Statistical Yearbook 2022

Brussels, May 2023

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I Foreword

As the world was just about to overcome the Covid-19 pandemic, it already stumbled into the next crisis. Russia's attack on Ukraine brought about another major challenge. Besides being a huge humanitarian tragedy and a major geopolitical catastrophe, it has significant negative consequences for small and medium-sized enterprises (SMEs) in Europe. These SMEs did not yet fully recover from the Covid pandemic, and they already need to face new challenges, such as soaring energy prices, supply chain disruptions, and trade sanctions. In addition, economic uncertainty remains at an exceptionally high level.

In this difficult situation, AECM members are at the side of SMEs in Europe. Many of them set up new dedicated programmes with favourable conditions to support companies that are under strain due to the negative economic consequences of the Russian war. Others prolonged and rebranded still running Covid programmes. For a detailed overview of these Ukraine crisis support measures we would like to refer you to our dedicated brochure linked here. However, the reader will see that these bold interventions are not visible in the data that we will present you in this edition as they are overcompensated by the phasing out of Covid measures.

As the current crises are weakening the capital base and the debt-equity ratio of SMEs, AECM members are widening their product range and offering innovative and alternative financing solutions to their clients. Our recent brochure on support products beyond standard debt guarantees linked here gives a comprehensive overview of such solutions.

According to the **AECM Scoreboard survey**, the outstanding guarantee volume with regard to guarantees originated from and implemented by AECM members **decrease by 14.5% in 2022 reaching a level of bEUR 266.6**. This decrease mainly reflects the phasing out of Covid programmes.

The volume of newly granted guarantees is much lower than during the pandemic years 2020 and 2021, but still significantly above the pre-pandemic level. **During the past year, guarantee institutions issued new guarantees worth bEUR 49.2**.

In the case of the number of SMEs benefitting from support by AECM members as well, we observed a decline down from its peak in 2021. **As of end-2022, 5.2m small and medium-sized enterprises were in the portfolios of AECM members**. More details on the results of the AECM Scoreboard are delivered in section III.

According to the results of our **Guarantee Activity Survey,** the **share of AECM members that expect the guarantee activity to increase climbed up**

significantly with respect to the previous year's expectation (60.0% up from 47.5%). This is certainly due to the roll-out of support measures for SMEs facing the negative economic consequences of the Russian war. The results of the survey furthermore show that the share of members that observed an increase of **default rates in 2022 was far below the 2021 expectation, but the forecast for 2023 is gloomy with almost 2/3 of members expecting default rates to increase**. The detailed analysis of the results can be found in section IV.

The spring 2023 economic forecast of the European Commission upward correct the gloomy outlook depicted by the winter forecast As the European economy performed much better than foreseen over the past winter, the better starting position lifts up the outlook for upcoming years. **In 2022, the EU gross domestic product increased by substantial 3.5%**. The EU economy is expected to grow by **1.0% in 2023 and by 1.7% in 2024**.

Despite the cost of public measures to cope with the war in Ukraine and its economic and social consequences, the **government deficit** in the EU is expected to decline to 3.1% in 2023 and 2.4% in 2024. The **debt-to-GDP ratio** is set to decrease to below 83% in 2024 following its historic peak of 92% in 2020. The situation on the EU labour markets is very positive with **unemployment rates** forecast to slightly decrease to 6.2% in 2023 and 6.1% in 2024. Prices are soaring in the EU with an expected **inflation rate** of 6.7% in 2023 and of still 3.1% in 2024. **Business bankruptcy rates** reached - according to Eurostat data – its highest level in Q4 2022. Increases were registered in all quarters of 2022.

This publication will inform you about the development of AECM's membership base (section II), most recent developments in the European guarantee sector (sections III and IV), about expectations for the future development of guarantee institutions' activities (section IV) as well as about recent research on the impact of guarantee schemes (section V). The methodological and editorial note (section VI) as well as the glossary and the "about us" page offers complementary information on this publication.

We wish you a pleasant reading !

Your AECM team

Brussels, May 2023

II AECM members

During the year 2022, AECM welcomed the Organisation for Entrepreneurship Development (ODA) from Moldova as a new member. The Russian member FSECA was excluded from the association following the Russian invasion of Ukraine. The number of members increased to 48 at 2022 year-end. Furthermore, AECM gained a new partner in 2022, the DAMU Fund from Kazakhstan.

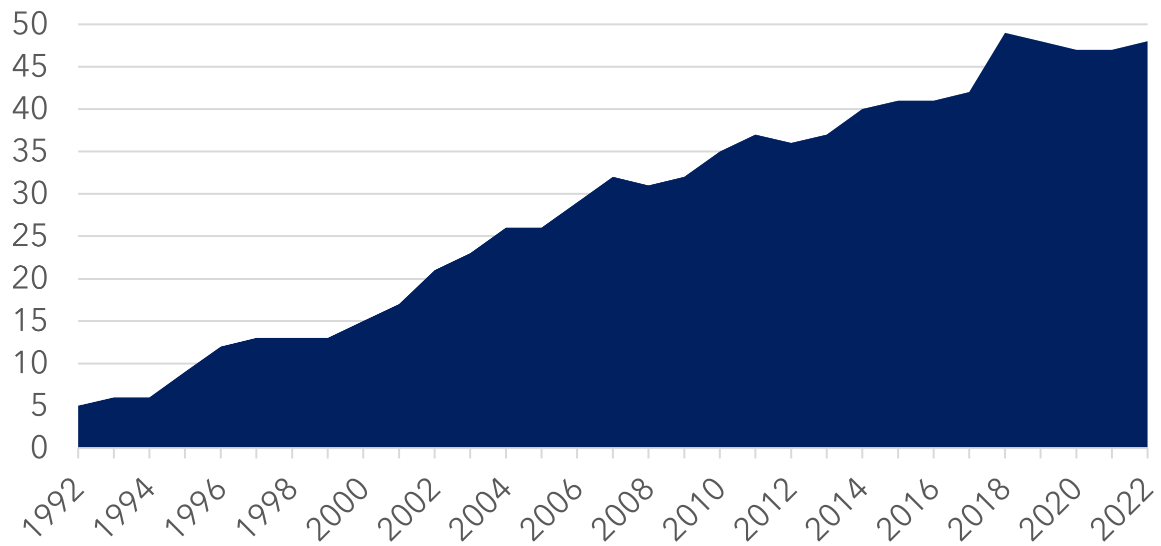
In September 2021, our Belgian member from the Flemish region PMV/z-Waarborgen nv changed its name to PMV-Standaardwaarborgen nv.

As of 1st January 2023, prior to the publication of this edition, MVA/HU, Assoconfidi/IT and Garfondas/LT are no longer members of AECM. MVA/HU's guarantee activity was integrated into our member Garantiqa/HU and Garfondas/LT was integrated into our member INVEGA/LT. On the other hand, Garanzia Etica/IT, member's member of Assoconfidi/IT, joined AECM in February 2023. Furthermore, SOWALFIN/BE changed its name in January 2023 to Wallonie Entreprendre (WE) in the frame of a merger with several other regional promotional institutions.

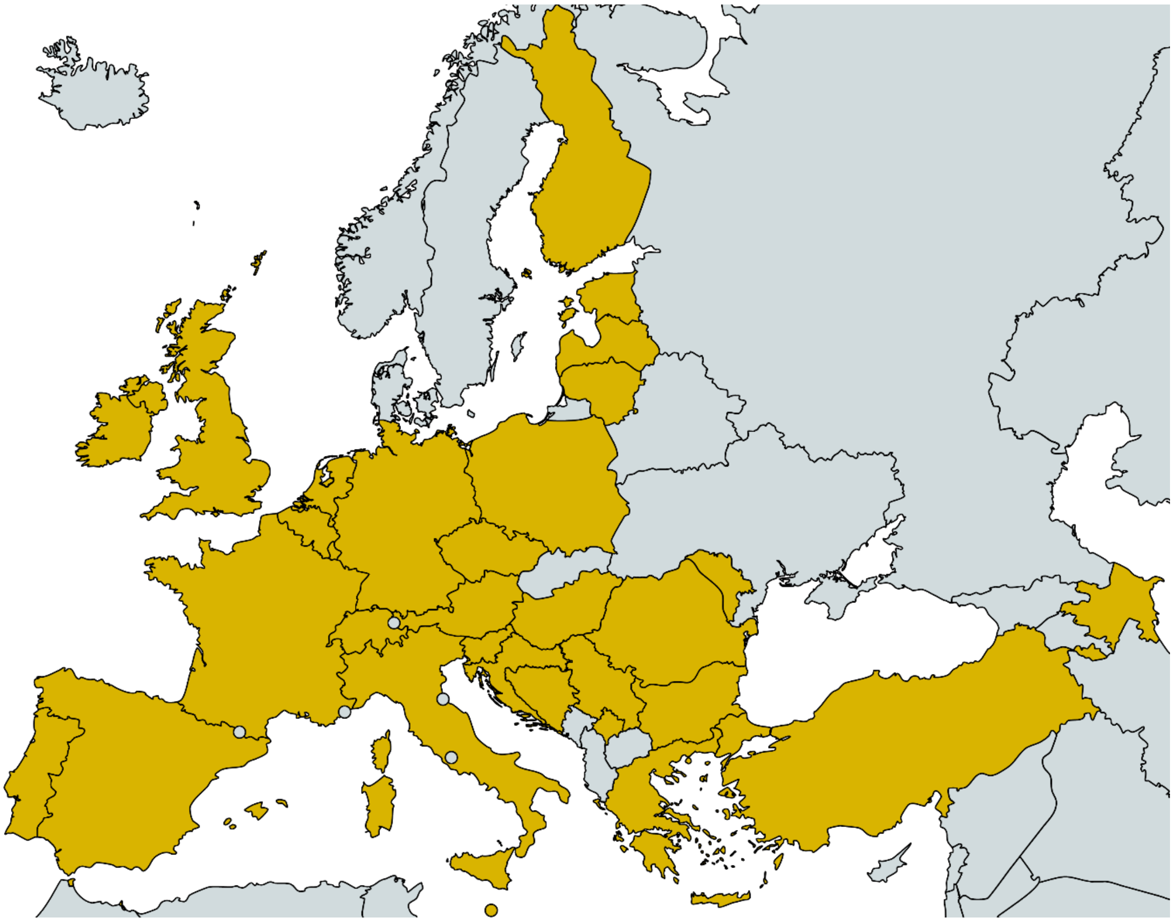
As of end-2022, 30 AECM members were public institutions, ten had a mixed ownership structure and eight members were private institutions (including mutual).

The development of the membership base can be seen in graph 2.1 below. A detailed timeline of accession dates is available on our website under this link. A list of all current 45 members (as of 02/2023) and a map can be found on the next page.

Graph 2.1 : Development of the number of AECM members at year-end[1]



[1] AECM was founded in 1992 by ten guarantee organisations from five countries. Five of them merged in the early 2000s which is the reason why they are counted as one from the beginning.



AT	aws
	NÖBEG
AZ	MCGF
BE	Brussels GF
	PMV Standaard-waarborgen
	WE
BA	GF Srpska
BG	NGF
	MGFSME
HR	HAMAG-BICRO
CZ	NRB
EE	KredEx
FI	Finnvera
FR	Bpifrance
	EDC
	SIAGI
	SOCAMA

DE	VDB
GR	HDB
	TMEDE
HU	AVHGA
	Garantiqa
IE	SBCI
IT	Garanzia Etica
	ISMEA
XK	KCGF
LV	ALTUM
LT	INVEGA
LU	MC
	MPME
MT	MDB
MD	ODA
NL	RVO

PL	BGK
PT	BPF
RO	FGCR
	FNGCIMM
	FRC
RS	GF Vojvodina
SI	SEF
	SRDF
ES	CESGAR
CH	NSGI
TR	KGF
	TESKOMB
UK	BBB

* AECM members as of May 2023

III Scoreboard Survey

i. Recent Developments – 2022

Total outstanding guarantee volume

bEUR 267

Number of supported SMEs

5.2 million

The average guarantee size

kEUR 45

Outstanding Guarantee Volume

According to our Scoreboard Survey, **AECM member organisations all together were supporting SMEs with guarantees worth bEUR 266.6 in 2022**. Despite a significant **drop of 14.5%** with respect to the year 2021, the volume remains well above the pre-pandemic level[2]. This significant decrease of guarantee volumes reflects the phase out of the extensive Covid-19 support programmes as well as the early reimbursement of no more needed emergency loans. This reduction apparently more than outweighs increases in the volumes due to support measures for companies affected by the consequences of the Russian War in Ukraine. Another reason for the drop is that Assoconfidi/IT left the association and therefore exits the scope of our Scoreboard survey[3]. Garanzia Etica/IT, one of Assoconfidi's members' member that joined AECM in 2023 compensated the drop in volume only partially. While the decrease was still timid last year, it accelerated in 2022 with half of members (21) registering a decrease in their outstanding guarantee volume against still 21 members registering an increase. The average annual growth rate was 3.1% and the median growth rate was at 0.0%. Both rates are not negative as the decrease is substantially driven by the phase out of significant parts of the volume of large AECM members.

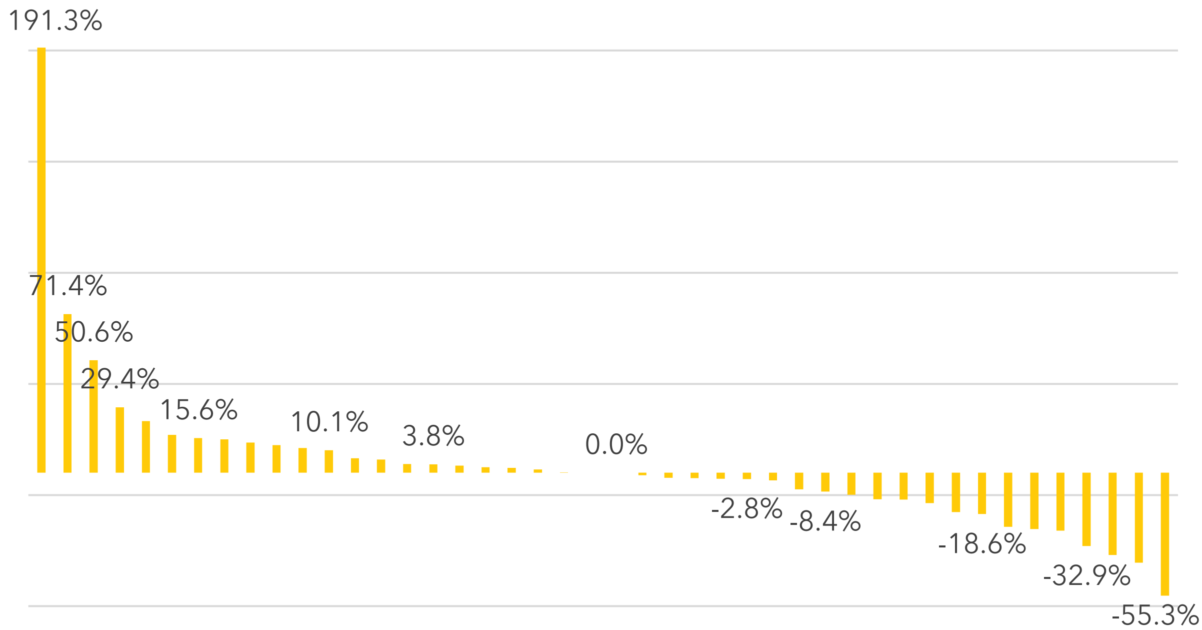
Almost 60% of the outstanding guarantee volume is attributed to Bpifrance/FR, the implementing institution of the French government's PGE (prêt garanti par l'Etat) programme and to the British Business Bank in its role as implementer of the

[2] bEUR 110 in 2019.

[3] The decrease corrected for the change of membership status of Assoconfidi/IT would have been 12.0%.

extensive support programme set up by His Majesty's Treasury (HMT). The third largest AECM members is ISMEA/IT.

Graph 3.1 : Distribution of growth rates



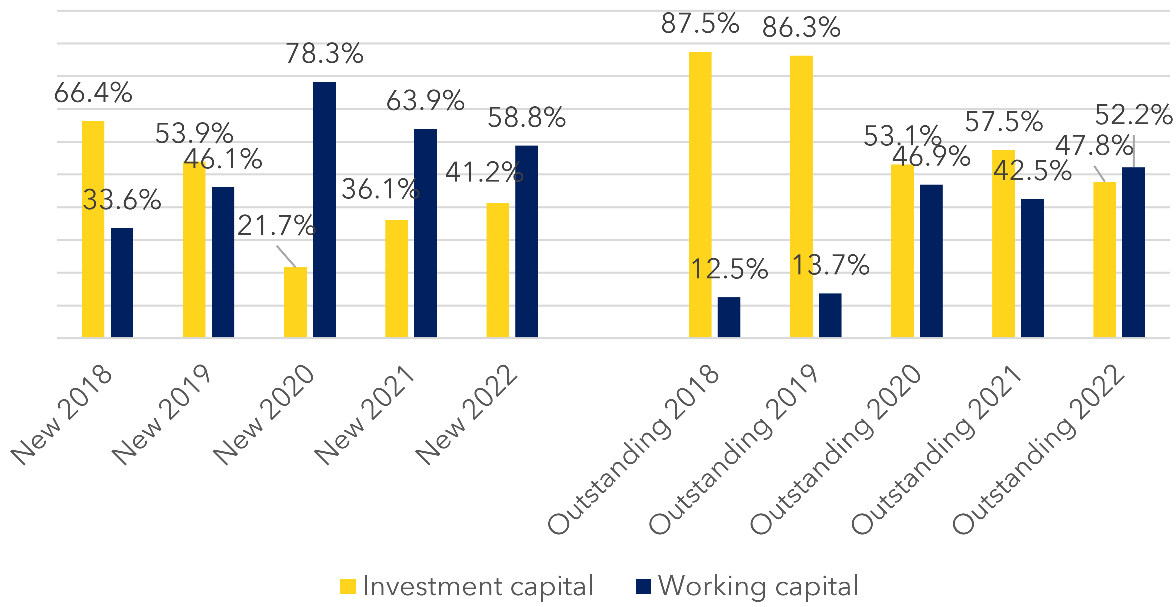
The highest percentual year-by-year increases were registered by FGCR/RO (+191.3%), GF Srpska/BA (+71.4.4%) and FNGCIMM/RO (+50.6%)[4]. The strongest absolute increases could be observed for volumes of FNGCIMM/RO (+bEUR 2.3), BGK/PL (+bEUR 2.1) and TESKOMB/TR (+bEUR 1.4).

The average outstanding guarantee volume decreased by 17.9% to bEUR 5.3 and the median outstanding guarantee volume decreased by 43.5% to mEUR 522.9.

We asked our members to distinguish the part of the outstanding guarantee volume that covers working capital loans and the part that covers investment capital loans. 28 out of 45 respondents - representing 27.6% of the volume – reported on this distinction. As a result, 47.8% of the distinguished volume covered investment capital loans (57.5% in 2021, 53.1% in 2020 and 86.3% in 2019) and the remaining 52.2% covered working capital loans (42.5% in 2021, 46.9% in 2020 and 13.7% in 2019). This is a further significant shift towards guarantees on working capital loans which can be explained by the fact that most guarantees under the Temporary Crisis Framework (TCF) were working capital guarantees and by the dominance of working capital guarantees in ongoing Covid guarantees. The following graph illustrates the development over the previous years. While investment capital loan guarantees were prevailing before the pandemic, the importance of working capital loan guarantees significantly increased over the recent crises years.

[4] As in the case of Bpifrance/FR and BBB/UK, the large volume of FNGCIMM/RO resulted from the implementation of an extensive government programme.

Graph 3.2 : Development of the share of working/investment capital guarantees



Some AECM members specified in their responses to our Scoreboard Survey which are the drivers behind the development of their respective outstanding guarantee volumes. These are presented in the following:

- **aws/AT** figures are reflecting the fading out of Covid-19-Bridge-Financing-Guarantees. Furthermore, in 2022, aws standard guarantees reached the pre-crises level.
- When comparing **MCGF's/AZ** activity during the last two years, one can notice a positive upward trend. From year to year, interest in the mechanism of credit guarantees continues to grow. Within the framework of the mechanism for providing guarantees for business loans, the Fund expands the access of many entrepreneurs to sources of financing. Funding is allocated for projects that cannot be financed due to the lack of collateral.
- **PMV Standaardwaarborgen/BE** still sees an increase in outstanding volume, due to another record year of new guarantees in 2022.
- During 2022, **NGF's/BG** main programme phased out and this gap will be filled in 2023.
- **NRB/CZ** reported about an increased guarantee volume e.g. due to covid related guarantees in portfolio.
- **TMEDE/GR** observed an increase in contract execution guarantees (in terms of volume) that will produce income on the long term in accordance with institution's strategy and a decrease in tender guarantees that produce one off income on the issuing period following the gradual restart of the economic activity.

