolio is more general, AVHGA's activities concentrate only on a specific sector.

2021. During the crisis period, AVHGA offered the following products to help Greyhound SMEs:

1. AVHGA Crisis Agricultural Guarantee Programme: In the offer of AVHGA, the Crisis Agricultural Guarantee Programme was available for agricultural SMEs to mitigate the economic damage caused by the coronavirus. Within the framework of the Crisis Agricultural Guarantee Programme, AVHGA takes over up to 90% of the risk of lending from financial institutions, with a 90% counter-guarantee provided by the Hungarian State. The guarantee fee payable by the undertakings may not exceed 0.4% of the amount of the loan taken out, which is a fee subsidy.

2. AVHGA's guarantee under De minimis aid. The De minimis guarantee is capped at 80% of the loan transaction guaranteed, up to a maximum of EUR 2.5 million per undertaking. The guarantee used in this way will encourage agricultural SMEs to access funding.

3. AVHGA COSME: Like Garantiqa Zrt., AVHGA also provides a guarantee under the AVHGA COSME guarantee programme with an EU counter-guarantee. The guarantor institution guarantees up to 80% of the principal amount, all this is provided by an EU counter-guarantee of 50%, the programme – like the product of Garantiqa Zrt. – does not include state aid.

Other guarantee programs

The Hungarian Export-Import Bank Zrt. specifically favours the investments and expansion of business organisations in the foreign market. In connection with this, not only classic sources of financing can be found in its product range, but also credit collateral and commercial guarantees in relation to guarantees. Generally speaking, EXIM's guarantee should not exceed 80% of the value of loan agreements.

1. Credit collateral guarantees: By providing credit collateral guarantees, EXIM provides a partial guarantee for the financial performance of the financing source used by economic organisations in order to improve their international competitiveness. The guarantee provided in this way typically covers 50% of the loan amount but may not exceed 80%. (<https://exim.hu>)

2. Commercial guarantees: Commercial guarantees are bank guarantees provided by EXIM that aim to improve international competitiveness. Types are the followings:

- Tender guarantee: a payment guarantee for the contracting authority based on the amount of the tender guarantee. Typically, EXIM guarantees 2-5% of the offer price.
- Advance repayment guarantee: in case of non-contractual performance, the bank guarantee for the repayment of the advance already paid, typically 15-30% of the export contract.
- Performance guarantee: a commercial guarantee created to ensure conformity with the contract.
- Guarantee of good performance: on the basis of warranty and guarantee obligations, it guarantees the fulfilment of the supplier's payment obligations up to 5-10% of the export contract.

START Garancia Zrt. was established in 2006 in order to contribute to the access of the domestic SME sector to financing sources for development purposes and European Union grants. The portfolio of START Garancia Zrt. was taken over by Garantiqa Zrt. and START Guarantee has been given a new role, from the autumn of 2021 it provides a guarantee for larger individual transactions. The budget of the counter-guarantee in the state budget can be found in the Act XC. of 2020 on Hungary's State Budget of 2021. The amount of the available budget has risen since the fall of 2021 (in practice from December). In addition to the state counter-guarantee, Start Garancia Zrt. does not provide a cash guarantee, but a guarantee in accordance with Section 6:419 of the Civil Code. (Nagy, 2012.)

Results of guarantee programmes

Based on what has already been presented in previous chapters, the role and importance of guarantee programme can be seen, among other features, in regional development. In the chart below, we present the contracted loan of the Széchenyi Card Programme, which accounts for approximately 60% of Garantiqa Zrt.'s portfolio, and the contracted guarantee holdings of Garantiqa Zrt. by county in June 2022, at the end of the Commission's Temporary Framework.

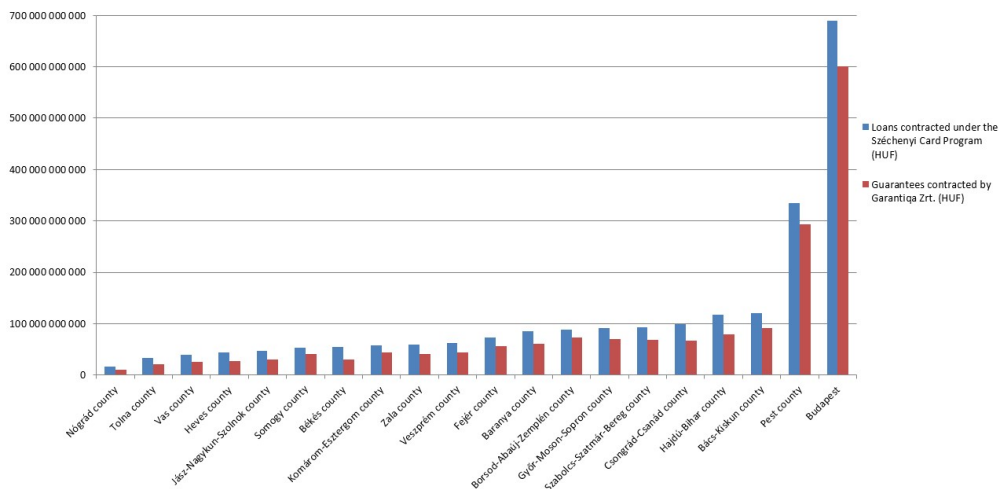


Figure 4. Volume of loans contracted under the Széchenyi Card Programme and volume of guarantees contracted by Garantiqa Zrt. by county in June 2022 (data in HUF)

Source: Garantiqa Zrt. and KAVOSZ Zrt. based on data, own editing

We have also confirmed our assumption with correlation calculations, according to which there is an extremely strong, positive correlational relationship between contracted loans and contracted guarantees as two quantitative criteria. In the event of a HUF 1 increase in the contracted loans of the Széchenyi Card programme, the contracted guarantee volume of Garantiqa Zrt. will increase by an average of HUF 0.89 per county. This result reflects the 90% guarantee of the Garantiqa Crisis Guarantee Programme. We have examined the same for the loans contracted under the Széchenyi Card Programme and the guarantees contracted by the AVHGA. Among the Széchenyi Card Programme credit facility, AVHGA's guarantee contracts are understandably the most behind the Agricultural Széchenyi Investment Loans, and as a result, the relationship between the two criteria will also be weaker.

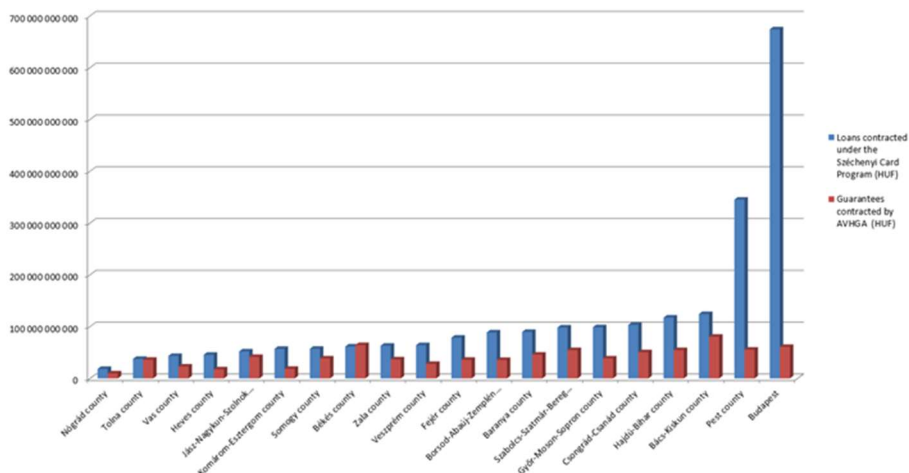


Figure 5. Volume of loans contracted under the Széchenyi Card Programme and volume of contractual guarantees of AVHGA by county in June 2022 (data in HUF)
Source: AVHGA and KAVOSZ Zrt. based on data services own editing

In the examined counties, in the event of a HUF 1 increase in the contracted loans of Széchenyi Card Programme, the contracted guarantee volume of AVHGA will increase by an average of HUF 0.05 per county.