- **Garantiqa's/HU** reported that the development of demand in 2022 was determined by the crisis mitigating Garantiqa Crisis Guarantee Programme (under the Temporary Framework). From the start of the programme in 2020, the demand for its other counter-guarantee products shifted to this product range. The reorganisation of the demand was driven by **Garantiqa's** quick guarantee procedure, the favourable guarantee conditions (e.g. 90% Garantiqa guarantee, 90% state counter-guarantee, 1% guarantee fee subsidy, etc.). The Garantiqa Crisis Guarantee Programme can be used for working capital, overdraft and investment loans. After several extensions, the programme was closed at the end of the first semester of 2022.
- According to **Garanzia Etica/IT**, the developments in the last two years are related to the market and the policies adopted by the Italian government to support companies affected by the Covid-19 pandemic and the consequences of the conflict in Ukraine.
- The **KCGF/XK** outstanding guarantee portfolio experienced a slight decrease over the past year. The flow of this development was impacted mainly by the lower rate of the registered guarantees compared to 2021 which has marked an increase in disbursements of the guaranteed loans in **KCGF** during the economic recovery.
- **ALTUM/LV** informed that its volume includes individual, and portfolio guarantees (including Covid-19 programmes) as well as individual agricultural guarantees and guarantees on energy efficiency of apartment buildings.
- The outstanding guarantee volume of **MC/LU** is decreasing in 2002 after it had skyrocketed during Covid-19. **MC** estimates coming back to a volume of more or less double of the volume pre-Covid-19.
- Compared to 2021, **MDB/MT** guarantees on working capital also include a scheme in response to the war in Ukraine. However, as some facilities related to Covid-19 were withdrawn by the borrowers the total sum of guarantees declined.
- In 2022, **FRC/RO** granted guarantees in the name and for the account of the State within the state aid schemes IMM Invest and IMM Invest Plus (Garant Construct & Innovation components). Furthermore, **FRC** granted guarantees in the name and for the account of the State for individuals (to support access to financing for young families and students). In conclusion, the volumes reflect guarantees for both SMEs and individuals and outstanding counter-guarantees.
- The outstanding volume of **NSGI/CH** also includes the Covid-19 guarantees and for this reason it is decreasing from year to year.

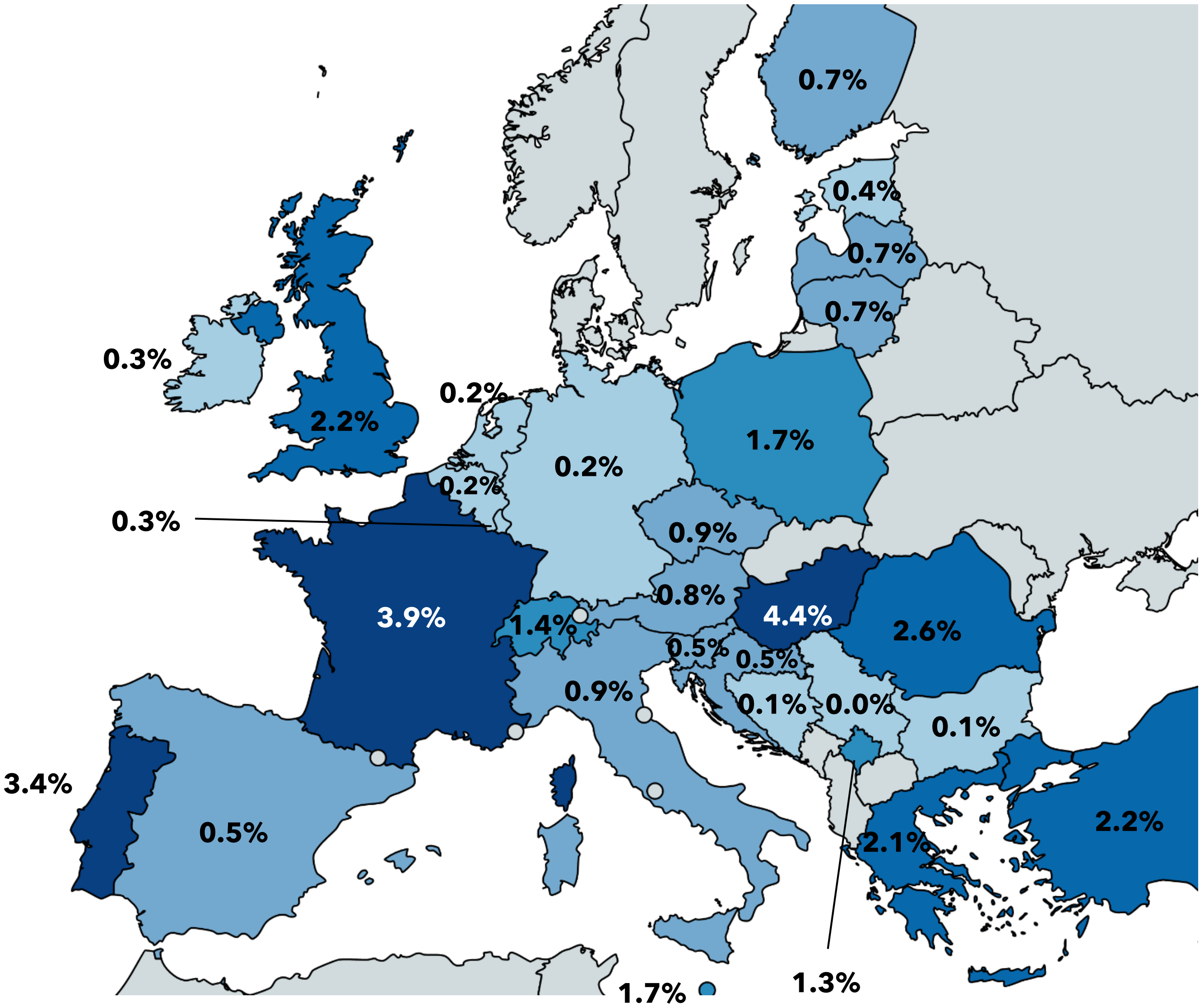
- The outstanding guarantee volume of **KGF/TR** is stable in Turkish lira, but due to a depreciation of 25.9% of the Turkish lira vis-à-vis the euro in 2022, the volumes are decreasing in euro terms.
- In 2021, the **TESKOMB's/TR** guarantee limit per person was increased from EUR 14,235 to EUR 25,882. Furthermore, it reports that after the pandemic, SMEs invested in their business by taking out guaranteed loans with the reviving economic conditions.
- **BBB/UK** registered a decrease in the stock due to amortisation of the large portfolio of Covid loan schemes. The vast majority of guaranteed lending (esp. BBLS) has "no purpose given" and therefore cannot be attributed to either working capital or investment.

Share of GDP

In an attempt to measure the relevance of AECM members' activity for their respective national economies, we calculated the percentage of the outstanding guarantee volume as a share of GDP. After the strong GDP decrease in 2020, the European economies recovered in 2021 and 2022 and reached a GDP well above the pre-pandemic level. At the same time, support programmes started to phase out which led to a significant decrease in the total outstanding guarantee volume. **The share of the overall AECM members' outstanding guarantee volume in the combined GDP of AECM countries consequently further decreased from 1.8% in 2021 to 1.4% in 2022[5]. This is still far above the pre-pandemic level of around 0.7%.** We observe the highest share with 4.4% in Hungary, followed by 3.9% in France and 3.4% in Portugal. The map below illustrates the results for the individual countries.

[5] Since at the moment of editing this report, Eurostat did not provide any GDP data for Azerbaijan, Moldova, we could not calculate the ratio for these countries. GDP data for the United Kingdom was downloaded from Statista and we used recurrent GDP data for Türkiye from 2021.

Graph 3.3 : Intensity map – share of outstanding guarantee volume in GDP



Number of outstanding guarantees

As already observed last year, the development in the number of outstanding guarantees lags behind the development of the volumes. **At the end of 2022, AECM members had almost 6 million guarantees in their portfolios, which is 7.9% less than in 2021**. This decrease is much less pronounced than the decrease in volumes and it sets in only this year, whereas the volume already started to decrease in 2021. It is important to note that the decrease is strongly dominated by the departure of Assoconfidi/IT. The growth rate corrected for this event would be +2.7%.

The strongest expansion in absolute terms was registered by BBB/UK (+63.5k units), closely followed by TESKOMB/TR (+62.7k units). The highest percentual increase occurred in Azerbaijan (+1,025.0% for MCGF). The highest number of outstanding guarantees is held in the portfolio of BBB/UK (1.7m units), followed by Bpifrance/FR (1.3m units) and KGF/TR (0.8m units).

The average size of outstanding guarantees continued its descend from its peak in 2020, down to kEUR 44.7 in 2022. The highest average amount could be observed for MDB/MT with kEUR 292.9. The lowest average guarantee amount is in the portfolio of TESKOMB/TR (kEUR 8.5). Graph 3.8 on page 20 gives an overview of the development of the average guarantee size by stock and flow.

Volume of newly granted guarantees

The volume of newly granted guarantees almost halved (-45.9%) in 2022 with respect to the previous year. However, with a volume of bEUR 49.2 it remains well above its pre-pandemic level of bEUR 38.8 in 2019. The highest volumes of newly granted guarantees in 2022 were registered by BGK/PL (bEUR 12.4), Bpifrance/FR (bEUR 5.6) and TESKOMB/TR (bEUR 4.7).

A few members commented on the development of newly granted guarantees:

- 84.5% of **aws'/AT** newly granted guarantees were standard guarantees and the rest were Corona-bridge-financing guarantees.
- Despite another crisis year 2022, **PMV Standaardwaarborgen/BE** observed an increase in guarantees. The reason might be the lower risk appetite of the financial institutions. **PMV Standaardwaarborgen** guarantees give a chance to the SME to further develop in Flanders.
- **HAMAG-BICRO's/HR** ESIF portfolio guarantee programme was interesting to the banks since amounts are smaller, more loans are for working capital financing, no double administration and everything is done within the financial institutions. Only in 2023, we can see banks more active with bigger investments (probably connected to the Ukrainian crisis).
- **NRB/CZ** registered a decrease due to the smaller number of covid-related guarantees.
- **AVHGA/HU** reported that due to the restart of the economy as well as to environmental and market uncertainties, the risk management has an even greater role in financing, so the importance of the guarantor also increases.
- The closure of the state-supported **Garantiqa/HU** Crisis Guarantee Programme generated an advanced demand for SME loans, which is also indicated by the decrease in demand in the second semester of 2022.
- The year 2022 was marked by a readjustment of the terms of the credit guarantee after the period of recovery, which was characterised by increased interest of the banking sector for credit guarantees considering the fragile period due to the pandemic effects and the special conditions offered by **KCGF/XK** supported by the Government of the Republic of Kosovo as well as

by international donors. Although the registration of credit guarantees in 2022 were at a lower level compared to the previous year, it can still be qualified as a year with greater achievements compared to previous years. These achievements are attributed to the continuous efforts of **KCGF/XK** to raise awareness about the importance of guarantee scheme.

- **ALTUM/LV** informed that in 2022 no new Covid-19 guarantees were issued which is the reason why the new production is lower than in previous years.
- The biggest influence was the decrease in the volume of portfolio guarantees. The reason is that already at the beginning of 2022 the amount of transactions included in the portfolio was almost 90% of the portfolio amount agreed by **INVEGA/LT** with financial intermediaries.
- **MC/LU** informed us that before Covid the investment capital was predominant. After Covid, **MC/LU** guarantees more and more working capital.
- **MDB/MT** reported that the launch of flagship schemes was delayed to last quarter of 2022 due to other crisis related schemes taking precedence.
- The volume of guarantees newly granted by **ODA/MD** has increased from mEUR 19.2 in 2021 to mEUR 27.5 in 2022 which represents an increase of 43.2%. The reason for the increase of newly granted guarantees was the fact that during 2022, the coverage rate was increased from 50% to 80% for all the requested loans and the guarantee fee was set to zero, for the first guaranteed year, in order to support the SMEs.
- Compared to 2021 the volume of guarantees newly granted by **SEF/SI** has decreased, due to non-investment activities of SMEs.
- Our member **NSGI/CH** informed us that the new guarantees are exclusively "normal" guarantees. Covid-19 guarantees are no longer issued.
- **BBB/UK** reported on a more even split between working capital and investment which reflects the movement out of the Covid pandemic, and associated emergency liquidity schemes. As before, totals do not sum as not all guaranteed lending had a purpose attributed.

Number of newly granted guarantees

Finally, we have a look at the number of newly granted guarantees. The development here is very similar to the one for the volume of newly granted guarantees. Following a strong increase in 2020, the number of newly granted guarantees falls in 2022 even substantially below the pre-pandemic level. **It reached a total volume of almost 800m units of new guarantees (-40.3%).**

The average size of guarantees newly granted in 2022 decreases with respect to the pandemic year 2020, as can be seen in graph 3.8 on page 20. It reaches kEUR 61.9 which is still well above the pre-pandemic level of around kEUR 40.

Number of supported SMEs

Regarding the **number of SMEs supported by guarantee institutions, the development reversed. As of 31st December 2022, AECM members supported more than 5.2m SMEs which represents a decrease of 10.9%[6].** 1.6m SMEs are supported by BBB/UK and 1.1m SMEs by Bpifrance/FR. The strongest increases in the number of supported SMEs were registered by TESKOMB/TR (+90.9k), RVO/NL (+34.6k) and BGK/PL (+21.5k).

Number of newly supported SMEs

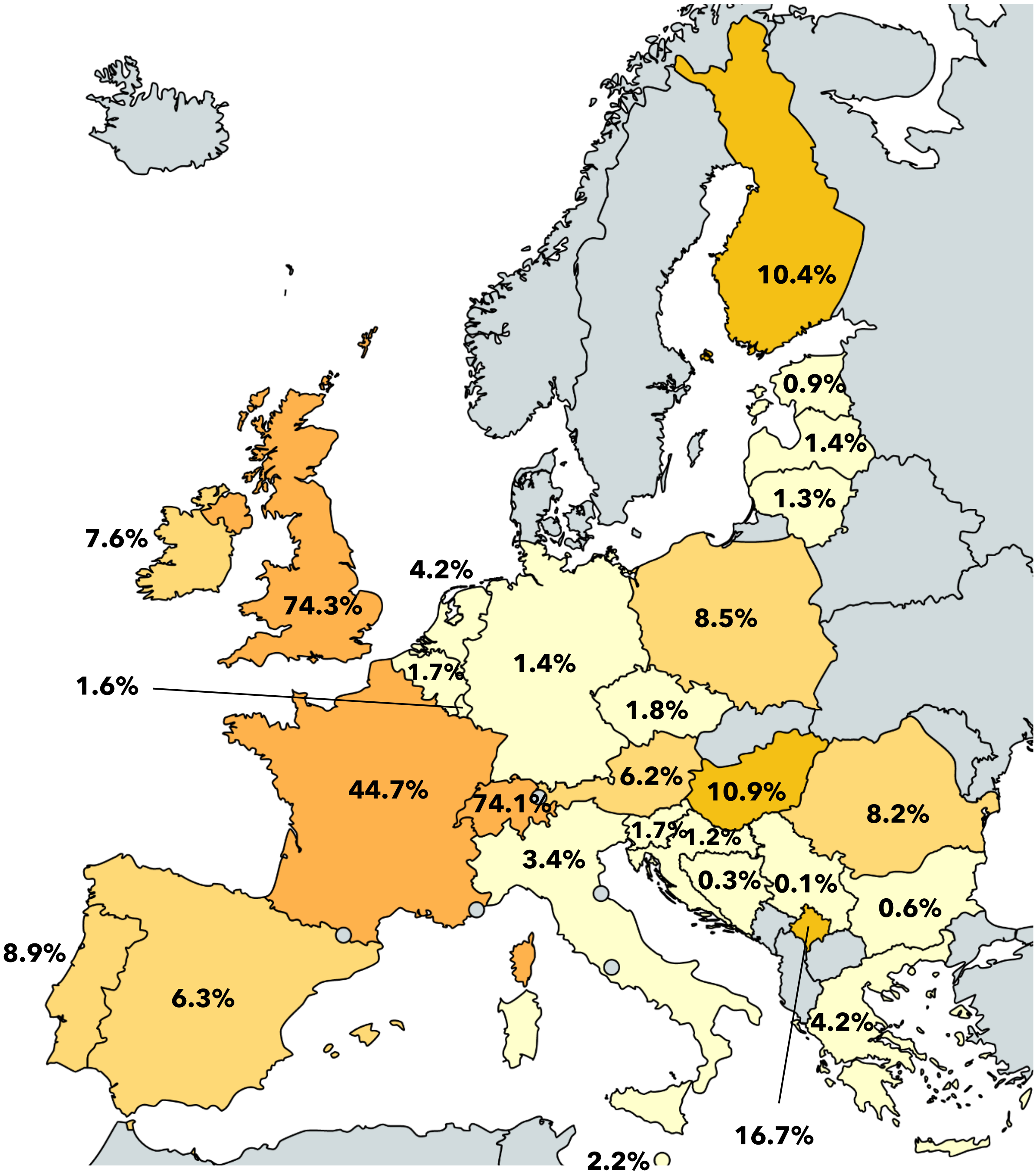
In parallel to the development of the number of newly granted guarantees, the **number of newly supported SMEs decreased significantly over the previous year (-27.3%) to reach the level of around 700.1k units**, which is only slightly above the pre-pandemic level.

SME outreach

In the following, we calculated the share of SMEs benefitting from a guarantee of AECM members in the overall SME population of their respective countries. As a result, the highest outreach could be observed on an axis from the United Kingdom to Switzerland, passing by France. While BBB reached out to 74.3% of non-financial SMEs in the UK, the members of NSGI reached out to 74.1% of Swiss SMEs. Our four French members Bpifrance, EDC, SIAGI and the National Federation of SOCAMA have currently 44.7% of French SMEs in their books. **AECM members all together reached out to 16.5% of the total SME population in covered countries**[7]. The map below shows the exact results.

[6] Corrected for the departure of Assoconfidi/IT, the growth rate would be positive (+2.0%).
[7] Turkey and Azerbaijan are not considered here, since Eurostat does not provide data on the number of SMEs in those countries.

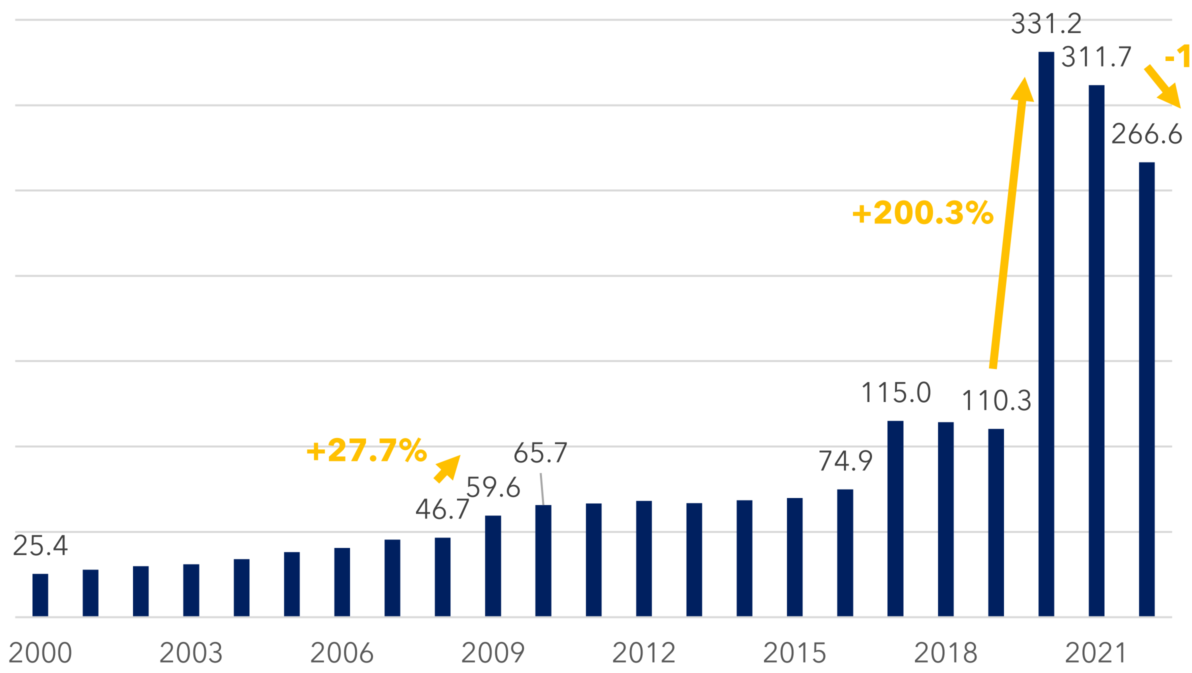
Graph 3.4 : Intensity Map – SME outreach



ii. Long-term Development

A look at the **long-term development of total outstanding guarantee volumes reveals that after having reached its peak during the pandemic year 2020, the volumes decrease as Covid guarantees phase out, first timidly in 2021 and now more visibly in 2022.** This decrease was registered in spite of the vast rollout of support measures for SMEs affected by the consequences of the Russian war (increase in energy prices, supply chain disruptions, trade sanctions etc.) which was overcompensated by the phase out of Covid guarantees. Two further factors strongly influenced the development of volumes: (1) the departure of Assoconfidi/IT from AECM whose volume are not counted in anymore and which is only to a small extent compensated by the volumes of Garanzia Etica/IT that joined AECM in 2023; (2) the continued strong depreciation of the Turkish lira vis-à-vis the euro. Graph 3.5 shows the development of the outstanding guarantee volume since the start of data collection in 2000. Retrospectively, the strong increase during the financial crisis in the noughties is barely visible anymore. The strong increase in 2017 corresponds to the exceptional policy-driven expansion of the guarantee volume of KGF/TR.

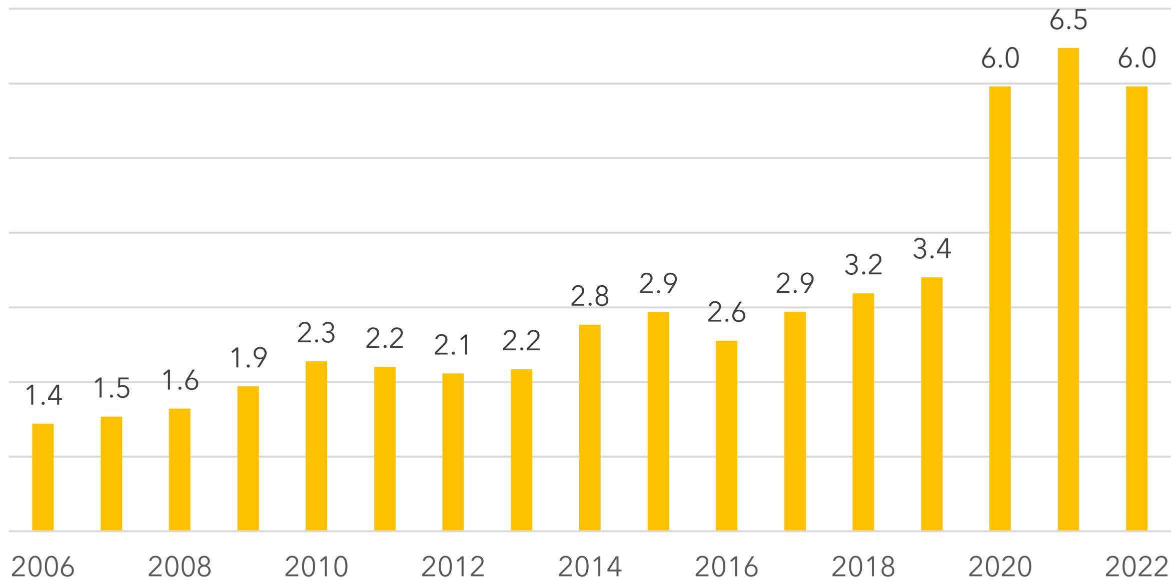
Graph 3.5 : Long-term development of the outstanding guarantee volume (in bEUR)



Regarding the **number of outstanding guarantees**, we have been able observe a steady increase since our first data collection in 2006 and an extraordinary expansion in 2020, reflecting the enormous roll-out of supporting measures for SMEs suffering from the economic consequences of the pandemic. **In 2022, a decrease sets**

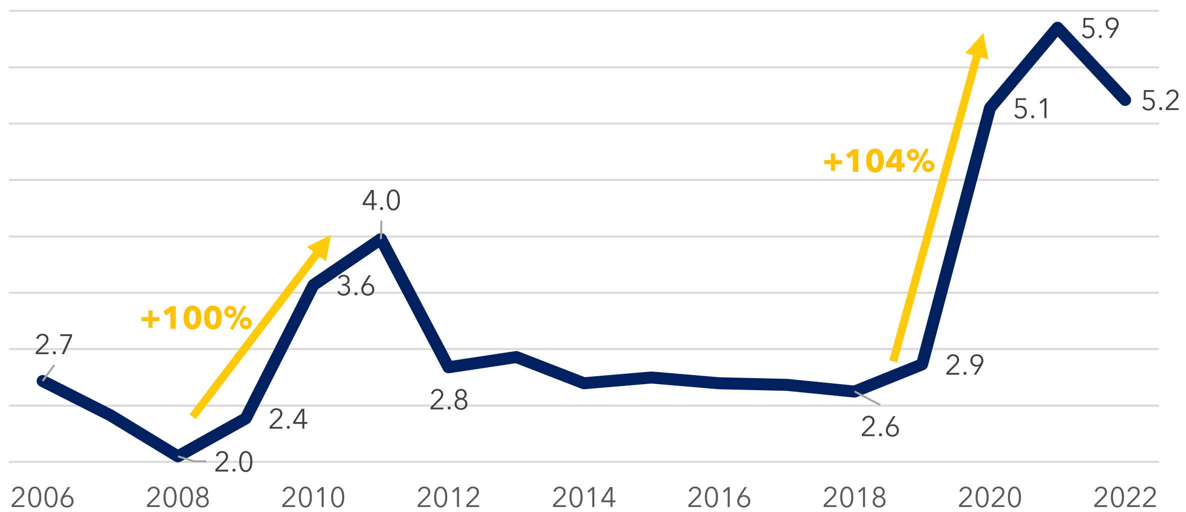
in as Covid guarantees phase out. Nonetheless, the number of outstanding guarantees remains at an extraordinarily high level.

Graph 3.6 : Development of the number of outstanding guarantees (in million units)



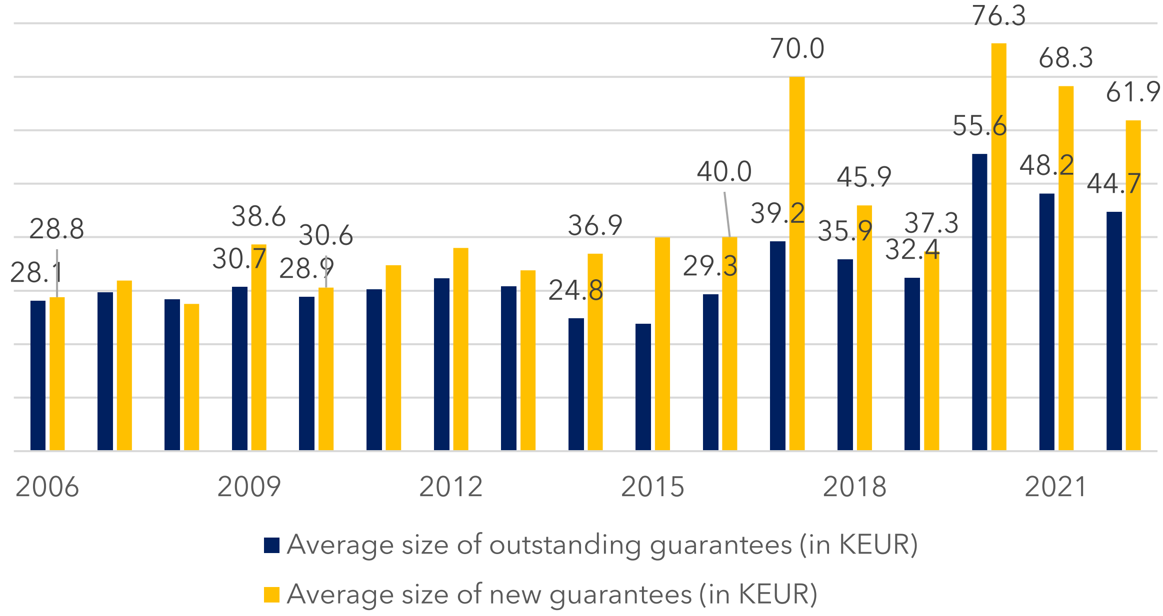
The development of the **number of SME beneficiaries** shows the **anti-cyclical role of guarantee institutions** even more impressively than the development of the outstanding guarantees does. During the world financial crisis, the SME portfolio of AECM members doubled (over three years). **During the pandemic, a 104% increase was experienced within two years**. The development between the two crises was very stable, as can be seen in graph 3.7 below. **As Covid guarantees phase out, the number of supported SMEs in the portfolios of our members starts to decrease, but remains at an exceptionally high level.**

Graph 3.7 : Long-term development of the number of supported SMEs (in million units)



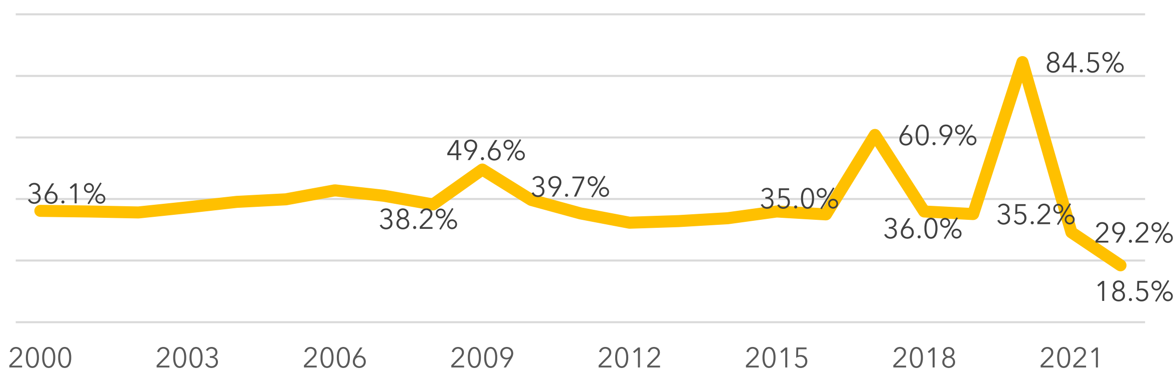
In 2022, we observe **a further slight decrease of both the average size of newly granted guarantees from kEUR 68.3 to 61.9 and the average size of outstanding guarantees from kEUR 48.2 to 44.7**, which is still well above its pre-pandemic level. This decrease reflects the phase out of Covid measures which were quite capital intensive.

Graph 3.8 : Development of the average size of outstanding and of new guarantees (in kEUR)



The last point to be mentioned in this sub-section on long-term developments is the **share of newly granted guarantees in the overall portfolio**. This share is usually around 1/3 of the outstanding volume with the notable exceptions of the financial crisis in 2009, the exceptional increase of the KGF/TR volume in 2017 and now the Covid-19 crisis. After each peak, the share decreased significantly and after both crises even below the pre-crisis level. In 2022, the share of newly granted guarantees in the total volume of guarantees in portfolio reaches with 18.5% an exceptionally low level. The exact development can be seen in graph 3.9 below.

Graph 3.9 : Development of the share of new guarantees in the overall portfolio



iii. Development of counter-guarantees

Total outstanding counter-guarantee volume

bEUR 12.9

Volume growth rate of

-1.0%

The average counter-guarantee size

kEUR 52.7

Outstanding counter-guarantees

13 AECM members[8] from eleven countries granted counter-guarantees in 2022. The **combined outstanding counter-guarantee volume of these members remained very stable in 2022 after a strong increase in 2020. It reached a level of bEUR 12.9 which represents a small drop of 1.0%**. The counter-guarantee volume is very much concentrated on the Iberian Peninsula representing 88.4% of the total. The strongest increases were experienced by SIAGI/FR (+161.5%), Bpifrance/FR (+37.7%) and Finnvera/FI (+19.0%).

The **decrease was more pronounced in the number of outstanding counter-guarantees (-6.3%). In 2022, AECM members had 244,133 units** of counter-guarantees in their portfolios. The **average size of a counter-guarantee increased from kEUR 49.9 to 52.7**.

New counter-guarantees

The **volume of newly granted counter-guarantees increased significantly (by +16.9%) in 2022,** but it remains far below the volume in the pandemic year 2020**. In 2022, a volume of more than bEUR 2.3 was newly issued by AECM members**. The **number of newly granted counter-guarantees decreased by 24.7% to a level of 25,850 units**. As a result of that, the **average size of newly granted counter-guarantees strongly increased from kEUR 58.5 to 90.9**.

[8] WE/BE, Finnvera/FI, NGF/BG, HAMAG-BICRO/HR, Bpifrance/FR, EDC/FR, SIAGI/FR, Garanzia Etica/IT, SBCI/IE, MDB/MT, BPF/PT, FRC/RO, CESGAR/ES.

iv. EU Financial Instruments

Total outstanding guarantee volume issued under ERDF

bEUR 4.9

Most heavily used programmes

ERDF and COSME

At least 29

AECM members are intermediating EU Funds

As COSME, InnovFin, CCS and EaSI are phasing out and InvestEU was not implemented yet in 2022, we did not collect data on outstanding guarantee volumes under these programmes. Volumes under these programmes should be now steadily decreasing from the volumes reported in last year's edition of the Statistical Yearbook.

As regards structural funds as well as the Pan-European Guarantee Fund (EGF), we continued our data collection. According to the results, ERDF is again the programme that is most heavily used by AECM members, due to the three most common Thematic Objectives (TO) in the funding agreements, namely: TO3 'Enhancing the competitiveness of SMEs', TO4 'Supporting the shift towards a low-carbon economy in all sectors' and TO1 'Strengthening research, technological development and innovation'. **Nine members from nine countries[9] have a combined total outstanding guarantee volume under ERDF of bEUR 4.9, which is a 8.1% increase vis-à-vis 2021.** The strongest users of the programme are HDB/GR, NRB/CZ and BPF/PT. The strongest increase was registered by ALTUM/LV (+97.1%), BGK/PL (+36.5%) and NRB/CZ (+28.2%). The aforementioned results indicate that the added flexibilities offered for financial intermediaries introduced in reaction to the Covid-19 crisis, such as the provision of standalone working capital finance for affected SMEs, helped the use of ERDF, enhancing the implementation of many instruments.

The **European Agricultural Fund for Regional Development (EAFRD)** was used by three AECM members from three countries[10]. **The guarantee volume issued by members under this programme increased by 7.1% to reach a level of mEUR 317.5**. Heaviest user is BGK/PL that also observed the strongest increase (+56.2%).

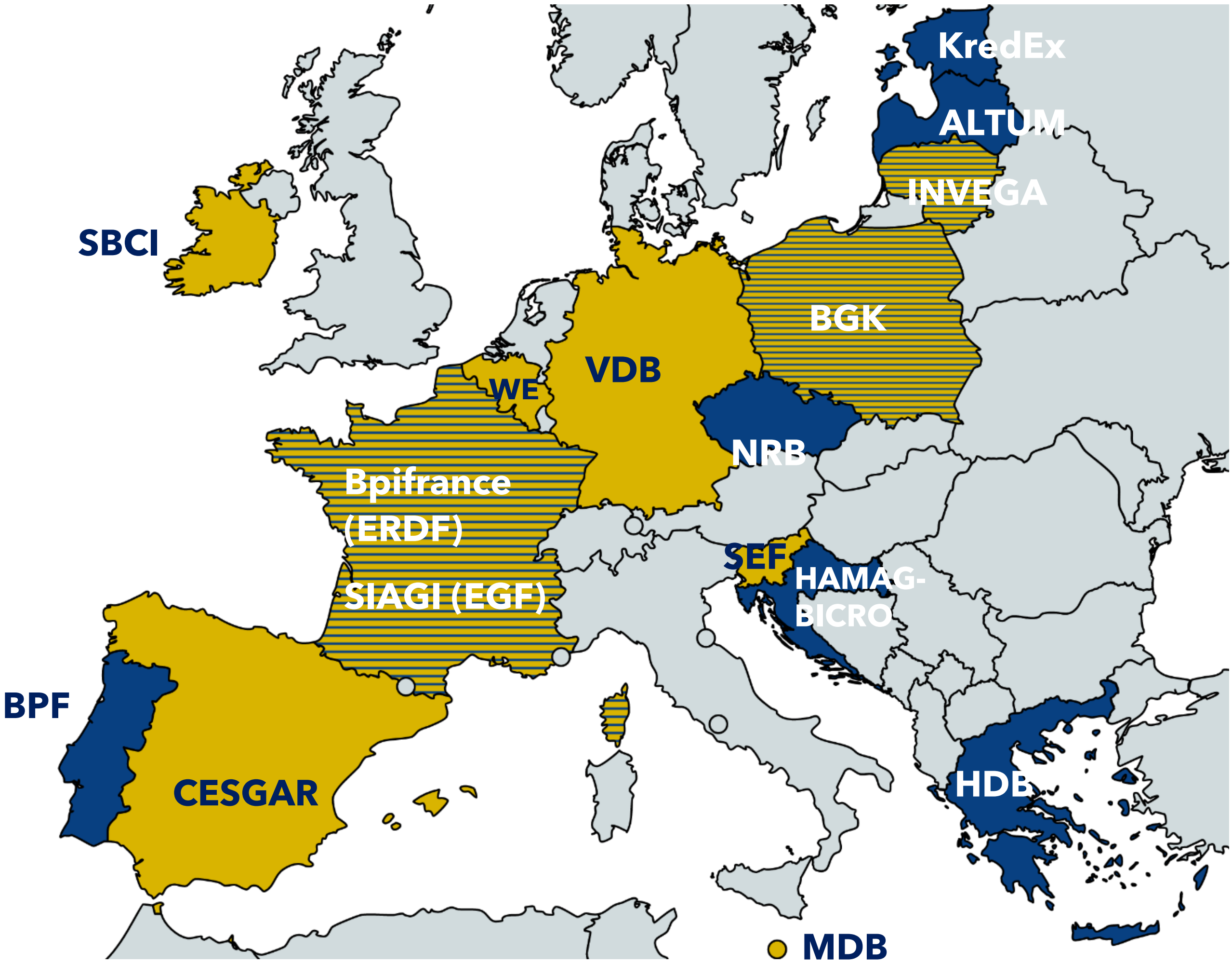
[9] HAMAG-BICRO/HR, NRB/CZ, KredEx/EE, Bpifrance/FR, HDB/GR, ALTUM/LV, INVEGA/LT, BGK/PL and BPF/PT.
[10] HAMAG-BICRO/HR, BGK/PL and FGCR/RO.

ESF was used by two members[11] and the outstanding guarantee volume issued under this programme increased from mEUR 1.3 to mEUR 11.6 (+815.6%).

We furthermore asked our members whether they are using funds under the **Recovery and Resilience Facility (RRF)** and only CESGAR/ES reported that a substantial share of its outstanding volume is counter-guaranteed by the RRF. HAMAG-BICRO/HR is using RRF for microloans and INVEGA/LT for equity products. ALTUM/LV will use RRF only from 2023 onwards to guarantee for loans on energy efficiency measures for apartment buildings.

Regarding the **EGF**, this programme was used by nine members from nine countries[12]. **The total outstanding guarantee volume under EGF increased substantially from mEUR 171.9 to bEUR 1.5**. All members registered very high growth rates as the programme just set off.

Graph 3.10 : Map of AECM members participating in ERDF (blue) and in EGF (yellow)



[11] MDB/MT and BPF/PT.
[12] WE/BE, SIAGI/FR, VDB/DE, SBCI/IE, INVEGA/LT, MDB/MT, BGK/PL, SEF/SI and CESGAR/ES.

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v. Agricultural Guarantees

Total outstanding agri guarantee volume

bEUR 21.2

Number of total agri-SME beneficiaries

192.2k

Volume of newly granted agri guarantees

bEUR 3.3

21

Members active in the agricultural sector

5

Agriculture-oriented guarantee schemes

The war in Ukraine has been deeply affecting the sector of agriculture. In fact, in 2022, the world has been experiencing the worst food crisis in generations. Small and medium-sized agricultural enterprises (agriSMEs) have been facing unprecedented pressure due to rising prices for food, fertilizer and fuel. In this difficult situation, AECM members stand again at the side of agriSMEs helping them to mitigate the crisis and supporting the long term food system transformation.

Thanks to the Commission's decision to allow Member States to use the flexibility foreseen under the state aid rules, namely the adoption of the Temporary Crisis Framework (TCF), AECM members were enabled to increase their steadfast financial support by offering guarantees with favourable conditions such as higher coverage rates, subsidised fees, increased volumes per final beneficiary, including advisory services.

In 2022, the number of AECM members that issued guarantees to agricultural firms remained stable counting 21 members out of 46: on the one hand, AECM welcomed the Organisation for Entrepreneurship Development (ODA) from Moldova. On the other hand, the Russian member FSECA was excluded from the association following the Russian invasion of Ukraine.

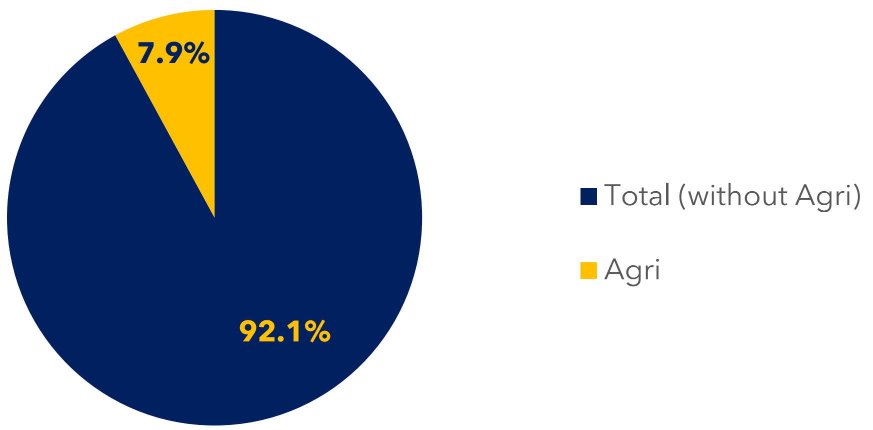
According to the 2022 Scoreboard Survey, AECM members taken as a whole, experienced an increase of agricultural guarantee volumes which reflects the above-mentioned extensive support offered to SMEs suffering from the consequences of the invasion of Ukraine. **AECM member organisations all together were supporting agricultural SMEs with a total amount of bEUR 21.2 of guarantees in 2022**. Compared to the year 2021, this represents an increase of 4.5%. The tendency among AECM members is however non-uniform. According to the survey for which data are available, twelve members experienced an increase in lending volumes compared to previous year, while seven registered a decrease. The highest percentage growth were registered by FNGCIMM/RO (1,3871.5%) followed by FGCR/RO (191.3%) and NGF/Bulgaria (158.7%). In case of FNGCIMM and FGCR, the impressive increase is due to AGRO IMM INVEST component of the IMM INVEST PLUS Programme adopted by the Romanian government in order to support businesses in the fields of agriculture, fishing, aquaculture and the food sector in the context of the economic crisis generated by Russian aggression against Ukraine. Under the aforementioned programme, FGCR and FNGCIMM have offered guarantees that cover up to 90% of the financing value, related to investments and working capital financing.

Contrary to the increase in the total amount of guarantees granted, **the number of outstanding agricultural guarantees remained stable. At the end of 2022, AECM members registered a total of 227.821 guarantees in their portfolios**, with positive growth in eleven out of 19 guarantee schemes for which data are available.

The highest percentage increase occurred in Romania (+9,393.5% for FNGCIMM) followed by Bulgaria (+203.8% for NGF). The highest number of outstanding guarantees is held in the portfolio of ISMEA/IT (135.932 units), followed by KGF/TR (23.535 units) and AVHGA/HU (23.010 units).