The current and future role of guarantee schemes

In August 2022, my co-author and I conducted a semi-structured in-depth interview with the CEO of Garantiqa Zrt. and the Deputy Managing Director of AVHGA. The interviews focused on, among other things:

- the role and importance of guarantee programmes in times of crisis,
- the regional impact of guarantee schemes,
- recommendations for domestic SMEs.

Both Garantiqa Zrt. and AVHGA, organisations with a 30-year history, have maintained their market share and their role and importance in SMEs' access to finance since their foundation. Corporate lending, the size of the guaranteed portfolio in the period from 2010 to 2020, was characterized by a relative calm, steady growth of the guaranteed loan portfolio, the "7 plentiful years" were characterized by a spin in bank lending, so "it was not difficult to grow". In 2019, the pandemic hit Hungary to a more favourable, already much more prepared situation compared to the money and capital market crisis of 2008, for which even guarantee organisations were already prepared by being aware of their role in the economic downturn, and their product range was also developed with this in mind. In times of crisis, the role of guarantee institutions are being amplified. In these situations the credit risks also increase, at which point the need for atomizing and mitigating risks also increases, and thus the role of guarantee institutions also increases. They drew attention to the fact that the examination of the guaranteed loan portfolio is not the same as the entire Hungarian credit market, since the guarantee mostly helps the weaker firms, where the added value of the guarantee itself is present, because without the guarantor institutions, the companies (mostly SMEs) would not receive a loan, or they receive a loan on more favourable terms with the use of the guarantor institution (for example, they receive a loan for a longer term or receive more loans). During the money and capital market crisis in 2008, the willingness of banks to lend was low, and guarantor institutions 'appeared on the scene' with their role in increasing the supply of

credit. During the COVID, the decrease in lending activity was also compensated by subsidized loan programmes, there was a large volume of preferential financing available in the credit market, so there was a supply, (unlike during the 2008 crisis), so the guarantee portfolio also increased according to textbook form. State-backed loan and guarantee programmes have therefore played a major role in maintaining and even increasing the level of guarantee and lending.

Key features of each guarantee programme:

- countercyclical, moving against the general economic cycle,
- it is supportive, because there are companies in sectors that would not get a loan without a guarantee, even though we know that the sureties are redeemed for these companies (for example, currently in the food sector), but this is already economic policy. Behind the guarantee there is its state counter-guarantee (the 85 % counter-guarantee – 90% during COVID – is rather the biggest curiosity in Europe),
- it is additional, it is related to credit,
- it is one of the vanguards of rural development and regional development, guarantee programmes are an integral part of development policy and economic policy, they are part of the agricultural support institutional system,
- they have a price, the guarantee costs money, there are state-supported guarantee programmes and there is also a market-priced guarantee programme on the Hungarian market.

With regard to the guarantee programmes, it can be said that there is no or, if there is, there is only moderate competition between the individual guarantor institutions, there is rather a kind of specialization on the market, Garantiqa Zrt. specializes in SMEs for the most part, provides guarantees for their general transactions, AVHGA provides guarantees for agriculture, EXIM also meets the needs of a special target group (companies aspiring to the foreign market), START Guarantee and MFB Zrt. are interested in larger individual guarantee transactions. Regarding the development of individual guarantee programmes, starting from the emergence of political needs and the needs of enterprises, also taking the needs of IT and bank development into account, their duration is a good half-year, although their introduction in 2020 was carried out with extraordinary speed in order to prevent the deepening of the financial market crisis, but basically the ramp-up of a guarantee programme takes 2-3 years in peacetime. The crisis guarantee programmes were in response to an extraordinary crisis situation and their ramp-up was rapid, culminating in the expiry of the Temporary Framework on 30 June 2022. Since there were no similar crisis programmes on the market before, *the programmes can provide useful experience for another crisis, their monitoring and the use of experience is key for decision-makers and businesses.*