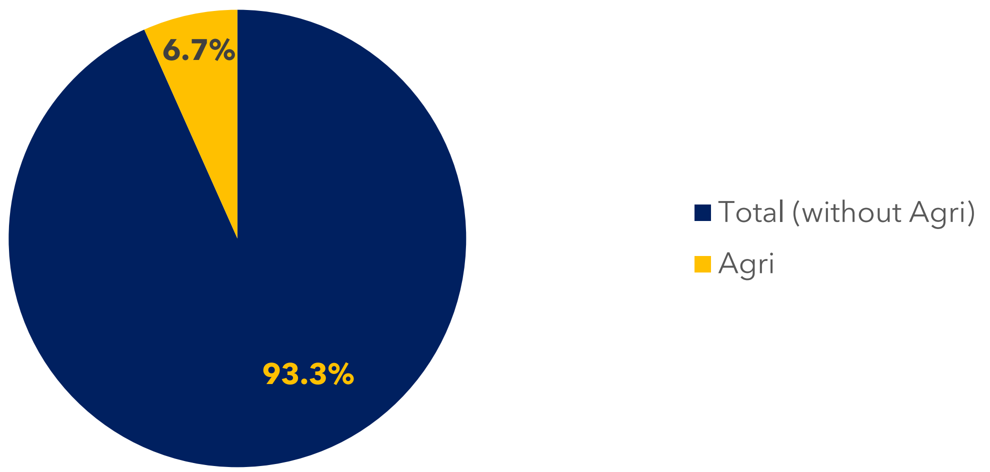
As the graph below shows, **the part of the outstanding agricultural guarantees per 2022 represents more than bEUR 21.1 which is 7.9% of the overall volume of outstanding guarantees**. If compared to 2021, the volume of outstanding agricultural guarantees as a share of the overall outstanding guarantee volume registered a growth rate of 1.4 %, reaching almost the same level as in 2020, when historical highs were recorded.

Graph 3.11 : Volume of outstanding agricultural guarantees as a share of the overall outstanding guarantee volume



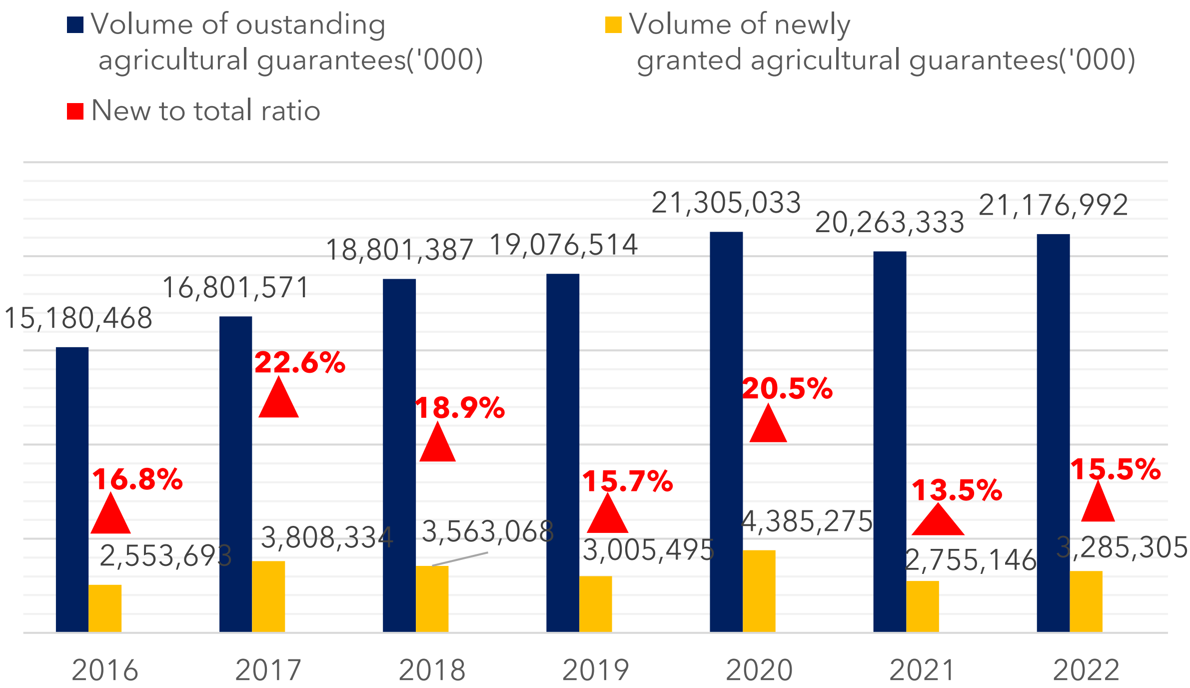
The newly granted agricultural guarantees amounted to more than bEUR 3.3 representing 6.7% of all newly granted guarantees in 2022. This is to say that the total volume of the newly granted guarantees increased by 20.1% in comparison to the year 2021. Members that registered the biggest percentage increase are FGCR/RO and FNGCIMM/RO. While the total volume of the newly granted guarantees registered an increase, the number of the newly granted guarantees decreased by 14.4% in 2022, reaching the lowest number ever registered of 32,460 units.

Graph 3.12 : Volume of newly granted agricultural guarantees as a share of the overall volume of newly granted guarantees



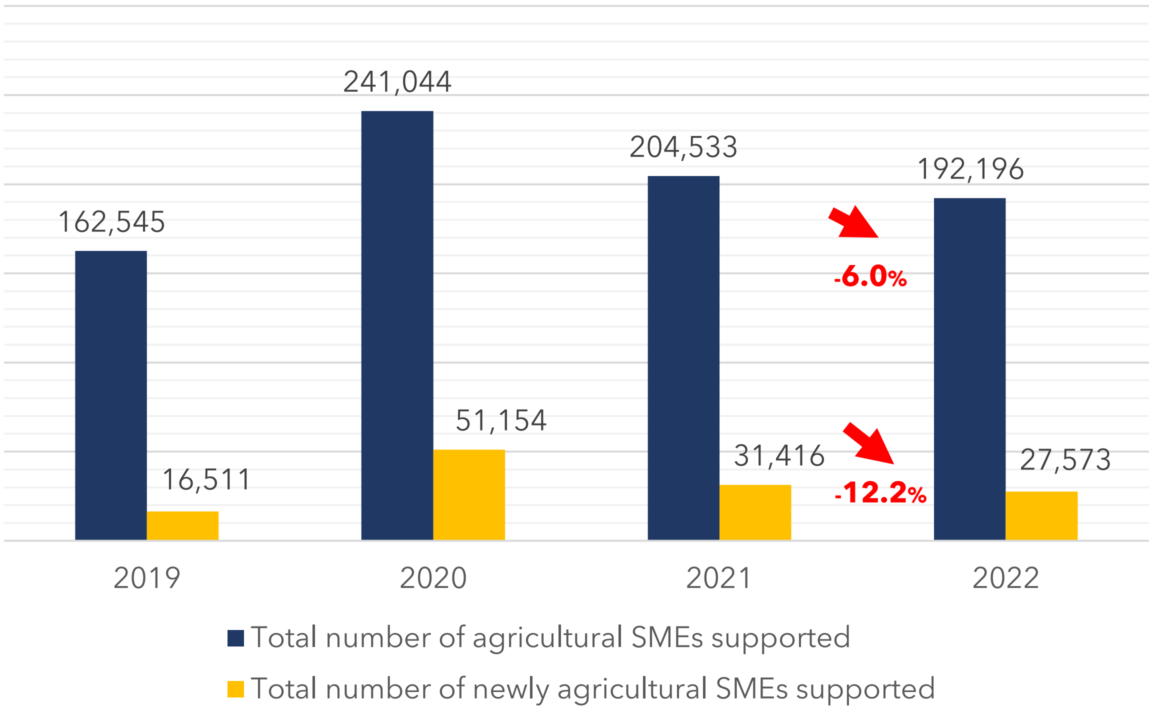
Further, the graph on the **evolution of agricultural data since 2016 shows that the volume of the outstanding agricultural guarantees had increased by 40.0%** between 2016 and 2022, reaching almost bEUR 21.2 in 2022. By contrast, the newly granted guarantees registered a rather fluctuating trend between 2016 and 2022. Upticks were registered in 2017, which was mostly due to the increase in figures of SIAGI/FR (134.0%) and VDB/DE (59.5%), in 2020 at the start of the Covid-19 crisis, and in 2022 as a result of the support offered to SMEs affected by the war in Ukraine. However, despite the historic highs of the total and newly granted guarantees reached in 2020, the new to total ratio remained highest in 2017.

Graph 3.13 : Volume of outstanding agricultural guarantees and newly granted guarantees compared to year-to-year progression



Regarding the number of SME beneficiaries, during the year of 2022, AECM members supported a total number of 192,196 agriSMEs, out of which 27.573 were new SMEs beneficiaries. If compared to the previous year, the total number of supported SMEs decreased by 6.0%, whereas the number of newly supported SMEs decreased by 12.2%, remaining however comfortable above pre-pandemic level. This clearly denotes that the Covid-19 pandemic was the strongest driver of demand for finance in the agriculture sector.

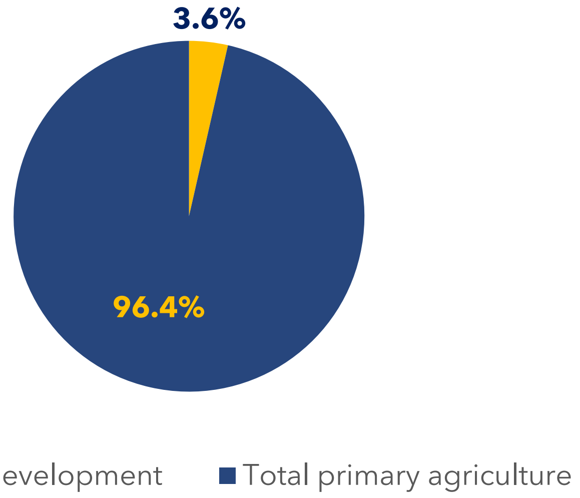
Graph 3.14 : Total number of SMEs and newly SMEs supported in portfolio



Apart from financing primary agricultural production of food and non-food products and the production of food of non-agricultural origin (e.g. synthetic meat), AECM members also support rural development activities by granting guarantees for activities aiming at maintaining the economic and social infrastructure of rural areas.

This year again, we asked our members to distinguish between the volume of outstanding agricultural guarantees in the area of primary agriculture and those in the area of rural development. According to 13 replies, **the total volume of guarantees for rural development activities in 2022 amounted for kEUR 699.679** representing 3.3% of the total volume of the aggregated portfolio of AECM members, for which data are available. **89.4 % of the volume was invested in primary agriculture (i.e. bEUR 18.9).**

Graph 3.15 : Distinction between outstanding guarantee volume in the area of agriculture and in the area of rural development



Turning to the **agriculture-oriented guarantee institutions** (AVHGA/HU, ISMEA/IT, Garfondas/LT, Agrogarante[13]/PT and FGCR/RO), the graph below shows the breakdown of total portfolio by each of these AECM members.

If compared to the previous year, in 2022, two agricultural-oriented guarantee institutions registered a decrease of their portfolios, while three witnessed an increase in total volume of guarantees granted.

Agrogarante/PT observed a negative evolution of the outstanding guarantees volume comparing to previous years when historical highs were reached, remaining however well above pre-pandemic level. The trend for 2022 is due to the phase out of the guarantees offered under the Temporary Framework.

AVHGA/HU indicated an increase in its guarantee activity of 6.5 % compared to year 2021. The aforementioned growth was driven by the continuation of implementation of the so-called Crisis Agricultural Guarantee Programme rolled out in accordance with the Temporary Framework. The programme was intended to facilitate access to finance for agriculture-oriented SMEs for their investments and working capital needs until 30 June 2022. Besides, in order to help agriSMEs affected by the war in Ukraine, AVHGA has been implemented the second Crisis Agricultural Guarantee Programme, this time under the Temporary Crisis Framework.

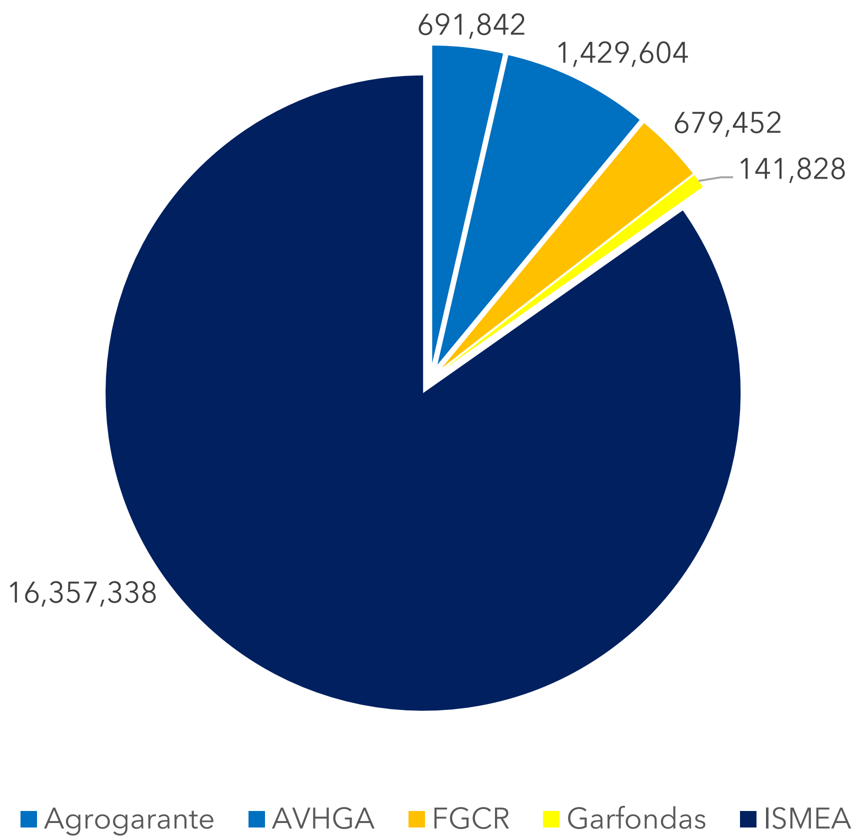
Similarly to the above mentioned agricultural-oriented guarantee schemes, also **Garfondas/LT** has set up dedicated scheme to support SMEs to overcome the consequences of the war in Ukraine. In 2022, Garfondas increased its volume of outstanding guarantees by 24.7% reaching a total volume of kEUR 141.828. This is the highest increase since 2018, when we started to collect the agri data.

[13] Agrogarante is the agricultural guarantee scheme integrated in AECM member BPF/PT.

Like in previous years, **ISMEA/IT** remains the biggest agriculture-oriented scheme, accounting for 85% of the guarantee volume of the five agriculture-oriented guarantee institutions. In 2022, ISMEA had a total volume of outstanding guarantees of more than bEUR 16.4 registering a minor decrease of 1.1% compared to 2021. Like other members, our Italian agrioriented member offered targeted support to agriSMEs affected by the war in Ukraine by granting 100% with no fee guarantees under the Temporary Crisis Framework.

Regarding **FGCR/RO**, the agri-oriented guarantee scheme increased its guarantee activity by 191.3% compared to the previous year. This is the highest increase registered by the Romanian Rural Credit Guarantee Fund since 2018, when we started to collect the agricultural data. The historical high is due to the implementation of the state aid scheme associated with the RURAL INVEST and AGRO IMM INVEST components of the IMM INVEST PLUS Programme adopted by the Romanian government in order to support businesses in the fields of agriculture, fishing, aquaculture and the food sector in the context of the economic crisis generated by Russia's aggression against Ukraine. Under the aforementioned components, FGCR offers guarantees for both, investment loans and working capital loans with a maximum coverage rate of 90% of the financing value.

Graph 3.16 : Volume of Outstanding Guarantees of the agriculture-oriented guarantee schemes at 2022 year-end



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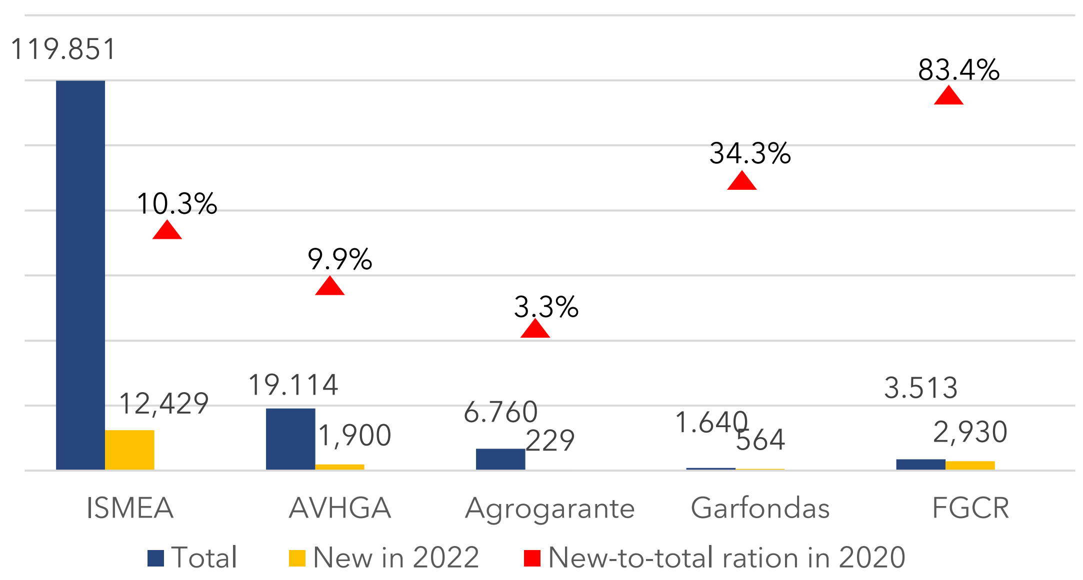
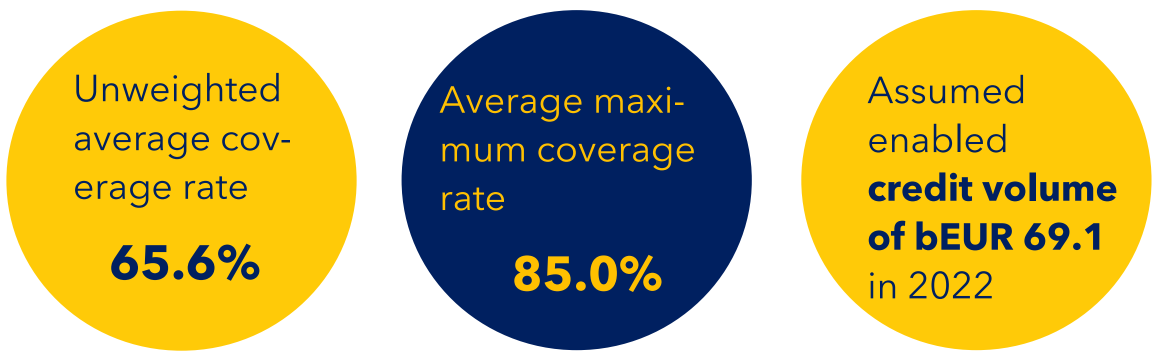
Turning to **SME beneficiaries, during 2022, the five agricultural-oriented guarantee institutions supported a total number of 150,878 agriSMEs**. Out of these, 18,052 were new SME beneficiaries. Survey data indicate that the number of the supported SMEs, both old and new ones, declined in 2022. The strongest increases in the number of old and newly supported SMEs were registered by FGCR/RO, where the number of beneficiaries increased 5.8 times.

Graph 3. 17 : Total (at year-end) and newly included (during 2022) agricultural SME beneficiaries (in units)



vi. Coverage Rate

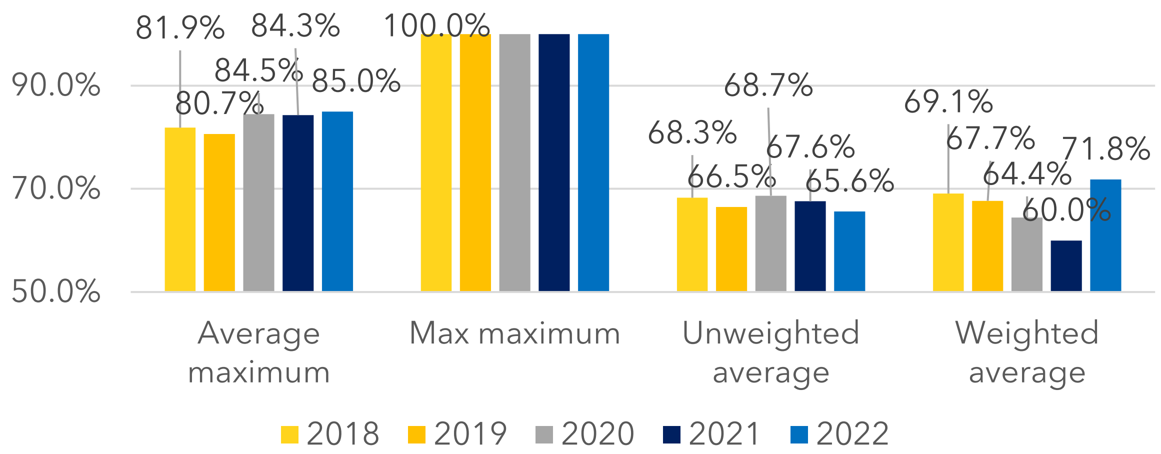


The shares of SME loans that are covered by our respective members remained relatively stable over the previous four years. The **maximum coverage rates** ranged (as for the four previous years) from 50% to 100% with an **AECM average that**

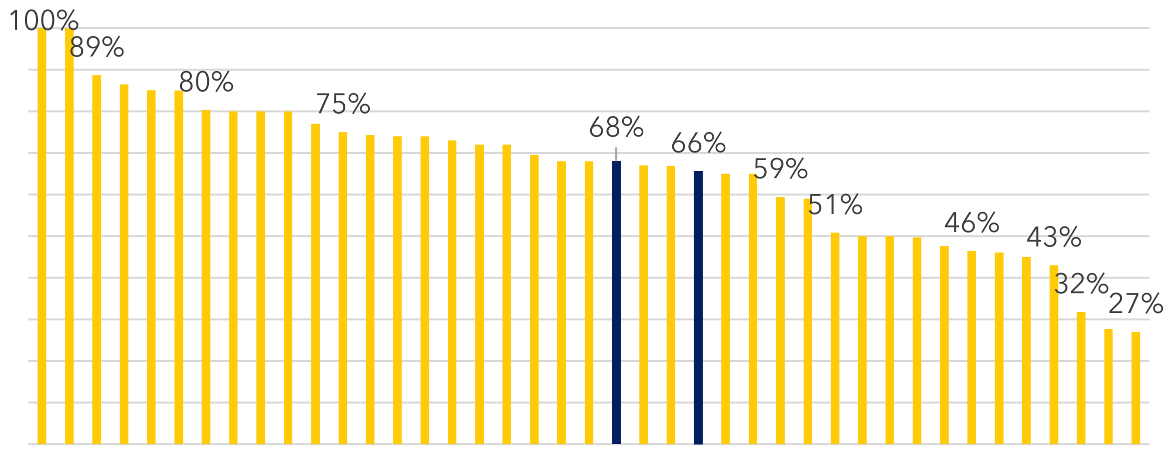
strongly increased in 2020, but was still outstripped by the 2022 average of 85%, the highest level ever registered. Four members increased the maximum coverage rate for their guarantees and three of them decreased it. The number of members that offer 100% guarantees (as a maximum, not necessarily as a rule) increased from 7 in 2021 to 9 in 2022 in accordance with the introduction of higher coverage rates under the Temporary Crisis Framework for Ukraine measures.

The **unweighted average coverage rate further decreased from its 67.6% in 2021 to 65.6% in 2022, falling even below its pre-pandemic level**. Average rates ranged from 27 to 100% as can be seen in graph 3.19. **The AECM average of average coverage rates weighted by the volume of newly granted guarantees amounted to 71.8%, up from 60.0% in 2021**. However, it is important to treat these numbers with caution as coverage rates are not communicated by all members, and they are naturally strongly biased by the coverage rates of members with large volumes of newly granted guarantees. The following graphs give an overview of the development of coverage rates over the past four years and of the distribution across members.

Graph 3.18 : Development of coverage rates between 2018 and 2022

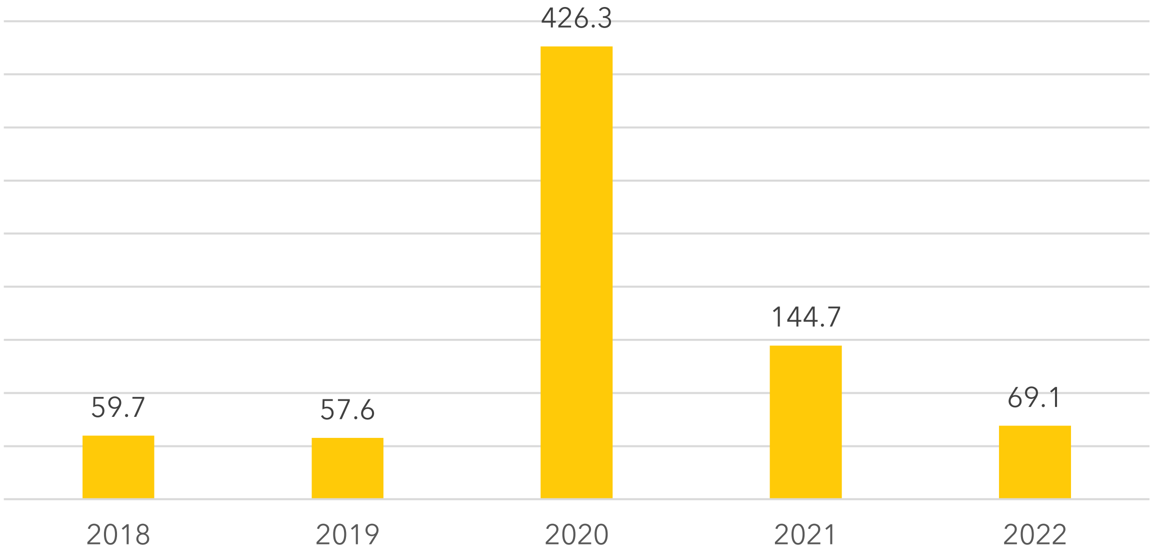


Graph 3.19 : Average coverage rates in 2021



We use data on the average coverage rates as well as on the volume of newly granted guarantees in 2022 to extrapolate the approximate enabled credit volume. For members who did not report on their average coverage rate we used the AECM unweighted average as a proxy. As a result, we find that **AECM members enabled a total credit volume of around bEUR 69.1 in 2022**. The whole investment volume that was enabled by our members' guarantees is of course much higher, but we do not dispose of adequate data to calculate it. The enable credit volume in 2022 is much lower than in Covid years, but significantly higher than in the pre-pandemic period. The following graph gives an idea about the most recent development.

Graph 3.20 : Assumed enabled credit volume (in bEUR)



IV Guarantee Activity Survey

This time, the Guarantee Activity Survey was undertaken in continuously difficult times. **As SMEs just exited the pandemic and were hoping for a swift recovery, many were hit hard by the outbreak of the Russian war and its impact on energy prices and supply chains**. Just as during the covid crisis, guarantee institutions rolled out comprehensive support measures aiming to stabilise viable companies.

All in all, 41 out of 45 members replied to the survey which corresponds to a record response rate of 91%.

The **Ukraine crisis has a strong impact on the results of our survey**. While a majority of members expects the general business prospects for SMEs and SME bank financing to remain stable, the guarantee activity of our members is largely expected to increase. But also default rates.

A preview of the results have already been published in February 2023. The following section will present a more detailed view on the results including a comparison with results of past surveys.

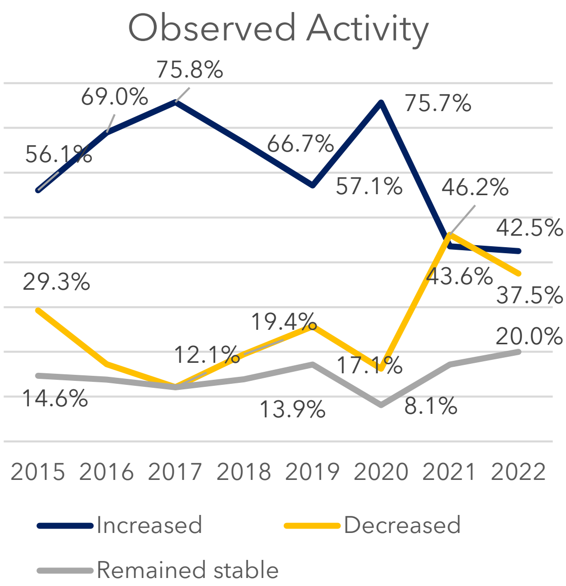
i. Guarantee Activity

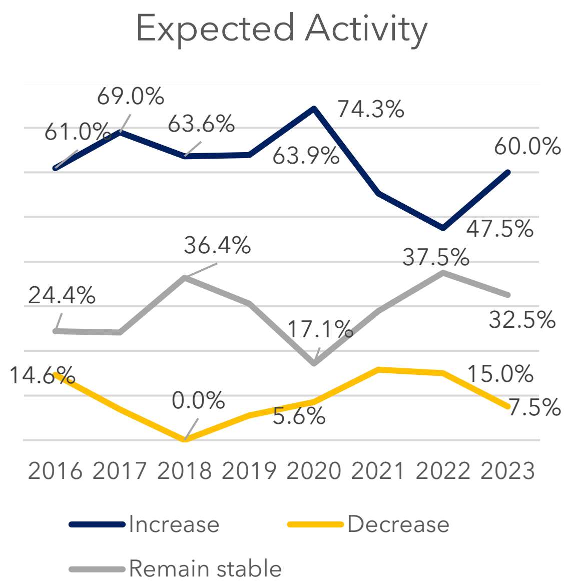
A tight majority of AECM members (42.5%) observed an increase in the guarantee activity in 2022, but almost as many members observed a decrease (37.5%). We observed the lowest level of observed increase of activity and the highest level of stabilisation since the introduction of this survey in 2015.

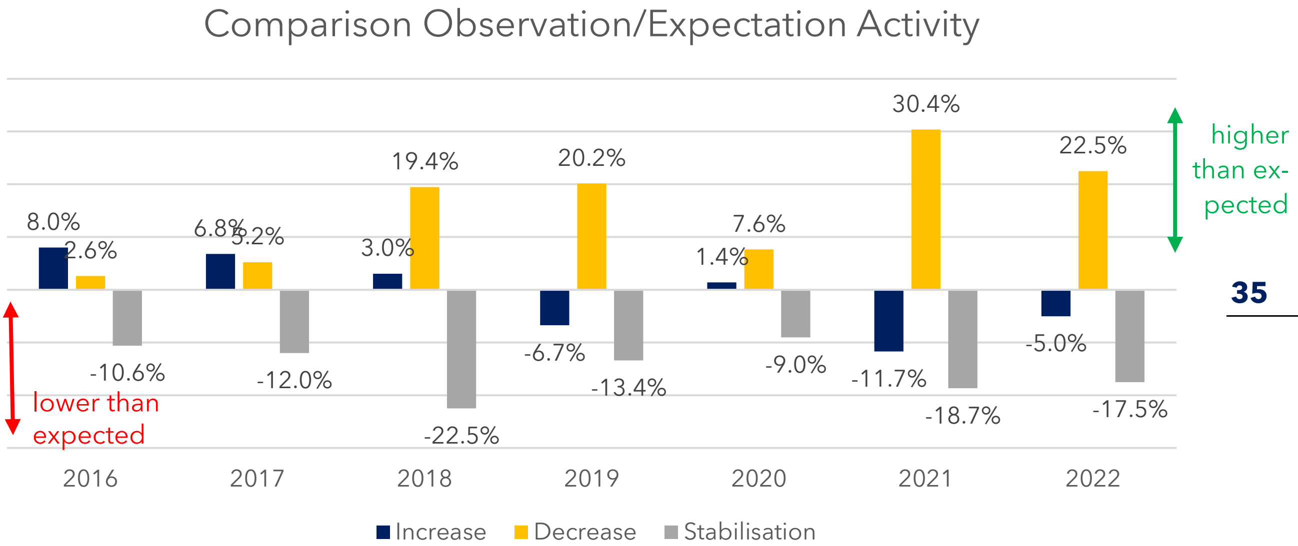
Comparing the observation of the activity in 2022 with the expectation that members expressed in the previous survey, we note that this development somewhat comes as a surprise as the decrease in activity is more than 20% higher than expected and the stabilisation is 17.5% less than previously expected.

Regarding expectations for 2023: while **60% of members expect the guarantee activity to increase, less than 10% expect a decrease. This is likely due to the increased financing needs of SMEs facing energy crisis and twin transition.** Please see the detailed results below.

Graph 4.1 : Observed (left) and expected (right) guarantee activity as well as the comparison (below) of expectation with the respective effective observation

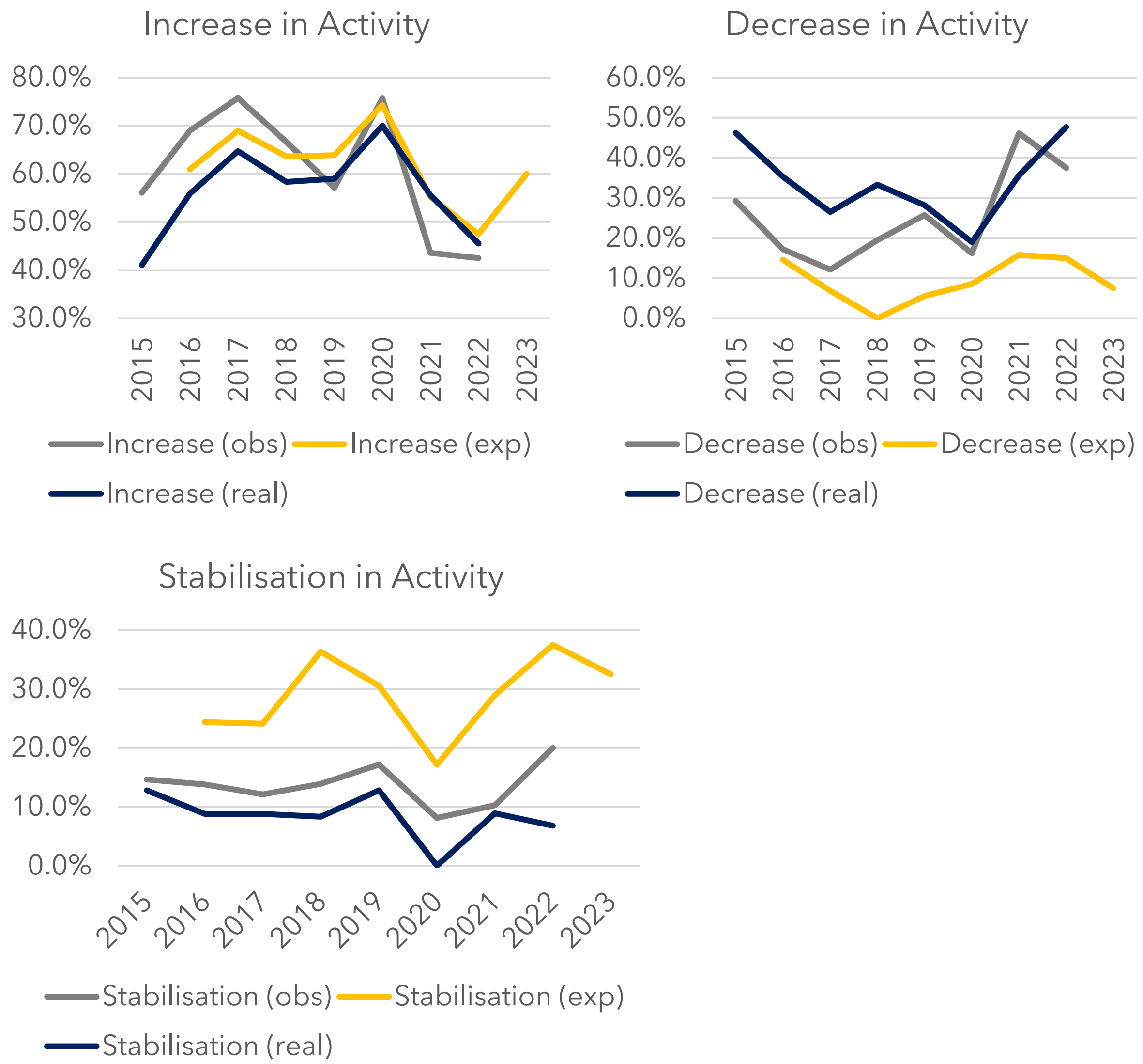






Graph 4.2 compares the observations and the expectations for the activity in a specific year with the real outcome according to the Scoreboard survey. Whereas the real increase was always very close to the observed and the expected increase, real decreases were usually higher than the observations and the expectations. For stabilisations, the real outcomes were always close to the observations but far below expectations.

Graph 4.2 : Comparison of expected and observed developments in the guarantee activity with the effectively measured developments



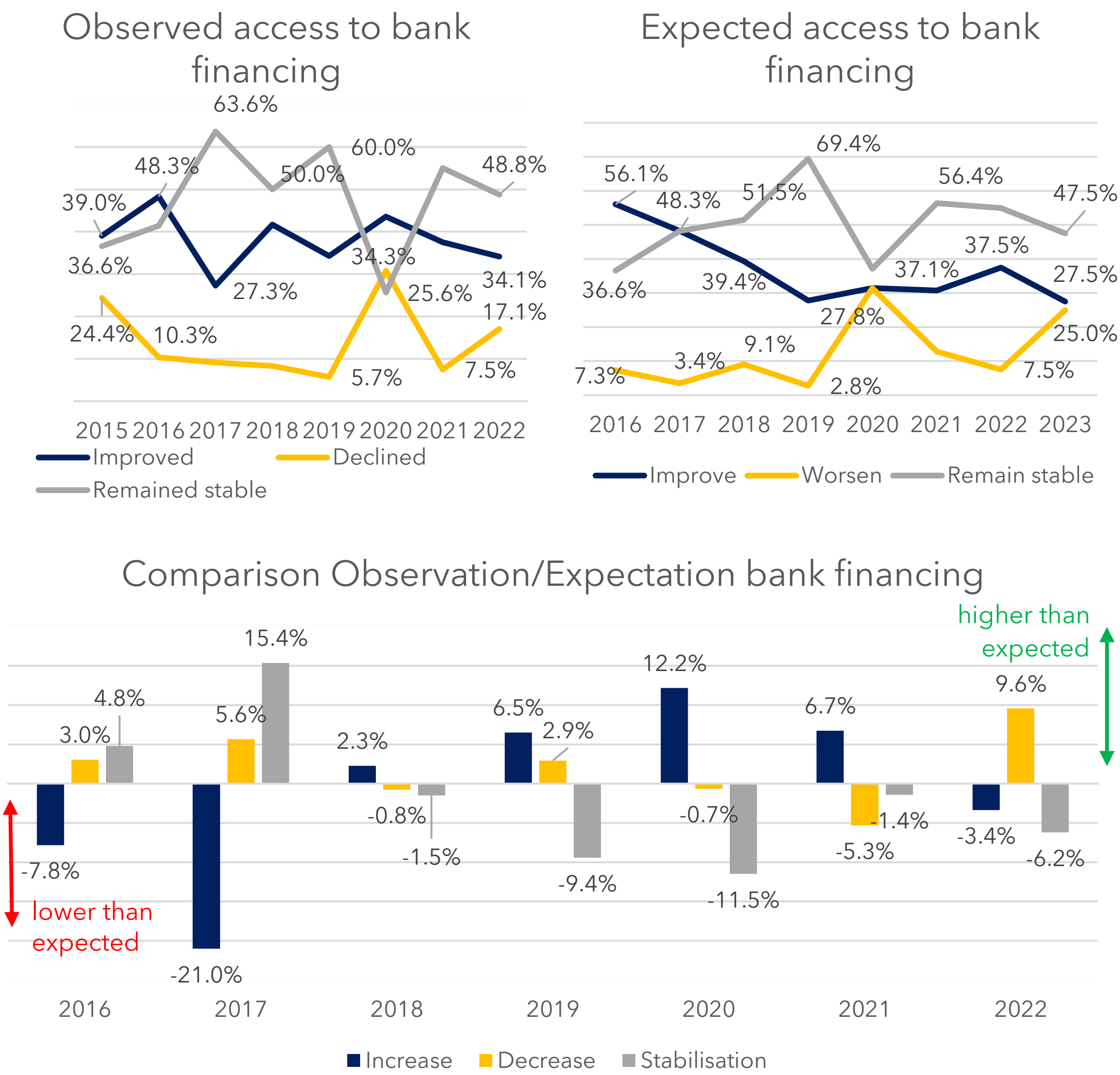
ii. Bank Financing for SMEs

A majority of participating guarantee institutions, almost 50%, observed a stabilisation of bank financing for SMEs in 2022. One third of respondents saw that SMEs' access to bank financing improved in the same year and despite the continuous crisis situation, only 17% observed a deterioration of access to finance. This stable situation in access to finance for SMEs is also a credit to the dedicated activity of guarantee institutions.

Compared to the expectation for 2022 in 2021, the deterioration of access to bank financing was observed to be almost 10% higher.

For 2023, a similar share of AECM members expect SMEs' access to bank financing to remain stable. Nonetheless, respondents are less optimistic for 2023 than they were for 2022. **The share of members that expect access to bank financing to worsen more than tripled with regard to last year. The reason for this more pessimistic view might be the uncertainty linked to the Russian war as well as increasing interest rates in a high inflation environment.** Have a look at the detailed results in graph 4.3 below.