Prospects for the future

On 24 February 2022, Russia launched a military aggression against Ukraine. The European Union ('EU') and international partners have responded with restrictive measures to the serious violations of Ukraine's territorial integrity, sovereignty and independence. EU and domestic businesses are thus affected in several ways, including falling demand, loss of revenue resulting from it, disruptions to supply chains for raw materials and livestock, high energy prices: rising prices for electricity and natural gas, and drastic increases in production costs. In this context, the Commission has decided to adopt a Communication³⁶ to identify state aid measures that Member States may take to remedy the economic impact of Russia's aggression against Ukraine and the sanctions adopted in this context by the EU and international partners,

³⁶ Communication from the Commission (2022/c 131 i/01) Temporary crisis management framework for State aid measures to support the economy following Russia's aggression against Ukraine

as well as countermeasures taken, for example by Russia. Hungary is a state directly adjacent to Ukraine. Due to this geographical proximity, the European effects of the Russian-Ukrainian conflict are more decisive in Hungary, and economic uncertainty is increasing. The negative impact on the economy can be estimated by GDP volatility and inflation projections. In its quarterly Inflation Report, the Hungarian National Bank publishes macroeconomic indicators and assesses the macroeconomic processes that determine inflation. After the outbreak of war, inflation and the deterioration of GDP expectations can be clearly quantified in the report: the inflation rate forecast increased by almost 5% in March 2022 compared to December 2021, while the expected GDP growth rate over the same period is almost 4% compared to December 2021 (MNB, 2022). This decrease means a nominal loss of at least HUF 1448 billion (EUR 3900 million) for the Hungarian economy in 2022. *In order to reduce the losses of economic operators, it is essential to introduce guarantee products in the future that will provide security for the SME sector even in the face of a protracted economic recession.*

There is uncertainty surrounding the future; businesses, especially the smallest ones, often can not even plan for the next month, there are also difficulties in compiling business plans for the coming years, financing risks are increasing. More and more businesses are postponing their investments. On the one hand, the disruptions in the supply chains already mentioned in connection with the crises lead to price increases, which businesses can no longer undertake compared to their initial budgetary plans, and on the other hand, they are trying to prepare for the future, which will reduce investment needs. *In the future, stimulating investment is an important economic policy aspect in order to maintain economic development.* The liquidity needs of enterprises increase during the crisis, the need for financing liquidity increases with the need to survive, for example, the cycle time in agriculture is relatively long, but most major branches of the national economy, such as construction and manufacturing, also face a persistent need for working capital, so it is necessary for them to prepare in the coming months. *Behind both investment and liquidity loans, the institution of guarantees appears, and the guarantor institutions are prepared for the crisis, are aware of their role in dealing with the crisis, but sufficient amount of available sources of financing on the financing market is required, too*

Conclusion

The national frameworks of credit guarantee systems show great heterogeneity in each country, however, in most of the examined countries the credit guarantee systems are state-owned and function properly only in their own country, as they have adapted to the given country's macroeconomic environment. (EIF, 2017.)

In our study, we have examined the role and regional impact of domestic guarantee programmes and analysed their evolution in relation to the Széchenyi Card Programme. Overall, we can state that state subsidies, such as guarantee programmes, do not dissipate the risks, they only share them among the SMEs, the financial institutions, and the state, so the financial institution's risk (which provide the funding source) starts to decrease. Our analysis shows the popularity of these guarantee programmes. In our research, we were able to prove that, as a result of state-supported financing programmes, the risk of institutions is lower and it really encourages lending to SMEs, even in a recessionary macroeconomic environment, so they can actually reach a wider range of enterprises. It can also be determined based on the interviews that guarantee programmes are revenue-positive for the government, as the savings on unemployment benefits outweigh the losses from the defaults of guaranteed loans. We have also found that these programmes are more effective in sustaining aggregate employment in periods or areas characterized by high unemployment rates, and are particularly relevant when policy cost is an important constraint.

With our study we would like to emphasize the importance of guarantee programmes especially in regional development and crisis management and to raise financial awareness among domestic SMEs.

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