Graph 4.3 : Observed (left) and expected (right) access to bank financing for SMES as well as the comparison (centre) of the expectation with the respective effective observation



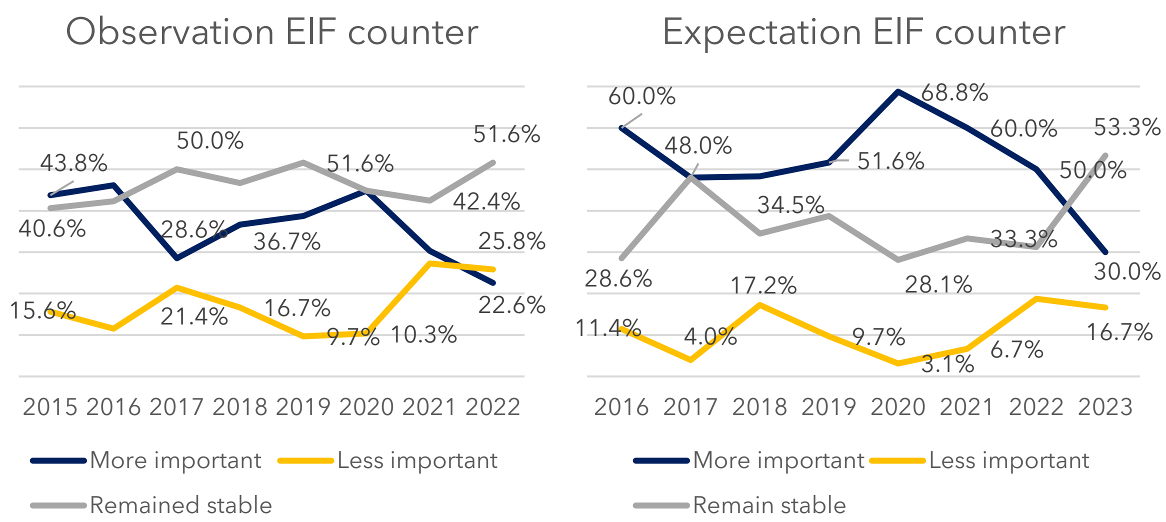
iii. EIF Counter-Guarantees

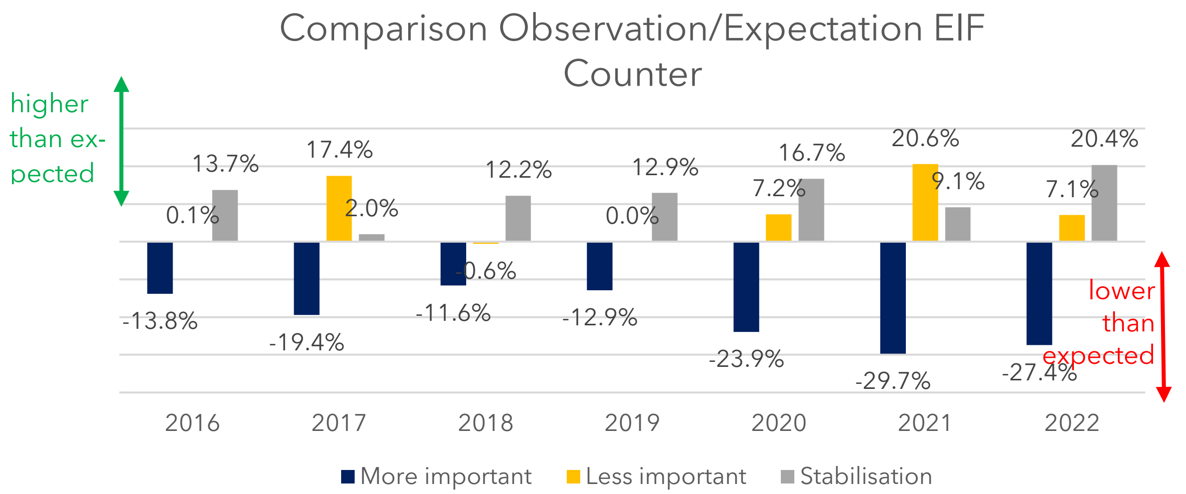
Observations on the development of EIF counter-guarantees point to a further tightening of EIF counter-guarantee supply. The share of members that expect the utilisation of EIF counter-guarantees to decrease remains at its highest level of around 26%. The share of members that expect an increase continued its descent and reach with 22.6% the lowest ever registered point. The reasons are that (1) the financing instruments under the previous Multiannual Financial Framework (such as COSME, InnovFin, etc.) came to an end, (2) the difficulties that members encounter with the intermediation of the new InvestEU products as well as (3) the too low budgetary allocation of InvestEU.

Expectations for the development of EIF counter-guarantees were very far from being met. For 2022, it became clear, that expectations for an increased importance of EIF counter-guarantees were by almost 30% lower than effectively observed and this already for the second year in a row. This mirrors the hurdles that our members encounter in the intermediation of InvestEU.

Regarding the year 2023, for the first time since we launched our Guarantee Activity Survey, more AECM members predict the utilisation of EIF counter-guarantees to remain stable than to increase. The number of respondents that expect the utilisation of the EIF counter-guarantee to become less important remains above 15%.

Graph 4.4 : Observed (left) and expected (right) use of EIF counter-guarantees by the respective institutions as well as the comparison (centre) of the expectation with the respective effective observation

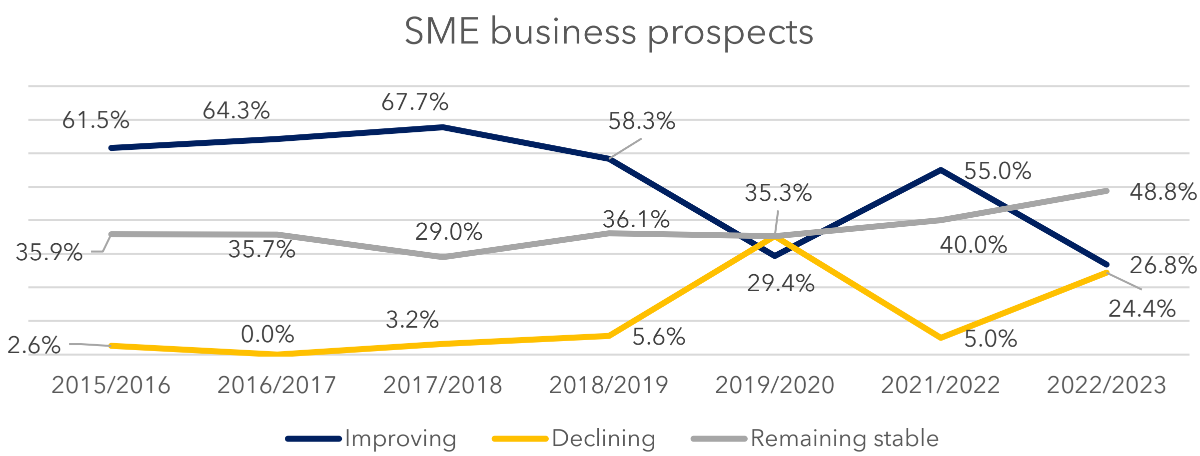




iv. Business prospects

According to the respondents of our Guarantee Activity Survey, **almost half of AECM members see the business prospects for SMEs in their respective countries remaining stable**. One quarter sees an improvement and another quarter sees a decline. This represents a net deterioration with respect to the perception last year as the number of members expecting business prospects to improve halved and the number of members that fear a decline multiplied by factor five. We are back at a similar situation as in 2020 when the covid pandemic broke out. The reason for this development is the high uncertainty due to the Russian war in Ukraine which has strong negative effects on energy prices, supply chains, etc.

Graph 4.5 : General business prospects for SMEs in the respective country



v. Focus in 2023

***"Continuing current business"* is again the most frequently mentioned focus of AECM members in 2023.** The share of members mentioning this priority, however, decreased from 85.4% to 78.0%. Only during the pandemic year 2020, this priority was not the most frequently mentioned one. The second priority is "new guarantee products" mentioned by 65.9% of respondents.

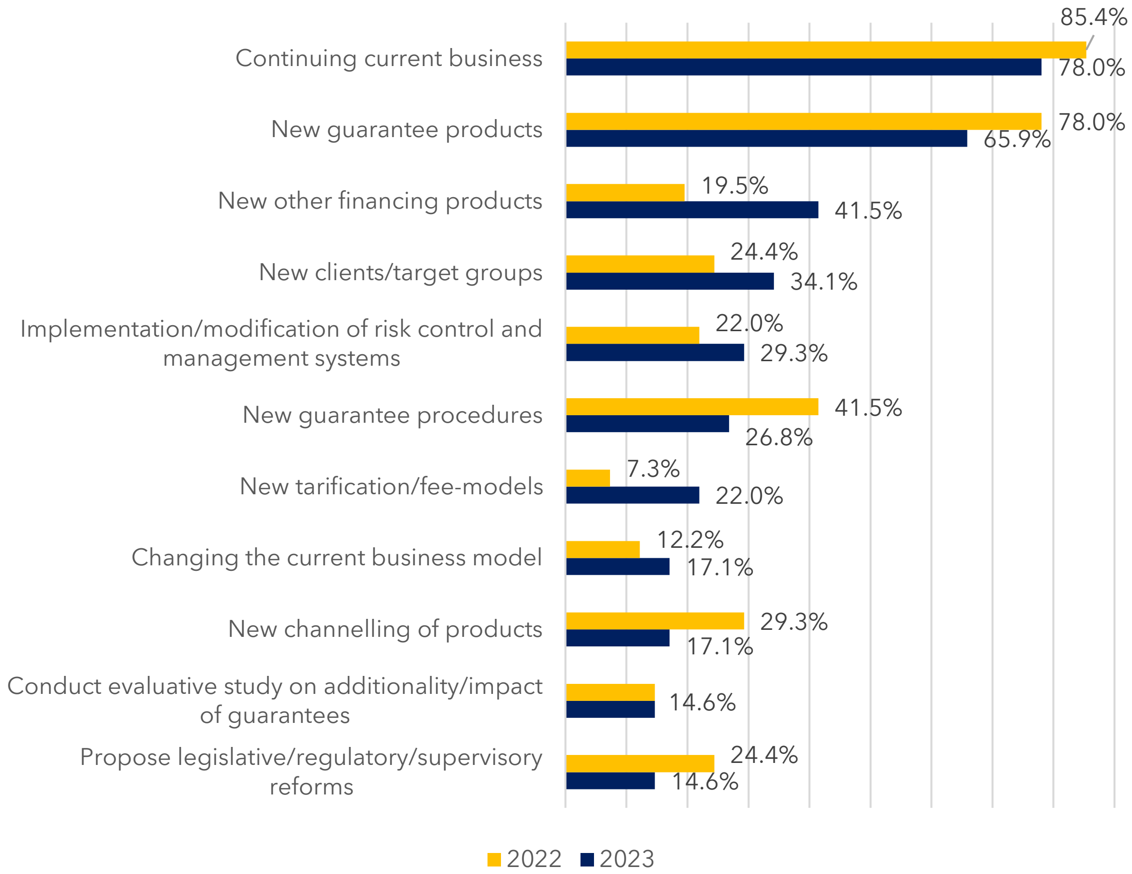
There are quite some priorities that gained in significance with respect to last year. The most notable examples are the following:

- *New other financing products* (41.5%, up from 19.5%)
- *New tariffication/fee models (22.0%, up from 7.3%)*
- *New clients/target groups (34.1%, up from 24.4%)*

A significant drop in importance could be observed for the priorities *"New guarantee procedures"* (26.8%, down from 41.5%) and *"New channelling of products"* (17.1%, down from 29.3%).

Please have a look at the detailed results on the question about priorities below.

Graph 4.6 : AECM members' focus for the years 2022 and 2023



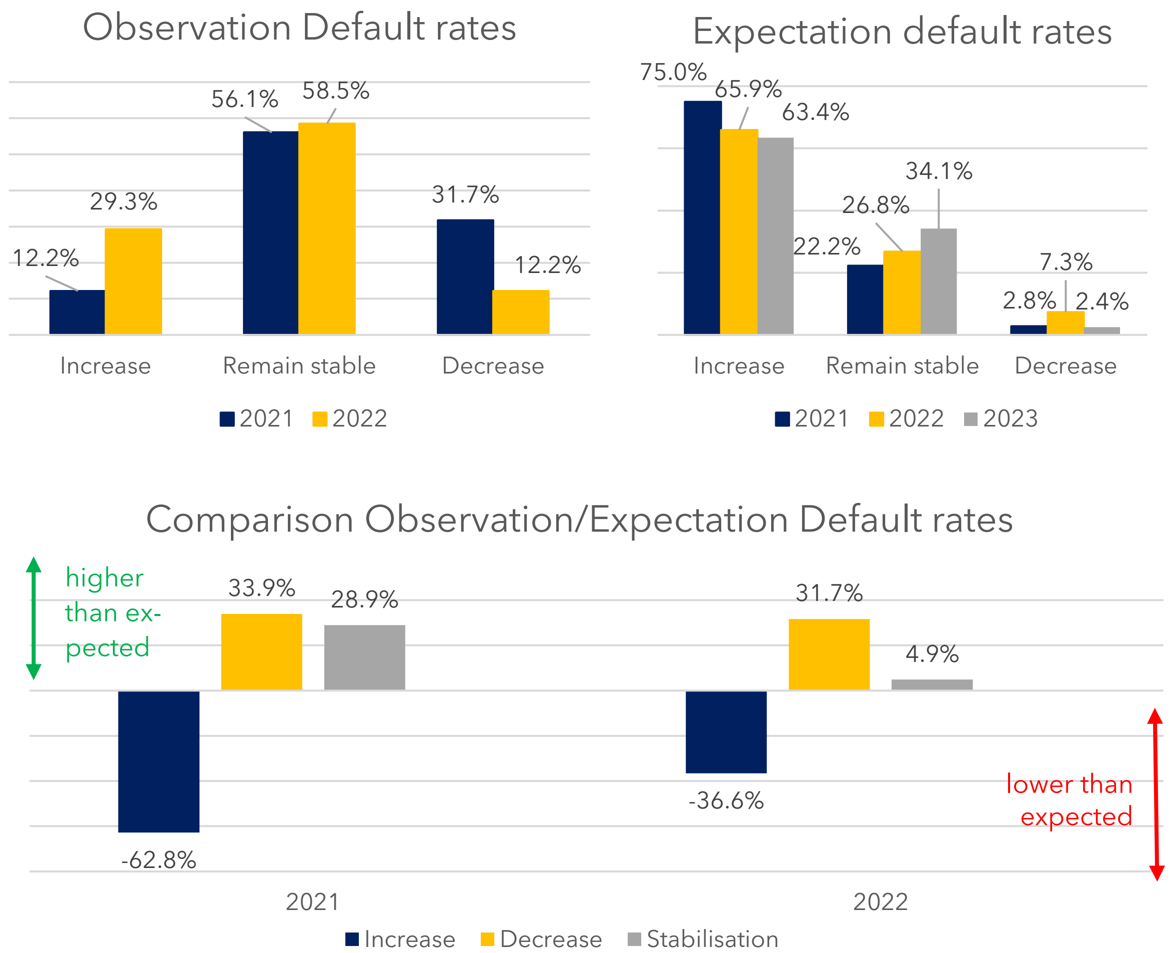
vi. Default rates

In 2022, almost one third of AECM members observed an increase in default rates, but the vast majority of almost 60% did not observe significant changes in the default rate. 12.2% of members even noted a decrease in default rates.

For 2023, however, guarantee institutions are very pessimistic. 63.4% of respondents expect the default rates to increase and only 7.3% expect a decrease. This is in line with expectations for the previous years. As we are stumbling from one crisis to the next, the fear of an insolvency wave remains at a high level.

If we compare observations with the expectations that members expressed previously, we see that in 2022 worries about an increase in the default rate did not materialise but remained 36.6% below the expectation. However, this comes after the year 2021 when the increase in default rates remained even 62.8% below expectations. It seems that the feared increase sets in gradually, but as for now, not to the extent dreaded by AECM members.

Graph 4.7 : Observed (left) and expected (right) development of default rates between 2021 and 2023 and the comparison of the expectation with the respective effective observation (below)



vii. Comments

As every year, we asked our members to tell us more about the development of the guarantee activity within their respective organisations. This year the focus was on the consequences of the Russian War on the respective national economies. Here are their replies:

- **aws'/AT** priorities for 2023 are to finalise a counter-guarantee agreement under InvestEU, to develop a new guarantee product for working capital and to offer better conditions for guarantees for sustainable projects.
- **MCGF/AZ** reports about increased prices as the customers and suppliers of some SMEs are mainly in Russia.

  For 2023, **MCGF** plans to implement a portfolio assurance mechanism and a guarantee on corporate bonds.
- **PMV Standaardwaarborgen/BE** sees a negative impact on the economy due to raising energy costs, heavy inflation and a tight labour market.

  For 2023, they are planning to develop guarantees for agriculture and alternative financing institutions (crowdlending) and they are launching a hybrid product combining a loan from PMV with a bank loan under a portfolio guarantee. The distribution of this product will be fully delegated to the financial institution.
- Our member **Wallonie Entreprendre/BE** is quite concerned about 2023 even if for the moment most SMEs seem to be getting through this new crisis.

  WE's priorities for 2023, are to set up digitisation and green transition guarantees, guarantees for large companies and to increase the amounts of automatic guarantees (where the credit decision is delegated to the financing banks).
- According to our member **HAMAG-BICRO/HR,** SMEs are affected by inflation, energy prices and on the market one can see that a number of micro entrepreneurs have problems with liquidity and have decided to close their business (hair dressers, beauty salons). Also SMEs that have gas stations have the same problems. Their profit margins are very low or they are making losses.

  For 2023, **HAMAG-BICRO** plans new programmes for the new programming period 2020-2027. These new national guarantees include portfolio guarantees for agriculture.

- **NRB/CZ** reported about high energy prices negatively affecting business sector as a whole and about high inflation as economical problem of high importance.

  It is currently preparing a new product for the financial period 2021-2027 (ESIF, InvestEU, national recovery plan).

- **KredEx/EE** observes a very clear and significant pressure on turnover and profitability through inflation, demand and inputs (energy, raw materials).

- The year 2023 will most likely be more difficult than the previous year for Finnish SMEs, according to our member **Finnvera/FI**.

  During H1/2023, **Finnvera** plans to launch InvestEU products (direct lending arrangements with a direct guarantee from the EIF).

- **Bpifrance/FR** reported on the first direct loan implemented in cooperation with the European Commission under InvestEU.

- **EDC/FR** does not see any impact of the Russian war on its activities.

- **SIAGI/FR** informs that small enterprise will need short term credit facilities to finance their working capital due to the material and energy cost increases. It responds to this need by providing guarantees to reinforce the working capital.

- **SOCAMA/FR** reports that enterprises are confronted with the energy crisis. Certain activities are more impacted, such as nutrition, dry cleaning and spa. The government has announced support measures in January and **SOCAMA** informs SMEs about these measures and directs them towards those structures that can help them.

  For 2023, Banque Populaire is envisaging to set up a green loan product that will be then guaranteed by **SOCAMA.**

- **HDB/GR** states that the war in Ukraine had an impact on the activities of Greek SMEs that are heavily affected by energy prices and the prices of raw materials that are used. Furthermore, the inflation rise has limited the purchasing capacity of households that results in lower consumption and thus, lower turnover for SMEs.

- According to **TMEDE/GR**, the fear of the financial institutions is focused on the more general effects of the development of prices, which will hit the expected income of businesses and may break the investment activity in a critical period when they expected a return to normality after the easing of the pandemic. The Russian war has had a profound impact on the guarantee business and its evolution in recent months. This is due to the economic consequences of the conflict, such as energy prices, supply chain disruptions and inflation, which have all played a part in the altered landscape of the guarantee business. The Ukrainian crisis is coming to seal the upward trend of inflation, which will affect the ability of entities to service their obligations, but also the prices of raw material supply, stopping the upward trend of the Greek GDP. The aim is for the effects to be short-term and not to take on more permanent characteristics. The European Central Bank's support measures will contribute through the Greek bond purchase programme, which is estimated to continue providing liquidity to the banking system. In particular, a double package of interventions is being promoted: four institutional ones for the continuation of projects and one of a technical nature - with extension of deadlines. The four institutional interventions are:

– Release of project revision rates

– Pricing of asphalt, PVC and polyethylene in an accounting manner

– Establishment of project completion premiums

– Activation of a Public Works price determination committee.

Also, the project execution deadline is extended up to 6 months. With these actions, the Ministry of Infrastructure and Transport motivates the contractors to continue and complete the projects, since the premium will only be given to completed projects without any delays. At the same time, as the ministry maintains, with the five interventions, the necessary breathing space is provided to the market by prolonging the projects without the risk of legal entanglements. That said, **TMEDE** is confident that its business will remain stable with an upward trend for 2023 given also the fact that **TMEDE**'s expansion in new financial products and innovative collaborations (e.g. EIF) ensures the constant growth of the institution.

TMEDE launched its new ERP (Enterprise Resource Planning) system in January 2023. It is a comprehensive, integrated system designed to streamline and automate business processes. It combines all the essential components of business operations into one integrated platform, enabling **TMEDE** to manage resources more efficiently and productively. **TMEDE**'s new ERP system is designed to be user-friendly and intuitive, so that one can quickly and easily access the needed information. It is also highly customisable, allowing to tailor the system to specific needs. In addition, it is designed to be secure and reliable. The providers have used the latest security protocols and encryption technology to ensure that data is safe and secure.

Furthermore, the **Hellenic Development Bank (HDB)** and the **Engineers and Public Works Contractors Fund (TMEDE)** will continue for one more year to offer their attractive financing product named HDB-TMEDE Loan Guarantee Fund, aiming to support the construction industry, operating as a loan guarantee for SMEs that are granted loans from the cooperating banks. The tool meets the actual needs of construction companies, SMEs in their majority, which, for various reasons, have limited access to financing products through traditional channels. The new HDB-TMEDE Fund provides guarantees for loans granted by eight cooperating banks (Alpha Bank, National Bank, Eurobank, Piraeus Bank, Attica Bank, Optima Bank, Cooperative Bank of Thessaly, and Cooperative Bank of Karditsa) to make financing accessible to Greek engineers, designers and constructors, thousands of freelancers and small and medium-sized enterprises. This joint effort of **TMEDE** and **HDB** significantly facilitates and expands access to business financing. Particularly now, in an unfavourable international environment and unstable global economic conditions, the HDB-TMEDE Fund aims to counterbalance the international interest rate increase, allowing construction companies to become leading actors in the construction boom underway.

TMEDE Microfinance Solutions (TMS) will officially launch its activities in Q1 of 2023. TMS is the first institutional body active in the microfinance sector and it has been the first licensed – following evaluation – body by the Bank of Greece with the exclusive purpose to provide microfinance up to kEUR 25 for capital enhancement. Accordingly, it is subject to the relevant supervisory regulations of the Bank of Greece. The new body responds to the pressing need for liquidity and financing products, with specialised and targeted tools, as well as to the demand for the existence of an institutional framework and new bodies to facilitate access to finance for medium, small and micro-enterprises. Both the parent institution, **TMEDE**, and Attica Bank play an essential role in the operation, ensuring thus the smooth and quality provision of its services – which will be entirely digital – and are jointly committed to supporting its development and expansion. During the first phase of its operation, it will provide loans only to members of **TMEDE**, in line with the provisions of the new body's business plan.

- The trends of the energy prices influence every sector negatively. **Hungary** has the highest inflation rate within the EU and this negatively influences the general business processes. Moreover, **AVHGA** is an agro-focused institution and Hungary faced a permanent drought during the year. These and the shortage of Ukrainian crops caused difficulties in the whole sector. Due to the increasing interest rate, debt becomes more expensive, which is a further challenge for enterprises.

  AVHGA's focus for 2023 is on the intermediation of the InvestEU SME Competitiveness and Sustainability windows (to be launched in mid-2023).

- SMEs in **Ireland** have adapted business models to cope with the changing environment, looking to shorten supply chains and look locally for solutions. **SBCI** developed new guarantee products to help with energy efficiency.

  SBCI's focus for 2023 is on the retrofit programme for homes and small landlords.

- The Russian War pushed **ISMEA/IT** to design a new guarantee scheme, similar to what was designed under the Covid TF, to support SMEs in facing the 2022 cost increase due to energy prices impact on their business activity. The Institute provided a specific platform where SMEs can apply for a zero fee, 100% protection guarantee on medium term loans under the Ukraine Temporary Framework (TCF). Currently, the Temporary Framework is supposed to be lasting till December 2023.

  ISMEA is currently working to design a new guarantee scheme aimed at providing a more standardised and selective process to help customers develop investment projects through a more effective credit protection. Moreover, a brand-new digital service that allows the banks to assess in advance the SME's PD and the relevant guarantee under the **ISMEA** calculation method has recently been implemented.

- According to **KCGF/XK**, the consequences of the Russian war were reflected in increasing prices of many commodities.

  KCGF is in the process of implementing new guarantee windows with additional non-financial components, digitalisation.

- **ALTUM/LV** is experiencing the direct impact of energy dependence and rising energy prices, as well as changing supply chains. They also expect a deterioration in the solvency of companies due to rising interest rates.

  ALTUM's focus for 2023 is on the implementation of new period programmes.

  By the end of October 2022, the entire plan for issuing guarantees for the year has already been fulfilled. Mainly guarantees are issued to working capital loans, less for investments - which is a different trend from previous years.

- In 2023, **INVEGA/LT** plans to develop new products, such as guarantees for bonds, loan instruments under the 2021-2027 EU structural funds period as well as equity instruments: accelerator funds, early stage venture capital fund.

- The war did put another layer of stress on the **Luxembourgish** economy at large scale and impacted the overall cost structure forcing businesses to adapt. Adaptation is/was made more difficult due to lack of resources in regard of the Covid-19 crises.

MC/LU is developing two new guarantees, a digital programme to manage our guarantees and it will launch a promotion campaign for the costumers.

- **MPME/LU** reports about a new application and a new process that it is implementing.
- In **Malta**, the impact of the consequences of the Russian war on local businesses was minimal. Nonetheless, supply chain disruptions and higher commodity prices led to an overall increase in import prices.

  In 2023, our Maltese member **MDB** is working on a scheme covering electrical vehicles and charging stations infrastructures.
- For 2023, our new member **ODA/MD** is planning to implement a new guarantee scheme for loan portfolios as well as to develop the Fund for Entrepreneurship and Economic Growth of Moldova, which will offer afordable lending resources for SMEs.
- **RVO** informs that in the **Netherlands'** inflation is increasing, prices of energy, raw materials, wages and the cost of living are rising. Profit margins and solvency are deteriorating, but the labour market remains tight for the time being. No rounds of layoffs for the time being, employers want to retain employees as much as possible.

  For 2023, it plans an adjustment of guarantee and financing instruments in the context of:

  -Striving for sovereignty: more attention to maintaining and expanding production capacity and technological knowledge, maintaining leading position in strategic innovative production and service sectors. Improving access to raw materials, more focus on energy transition and sustainability.

  -Security: ramp up R&D and production of defence and dual-use manufacturing.
- **BGK/PL** reports that all enterprises are feeling the consequences of the Russian war in a negative way. The increase in energy prices, disruptions in supply chains and inflation are making entrepreneurs pessimistic about the growth of business activity in 2023.

  In 2023, **BGK** plans to work towards the possibility of offering three new guarantees for working capital and investment loans from 2024, in the portfolio mode:

  - guarantees for innovative entrepreneurs under the new EU perspective,

  - guarantees to the agricultural sector under the new EU perspective,

  - guarantees with EIF counter-guarantee under InvestEU.

- For the clients of **FGCR/RO**, mainly farmers, the main problem are the high energy and fertiliser prices as well as restrictions on fertiliser imports from Russia.

  FGCR's priorities for 2023 are to rewrite and develop the current IT application (core system) used for the main activity. Furthermore, it plans to adopt and adjust a new guarantee product in accordance with the Communication from the Commission Guidelines for State aid in the agricultural and forestry sectors and in rural areas and Commission Regulation declaring certain categories of aid in the agricultural and forestry sectors and in rural areas compatible with the internal market.

- **FNGCIMM/RO** developed the guarantee activity by adding a new programme – "IMM Invest Plus". This programme is based on the Ukraine Temporary Crisis Framework.

  In 2023, **FNGCIMM** will be working on four new financial guarantee products that can be implemented in case **FNGCIMM** becomes the new implementing partner of European Commission for InvestEU.

- In the **Slovenian** economy, the consequences of the Russian war are mainly reflected in the increase of the prices for energy products, which in turn has a strong impact on the business operations of companies and makes it difficult for many of them to do business as before. Through its measures, the state is already accepting certain aid packages for companies that will mitigate the costs of the energy crisis, as reports our member **SEF**.

  The priorities of **SEF** for 2023, are 1) blending (combination of refunds and grants), 2) subsidies for start-ups for sustainable development and 3) encouragement for internationalisation with international partners.

- In **Slovenia**, our member **SRDF** predicts that the situation will become further complicated due to the Russian war. There is the risk that particular companies move to other countries.

- **CESGAR/ES** members empower and promote new products oriented towards sustainability. Furthermore, they boost the activity of Aquisgrán (sustainability) and are working to improve the rating system. Another priority for 2023 is the continued advancement with digitisation.

- According to **NSGI/CH**, Swiss SMEs will face price increases averaging a quarter in the basic electricity supply from January. Added to this are the increasingly realistic fears of recession in many European countries, combined with persistently very high inflation. Furthermore, supply chain problems continue to be topical and also contribute to the uncertainty.

- **TESKOMB** reports that the inflation rate is very high in **Turkey** and the government is trying to contain it but there are too many external factors impacting the economy such as the war in Ukraine and terror attacks.

  In cooperation with Halkbank, **TESKOMB** is advancing in the digitalisation of credit guarantee procedures.

- According to **BBB/UK**, the war in Ukraine is having a direct impact on SMEs' prospects and general creditworthiness, which in the economic climate makes even guaranteed lending less attractive for lenders - especially now schemes are not anymore as generous as during the pandemic.

V Impact Studies & Research

Guarantee institutions are accountable towards their shareholders and to providers of any kind of counter-guarantee or similar support. That is why they engage more and more in the evaluation of their activities and this with the aim to demonstrate their positive impact on the economy.

This section presents in the following summaries of a selection of recently published impact studies. This selection is followed by an overview table and a list of literature.

Bpifrance/FR : Evaluation of the economic impact of business buy-outs funded by the Bpifrance Guarantee Fund

This study was carried out under the supervision of a steering committee including Bpifrance, the State (DG Treasury) and independent economists/researchers specialising in public policy evaluation. It aims to measure the economic impact of guarantee schemes covering business transfers, focusing on takeovers of commercial funds. The method used is a propensity score matching method, combined with a double-difference approach, in which transferred businesses benefiting from a guaranteed bank loan are compared to comparable non-beneficiary businesses, whether or not they have been transferred. This study was based on a substantial literature review as well as on several databases: individual data on companies benefiting from the Bpifrance guarantee, all announcements of business sales and transfers published in the Bodacc, as well as additional databases mobilised through the CASD (Insee tax files, Sine survey).

The academic literature highlights the presence of financing and non-financial difficulties on the market for business transfers. They can be explained in the following ways: (i) the cost of the required double analysis, that of the history of the financial statements of the buyer and that of the company to be taken over. This search for information generates transaction costs, which are sometimes difficult for banks to amortise, given the risk and the small amounts requested, particularly for small companies; (ii) the difficulty of mobilising collateral; (iii) the risk associated with financing "sterile" debt, which is used primarily to finance the acquisition of the company, but is not or hardly ever reinjected into the company's productive assets.

The guarantee remedies these difficulties. This is important since according to the economic literature, business transfers are desirable for the following reasons:

- They are sustaining economically viable companies, allowing to maintain human capital and the productive capital of the company
- They are boosting the productive fabric by changing management, renewing investment and improving productivity gains
- They favour the development of the human capital of the buyer
- They allow the seller to redeploy his or her capital

Bpifrance offers two funds to guarantee business transfers: the "Start-up guarantee fund" and the "Business transfer guarantee fund". The first one intervenes when the buyer is less than three years in business and the latter if he or she is more than three years in business. Both funds offer a coverage of maximum 50% and have a risk ceiling of mEUR 1.5.

On average, over the period 2012-2019, the credits backed by the "start-up" fund to finance transfer projects represent about bEUR 1.2 for nearly 9,300 companies per year. For the "transmission" fund, these credits reach a total of bEUR 1.4 for almost 5,200 companies per year.

The descriptive analyses reveal that, compared to the other transfer projects they finance, the banks mobilise the "transfer" guarantee for buyers with a relatively risky profile, more first-time entrepreneurs in particular (77% vs. 73%), located in less urban areas (31% of them are located in sparsely populated municipalities compared to 27% for other buyers) that are less dynamic in terms of transfers and employment.

The econometric analysis suggests that, over a three-year period, this **scheme helps to stimulate investment (between kEUR 8 and 9 of additional investment), promote growth in turnover (between kEUR 22 and 32 of additional turnover) and EBITDA (between kEUR 4 and 5 of additional EBITDA), and to improve labour productivity as well as the survival of beneficiary enterprises (the rate of cessation of activity is lower for supported enterprises, between -2.1 and -3.8%)**, relative to non-beneficiary enterprises with similar initial characteristics (not necessarily transmitted).

In addition, the magnitude of this impact appears to be greater for sellers close to retirement age and projects benefiting from a higher amount of guaranteed credit (without it being possible to establish a causal link between the characteristics of these projects and this magnitude).

Finally, a complementary test suggests that the effects of the scheme on the loss ratio, the growth of turnover and EBITDA, as well as on the level of labour productivity disappear when the supported businesses are compared to unsupported businesses that were effectively transferred and that, consequently, succeeded in mobilising financing (not guaranteed by Bpifrance) to buy their business. This lack of impact seems to suggest that the effects of the scheme are mainly due to the release of financing and ultimately to the activation of the transfer, which is not taken into account in this test (all the businesses in the "control" sample having been transferred). Furthermore, **these results tend to exclude the hypothesis of an anti-selection or moral hazard phenomenon on the part of the banks that mobilise the scheme, given that the beneficiaries seem to have a relatively more "fragile" profile** (with comparable characteristics of the business taken over): in the opposite case, lesser results on economic performance and on the loss ratio would theoretically be expected.

However, the limitations of this study should be noted. The first limitation is related to unobservable factors that may jointly influence future performance as well as the probability of transferring one's business under the guarantee. The second limitation concerns the estimation of the propensity score, which is based on the modelling of several effects: (i) having chosen to sell one's business rather than to close down or continue one's activity in T (ii) having effectively sold one's business in T (iii) the bank having mobilised a guarantee to grant the financing in T. This combination of effects remains difficult to assess, given the variables that can be used: the individual characteristics of the manager are not available apart from that relating to age. It is therefore difficult to determine which effects predominate in this estimate. The final limitation is that this approach focuses exclusively on the economic impact of the scheme at the level of the business taken over and does not consider the potential economic spin-offs of the scheme generated via the transferor, who is likely to make an investment financed by the guaranteed loan (via the injection of the proceeds of its transfer into the economy).

Lê, M. (2021). Evaluation of the Economic Impact of Business Buyouts funded by the Bpifrance Guarantee Fund. Link

HDB/GR: Impact of the HDB loan support activities

For a second year in a row, WifOR Institute has conducted a study on the loan support activity (including guarantee support) of the Hellenic Development Bank. The study assessed the impact of HDB funding schemes for the period 2019 - 2021 on two economic indicators (Gross Value Added (GVA) and Employment), while additional environmental (greenhouse gas emissions, GHG) and social indicators were added for the first time (quality of wages, QW).

The study records that the Hellenic Development Bank contributed bEUR 7.7 to GDP and supported 306,000 jobs. For every euro of GVA created by HDB's funding activities, an additional euro is contributed to the GDP along the industry's supply chain. Moreover, **for every job supported by HDB's funding activities, an additional 0.7 job is supported along the industry's supply chain**.

Regarding the new environmental impact indicator, measured for the first time in a corresponding survey, it is observed that the **businesses receiving loans as part of HDB's financial programme as well as their suppliers are emitting less greenhouse gases (GHG) per unit of GDP contribution value**, i.e., Gross Value Added, than the businesses' foreign suppliers from European countries and the rest of the world along their global supply chain. HDB's interventions aim to support environmentally friendly investments in Greece, not only from Greek but also from international investment organisations and companies.

Additionally, in the new quality of wages index - which assesses whether employees' wages have a positive or negative impact on their quality of life – (with higher index values implying a more positive social impact), the **Greek businesses receiving loans as part of HDB's financial programme are creating a positive impact on the quality of wages within Greece valued at mEUR 280**. The value of the quality of wages' impact per unit of GDP contribution is positive and higher in Greece compared to the businesses' non-European foreign suppliers index along their global supply chain.

INVEGA/LT: Impact assessment of the use of financial instruments for the investment of European Union funds

The Lithuanian Ministry of Finance contracted UAB ESTEP Vilnius to prepare an impact assessment of the use of financial instruments for the investment of EU funds.

The purpose of the impact assessment is to determine the impact of European Union funds, to compare the effectiveness of different financial instruments, as well as to determine the cumulative extent, impact and effectiveness of investments from different sources of financing.

The impact assessment of the use of financial instruments is a theory-based impact assessment that analyses how and why interventions work, what their results and macroeconomic impact are and what the reasons for success or failure are.

The set of methods used in the evaluation consisted of qualitative and quantitative methods. Qualitative methods: intervention logic analysis, change theory, comparative analysis, case studies, interviews, surveys, analysis of secondary data, expert evaluation. Quantitative methods of analysis: macro-econometric modelling and cost-benefit analysis.

Extent of application of financial instruments in Lithuania for the period 2007-2020

During the period from 2007 to the end of 2020, the total amount of investment mobilised up to the level of final beneficiaries through these financial instruments amounts to bEUR 5.1, of which public funding is bEUR 3 and private equity funds bEUR 2.1, resulting in a total leverage of financial instruments of 1.7.

Since, under normal economic conditions, financial instruments should finance only financially viable investments that do not receive sufficient financing from market sources, this form of financing is appropriate for only part of the State's activities. In the period 2007-2020, financial instruments were mainly used as a form of financing in three areas of state activity: the competitiveness of the economy accounted for 46 % of the total funds allocated through financial instruments, the environment, including energy efficiency – 28 %, the agri-food industry – 23 %, and the rest of the sectors – 4 %.

Public funding is mainly allocated to debt instruments (bEUR 1.7; 51 %) and guarantees (bEUR 0.97; 28 %). In order to boost venture capital investments in Lithuania, bEUR 0.23 (8 %) of public funding was allocated for this purpose.

Impact of financial instruments on Lithuania's macroeconomic indicators

Using macro-econometric modelling and assessing the direct and indirect effects of the financial instruments in question for the Lithuanian economy, it was estimated that almost bEUR 9 of additional GDP was created in nominal terms over the period 2009-2020, while the extension of the impact forecast to 2030 would result in the cumulative effect of the measures on GDP exceeding bEUR 17 over the period 2009-2030. **These estimates suggest that in the period 2009-2020, financial instruments resulted in an average increase of 1.9 % in the country's nominal GDP growth compared to the scenario without financial instruments**. Due to the biggest financial shock, the strongest impact is observed in 2020, when financial instruments generated 3.4 % of nominal GDP. In the period analysed, the **net benefits of financial instruments from additional GDP by subtracting costs (public and private funds allocated to financial instruments) represent on average 1 % of additional annual nominal GDP**.

Financial instruments have had the largest positive impact on GDP through the increase in gross capital formation by stimulating investment. In the period up to 2020, this indicator increased by an additional bEUR 8.5 due to the interventions assessed and bEUR 12.2 projected by 2030. It also shows a significant impact on GDP through consumption growth, which increased by bEUR 4.3 over the period up to 2020 and a cumulative increase of bEUR 8.5 by 2030.

When analysing the payment structure of financial instruments for the period 2009-2020 by sector of the economy, the impact was assessed for three groups of economic sectors: (1) the private sector except agriculture, (2) the infrastructure sector and (3) the agri-food sector. Most of the money came into the economy through the private sector. Between 2009 and 2020, bEUR 1.4 of public funding was allocated through financial instruments to the private sector, and including the funds mobilised by financial intermediaries, bEUR 2.55 was allocated to finance companies. The financial instruments in question in the private sector generated almost bEUR 4.3 in nominal added value up to 2020, and the extension of the impact measurement period to 2030 increases the impact of financial instruments on the creation of added value in this sector by over bEUR 8. By 2020, the total return on invested funds amounts to 2.35 and rises to 3.58 with projected delays in multiplicative and long-term impacts by 2030.

Financial instruments have had a positive impact on social indicators in Lithuania. Overall, over the period 2009-2020, the **financial instruments implemented resulted in the creation and preservation of around 18,000 jobs, leading to a decrease of around 1.2 % in the unemployment rate** in the country. In addition, a significant impact on wage growth is observed, with modelling results suggesting that the estimated interventions at the end of 2020 resulted in an increase in average annual real gross wages of EUR 22.8 compared to a scenario without financial instruments, leading to a 2 % increase in wages in the country.

The economy driven by the implementation of the financial instruments (direct effect on consumption, imports and employment) has increased government revenue from direct and indirect taxes. It is estimated that **additional government revenue of bEUR 3.1 was generated by 2020 and is forecast at bEUR 6.5 by 2030.**

Comparison of the impact of financial instruments and subsidies in terms of cost-effectiveness ratio

When comparing financial instruments on the basis of a cost-effectiveness ratio calculated as the ratio between public funding and additional GDP, the **efficiency ratio of financial instruments was almost 50% higher at the time of the interventions and twice as high as the corresponding subsidy factors after the extension of the impact forecast to 2030.** This is explained in particular by the fact that financial instruments target viable, revenue-generating investments, in contrast to subsidies, and therefore have a significantly greater impact on value-added growth. Moreover, **guarantee instruments have a significant financial multiplier, for some of the instruments assessed the leverage ratio goes up to 10**. The effect is illustrated in the following table.

Period	Subsidies from EU funds 2014	Financial instruments 2014-2020	Financial instruments 2009-		
			Loans	*Guarantees*	*VC investments*

Economic efficiency during the intervention	1,88	2,6	2,12	4,69	2
Economic efficiency, including delayed supply	2,4	5,0	4,02	7,54	3,2

During the evaluation, a number of major market failures were identified, which were addressed in the implementation of financial instruments in Lithuania in the period 2007-2020. First, access by SMEs to external sources of financing in Lithuania is one of the lowest in the EU as a whole – 14 %. The SME's inability to borrow funds is identified as the biggest operational problem (EU average 8 %). The funding gap is due to the high rate of rejection of loan applications by commercial banks. All financial instruments of INVEGA, EIF and VIVA established in the periods 2007-2013 and 2014-2020 were aimed at increasing the access of companies to external financing. The measures financed by the State included a variety of products: loans, leasing, factoring, venture capital, guarantees, crowdfunding. In order to further improve SMEs' access to external financing, it is appropriate to further expand INVEGA's instruments and to offer to the market a combination of financial instruments covering both standard financial instruments implemented with traditional financial intermediaries (banks and credit unions) and the development of innovative tools to promote the supply of alternative financing and the participation of companies in the capital market.

The second market shortfall addressed by financial instruments is the lack of venture capital investment in Lithuania and the third market shortfall is the high demand for investment in energy efficiency and the non-financing of this sector on the market.

Financial instruments as a countercyclical instrument

The assessment shows that government investment is an important financial policy tool to reduce fluctuations in economic cycles, stimulate growth and transformation. They can lead to an increase in labour productivity and economic potential. Looking at the proportion of financial instruments for loans and loans granted under the State guarantee in the overall proportion of genuine loans to non-financial corporations, it appears that the share of financial instruments in the overall loan market for the period 2009-2020 fluctuated quite significantly, from one tenth to half of all annual loans issued on the market. There is a clear cyclicality, which was most evident in 2020 due to the COVID-19 pandemic and the government's actions in response to the need to reduce the negative economic and social consequences and the strengthening of corporate liquidity, when the funds from financial instruments almost doubled to 1.8 % GDP and as much as 54 % of all new loans granted in 2020 came from or with public funds.

In times of economic recession, the need for loans for working capital and corporate liquidity, as well as the importance of guarantees provided by the State, is intensifying. While these measures formed the basis for assistance through financial instruments in 2020, 70 % of respondents to the assessment survey of institutions and financial intermediaries consider that the measures implemented were only partially adequate and sufficient. Prioritising the speed of aid in 2020 did not sufficiently assess the compatibility of the proposed measures and the continued suitability of the proposed measures following the initial COVID-19 shock to the economy, **lacking the wider use of guarantee instruments, thus not fully exploiting the potential to raise capital from financial institutions to mitigate the consequences of the crisis**. These reasons have reduced the effectiveness of financial instruments implemented in response to the consequences of COVID-19 and pose risks to financial sustainability in the medium term, according to the assessment of the National Audit Office (2021).

Analysis of the impact of financial instruments on raising additional capital for the achievement of the State's objectives

The ability to attract additional resources for the achievement of State objectives is a key feature of financial instruments and one of the main arguments promoting their wider use. The relationship between funding provided to final recipients through financial instruments and public funding is known as the leverage ratio. The higher the leverage ratio, the more private capital has been mobilised for the implementation of financial instruments. **The results of the comparison against the leverage ratio show that the leverage of debt instruments implemented in Lithuania in the period 2007-2020 ranges from 1 to 5, venture capital investments from 1 to 4.2 and guarantees from 1 to 10.22**.

Assessment of financial instruments as a sustainable investment pathway

In contrast to grants, financial instruments are considered to be a sustainable way of financing because, depending on the type of projects financed by the financial instruments and the sharing of risks between the State and financial intermediaries and other private investors, the majority of the funds allocated to the instruments are returned to fund managers over a period of 3 to 20 years. According to data from financial instrument managers, the proportion of insolvent loans in the portfolio of individual instruments assessed is up to a few %. In addition, the vast majority of financial instruments (such as loans, venture and private equity investments, debt securities) can also generate returns. The financial data collected during the evaluation show that since 2012 new financial instruments financed by returned EU funds for the period 2007-2013 have started to be implemented in Lithuania. In total, mEUR 384.2 were made available for the implementation of the financial instruments in question, representing 11 % of the total public funding provided for the implementation of the financial instruments.

Moreover, the fact that loans, including those covered by guarantees and capital investments must be repaid also has an impact on the behaviour of the final beneficiaries, and should therefore improve the use of public funds and reduce the likelihood of final recipients becoming dependent on public support.

Estep (2021). Impact assessment of the use of financial instruments to invest European Union funds (in Lithuanian). Link

BGK/PL : Outcomes of the de minimis guarantee scheme - Report of 2022 Study

BGK mandated CBM Indicator to update the study on the outcomes of the de minimis guarantee of last year. The survey conducted for the purpose of this report covers de minimis guarantees provided by BGK between 1 January 2021 and 31 December 2021. The control sample comprises entities which, due to their size, sector and region of activity, resemble the structure of BGK guarantee users but do not have any guarantee backed loan taken.

Two analytical approaches are used in this study to assess the effect of de minimis guarantees on the financial gap:

- only those businesses which admit that they would not have obtained financing without de minimis guarantees are considered to be in the gap (narrow approach);
- businesses which admit that they would not have obtained financing without de minimis guarantees or they would have obtained it on worse terms than the terms applied for are considered to be in the gap (broad approach).

This year's survey was supplemented with several additional questions concerning the experience of enterprises in acquiring external financing, which made it possible to estimate the absolute size of the financial gap among Polish SMEs.

The main results of the report are listed here below:

- **As of March 2023, bPLN 167.9 (bEUR 36.6) of de minimis guarantees (575.6k in numbers) were provided since the inception of the scheme** until April 2022 and they secured loans for a total of around bPLN 248.6 (bEUR 54.1).
- **58% of companies having a loan with de minimis guarantee during the last year have improved their liquidity, of which 89% claim that it would not be possible without BGK guarantees.**

- 24% of SME loans in Poland (as at end of April 2022) were secured by de minimis guarantees.
- **23% of de minimis guarantee beneficiaries completed an investment last year, 82% of which claim that this was possible thanks to the guarantee** (in the entire SME sector, the percentage of investments was 19%). However, de minimis guarantees mainly serve as security for working capital facilities (currently about 95% of transactions).
- **48% of companies that obtained a loan with de minimis guarantee in 2021 claim that they would not have obtained the financing without such security** (businesses in the financial gap in the narrow sense).
- **46% of capital projects completed by beneficiaries of de minimis guarantees were innovative, whereas in the general SME sector, innovative projects constituted 31% of all projects.**
- bPLN 82 (bEUR 17.9) was the amount of additional loans (for companies in the gap) generated with guarantees since the inception of the scheme. This is more than 38% of all loans granted with de minimis guarantees.
- 80% of beneficiaries of de minimis guarantees claim that the financing obtained thanks to de minimis guarantees to some extent helped them survive the crisis caused by the Covid 19 pandemic.
- **356,000 of jobs saved, and 161,000 created due to additional loans generated thanks to de minimis guarantees in the period from 2014 to 2022.**
- 97% of beneficiaries of de minimis guarantee would recommend this product to their fellow business owners from the SME sector.

Covid terms

The terms on which de minimis guarantees were provided in 2021 were changed to mitigate the effects of the Covid-19 pandemic. The effectiveness of a large part of changes introduced for the period of the pandemic has been extended until 31 December 2022. The following table gives an overview of the improved conditions during the pandemic.

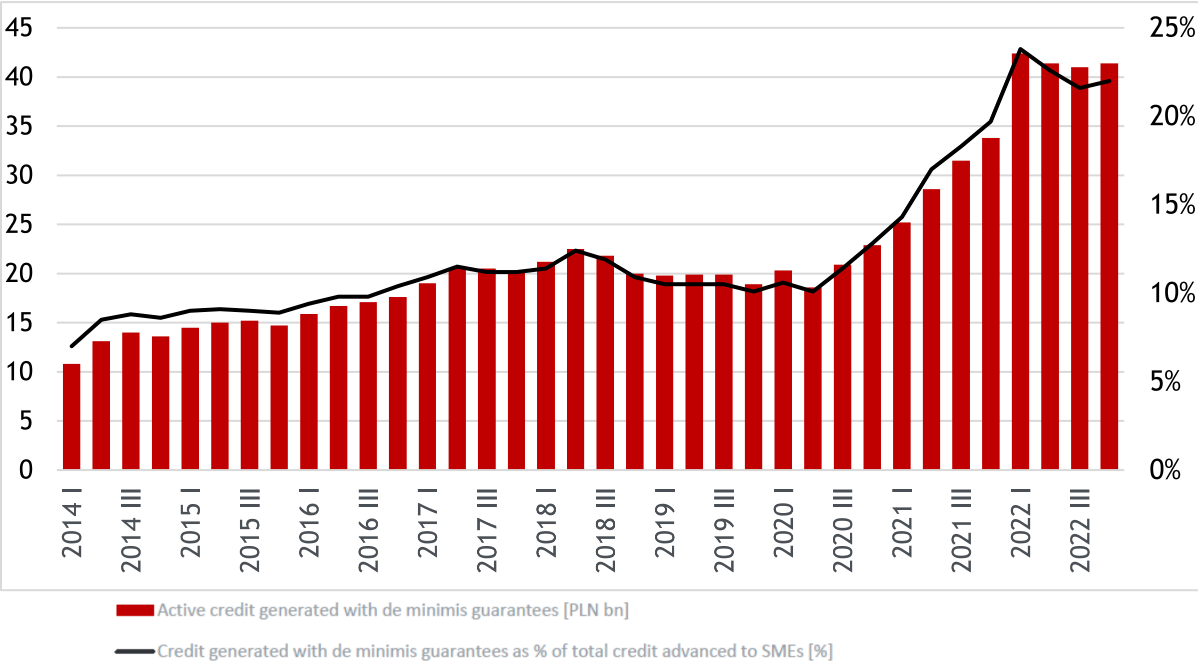
Table 1. Terms of de minimis guarantees and changes effective during the pandemic

Standard terms	Amendments for the duration of the Covid-19 pandemic and counteracting its effects*

Nature of product	Product offered within the available limit of de minimis aid	-
Guarantee parameters	• Maximum amount of support **up to EUR 1.5 million** for guarantees for up to five years and **EUR 750,000** for guarantees of more than five years but up to 10 years; • Amount of single guarantee facility up to PLN 3.5 million; • Guarantee **for up to 60% of the borrowed amount**	• The unit amount of guarantee may exceed PLN 3.5 million if the admissible aid limits are not exceeded; • Guarantee **for up 80% of the borrowed amount**
Time frame	**27 months** for working capital loans **99 months** for investment loans	**75 months** for working capital loans **120 months** for investment loans
Annual cost	**0.5% of the guaranteed amount**	**0% of the guaranteed amount** for commissions maturing in the period.

The change of terms of de minimis guarantees, resulting from the inclusion of this instrument in the so-called anti-crisis shield supporting Polish companies in dealing with the consequences of the Covid-19 pandemic, resulted in a significant increase in the popularity of BGK's product. Although the change took place at the beginning of 2021, the popularity of de minimis guarantees has grown consistently. This process has recently been supported by the tightening of the lending policy of banks for SMEs. The following graph illustrates the pandemic-induced acceleration.

Fig. 29. Cumulative amount of active loans generated by de minimis guarantees and its share in the total amount of loans granted to SMEs (figures at end of quarterly periods)



The vast majority of beneficiaries of de minimis guarantees which obtained funding secured by the guarantee in 2021 (80.1%) admit that it has helped them to a greater or lesser extent to get through the crisis faced by the SME sector in connection with the economic restrictions related to the pandemic. However, compared to the last year's survey (covering loans advanced in 2020), the percentage of entrepreneurs indicating the crucial role of the guarantees on the ability to survive the pandemic dropped significantly (from 72.1% to 41.2%), while the share of businesses describing such role as small increased (from 12.3% to 38.9%).

Fig. 32. The assessed extent to which funding obtained with BGK guarantees translated into the survival of the crisis caused by COVID-19 pandemics

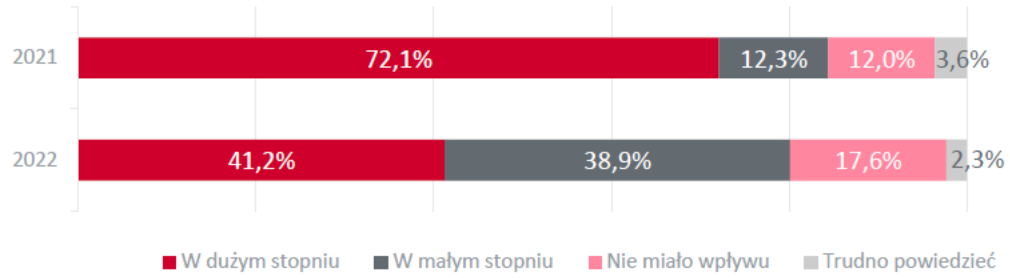
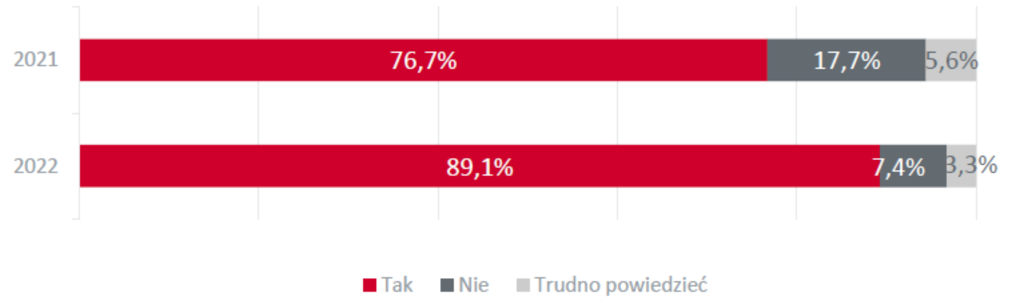


Fig. 33. Percentage of businesses declaring that the financing received due to BGK guarantees allowed them to stabilise or improve the company's financial condition



Impact

Beneficiaries of de minimis guarantees performed significantly better in the 12 months preceding the survey than entities from reference groups. Similar results were also observed last year. As in the previous year, it is almost a common conviction that the successes in the form of improvement or maintenance of financial liquidity, revenue or market position would not have been possible without a loan secured by a BGK guarantee. The following graphs illustrate to which extent beneficiary SMEs outperform the reference groups.

Fig. 19. Change in liquidity within last 12 months

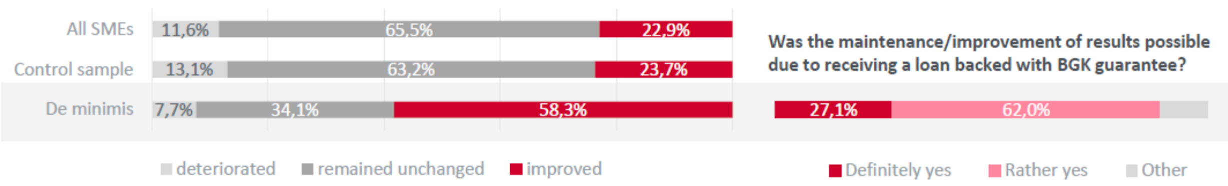


Fig. 20. Change in company's turnover within the last 12 months

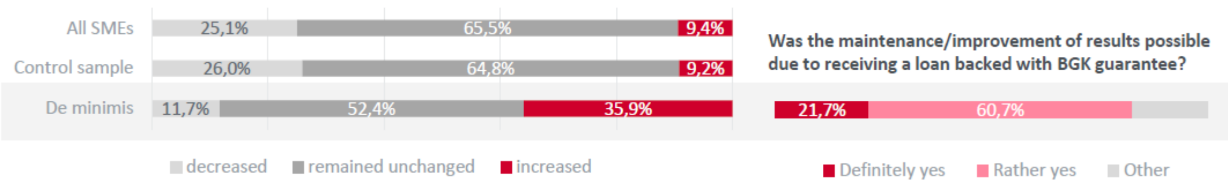


Fig. 21. Change in market position within the last 12 months

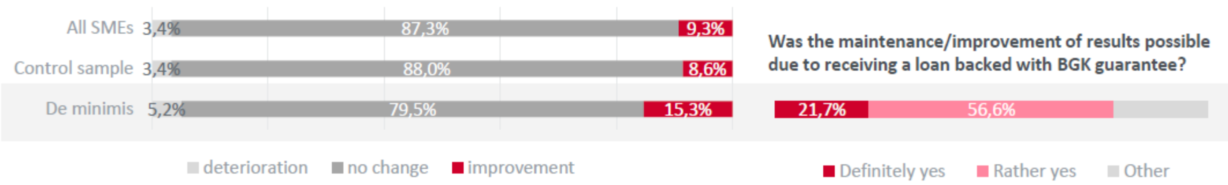
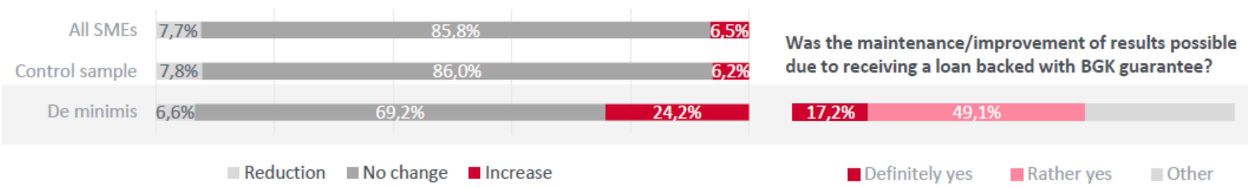


Fig. 22. Change in jobs within the last 12 months



Furthermore, companies benefitting from de minimis guarantees also made innovative investments slightly more frequently than all SMEs and entities in the control sample. In terms of general investment activity and development of exports, companies from the control sample performed minimally better.

Among beneficiaries of BGK guarantees, relatively the best results are declared by small companies (index value: 2.10), businesses operating on an international scale (2.50) and with 2021 revenue in excess of mPLN 30 (2.58). Geographically, the Mazowieckie province (1.90), and south-west part of the country (1.87) stand out. In terms of industry, the highest average was achieved by accommodation and food service activities (1.94) as well as transport and storage (1.93) which were rebounded after the pandemic. Considerably better results were also recorded by entities that obtained an investment loan under the de minimis guarantee scheme (2.42 vs. 1.71 for borrowers using working capital facilities).

BGK (2022). Outcomes of the de minimis guarantee scheme – Report of 2022 study. Link.

KGF/TR : Firm-Level Impact of Credit Guarantees: Evidence from Turkish Credit Guarantee Fund

Credit Guarantee Programmes (CGP) are often employed government policy tools to promote SMEs' access to credit. Many governments also use this facility to relieve domestic financing conditions, especially for SMEs, during times of aggregate shocks that may cause economic contractions. To counteract the negative consequences of the heightened uncertainty, Turkey enlarged its Credit Guarantee Fund (KGF) programme in 2017 in response to the geopolitical developments of 2016. The programme's size was first increased to bTRY 20 in December 2016, then to bTRY 250 in March 2017. The programme saw the issuance of almost 300,000 loans, totalling bTRY 208 in credit volume in 2017. With a 7.6% GDP share credit stimulus coverage, this programme stood out as the largest guarantee program launched globally in the same year. The guarantees were issued against a one-off guarantee commission at a rate of 0.03% of the guarantee amount to be paid by the beneficiary firm and with the constraint that banks cannot charge any additional fees.

The characteristics of the KGF supported firms and the effects of the programme on their employment, sales, and credit default probability in the two years following the programme are examined using a combination of firm level administrative databases from the tax registry, credit registry, and the KGF registry.

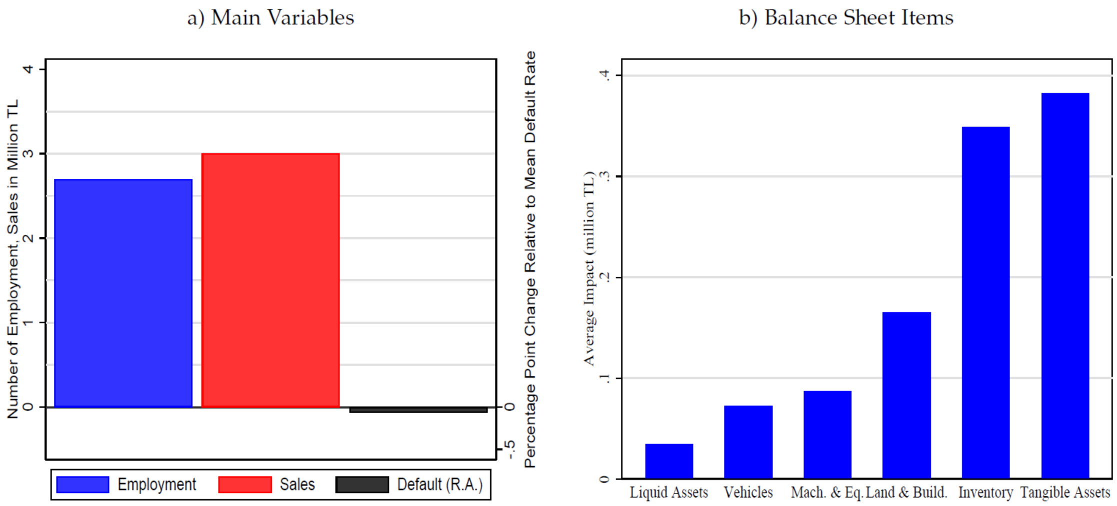
Using the coarsened and exact matching (CEM) methodology, the authors are able to use the data set to discover a number of observable firm characteristics that are used to match the KGF supported firms with their closest pairs. Although difficult to determine directly from company characteristics, firm riskiness is an important factor to take into account when matching. To do this, the authors created a risk score tool that considers firm ex-ante riskiness as part of the matching process. The matched pairs are then utilised in a difference-in-difference setup to estimate the average programme impact on the performance of treated firms, including employment, sales, and credit default probability, as well as several balance sheet items, including fixed capital investment, intangible capital investments, and firm indebtedness.

It can be shown that the KGF programme significantly shifted credits in 2017 in favour of smaller businesses and benefited the construction, manufacturing, and wholesale and trade sectors in particular. There was no discernible difference between the KGF-supported and non-supported enterprises' ex-ante risk characteristics. This means that **additional KGF funds were not concentratedly allocated to riskier enterprises. A potential moral hazard problem was effectively be avoided by capping the guarantee.**

KGF-backed loans were typically given at a lower interest rate with a three to six-month grace period due to their low risk profile, which greatly reduced the average borrowing cost and lengthened the duration, notably for SMEs. In that regard, the KGF programme made a substantial contribution in 2017 to the easing of loan conditions for businesses.

The estimates produce a number of interesting findings regarding the programme's short-term effects on the performance of enterprises. In the two years following the programme, **KGF-supported firms were able to increase employment by 17%, sales by 70%, and reduce credit default probability by 0.6% in comparison to the control group, demonstrating that the programme had an overall positive effect** on the performance of treated firms. A variable average evaluation of these statistics reveals that **every mTRY 1 credit generated thanks the KGF programme preserved 2.7 additional jobs, increased sales by roughly mTRY 3, and decreased the average loan default probability by over 6.5%** (see graph below). According to the official figure, the KGF programme generated a total loan volume of bTRY 293 in 2017 and 2018. Assuming that our estimates apply linearly to this figure, the implied overall programme impact on the Turkish economy in 2018 was roughly 794,000 additional jobs and bTRY 879 billion more in sales.

Figure 17: Average Monetary Impact of CGF Supported Loans (per 1 million TL of CGF loan)



Source: Authors' calculations.
Notes: The figures present the average monetary impacts of receiving 1 million TL of CGF loan. Mach. & Eq. represents machinery and equipment while Land & Build. represents the land and buildings.

These findings are robust to various checks, including additional controls and subsample considerations. They also show that the programme's impact varies by firm size and industry sector. The programme's positive impact on SMEs is significantly greater than that on other size groups. In terms of sectoral heterogeneity, the KGF programme is more effective in preserving employment in labour-intensive sectors (e.g., service) and in generating sales in sectors that serve the domestic economy more (e.g., wholesale and trade). It is demonstrated that by redesigning the programme priorities, one could achieve significant efficiency gains exploiting of the programme's size and sector impact heterogeneity.

The results furthermore show that the programme's positive impact on long-term assets (such as intangible capital) appears to be weaker than its impact on short-term assets, which is critical for firms' long-term growth and sustainability. Moreover, the results reveal an increase in overall indebtedness among KGF-supported firms, which may have an adverse effect on their credit default probabilities in the long run. Given these findings, complementing the KGF programme with other government policies aimed at supporting productivity while monitoring indebtedness can be critical to ensuring long-term growth and successful deleveraging of KGF-supported firms. Monitoring firms' indebtedness and ensuring appropriate debt management practices through mentoring services could significantly mitigate long-term credit default risks.

Akcigit, U., Seven, Ü. (2021). Firm-Level Impact of Credit Guarantees: Evidence from Turkish Credit Guarantee Fund. Link

BBB/UK : Evaluation of the Bounce Back Loan Scheme, Coronavirus Business Interruption Loan Scheme, and Coronavirus Large Business Interruption Loan Scheme

In mid-March 2020, the potential scale of the Covid-19 pandemic became clearer as public health measures designed to combat the pandemic and behaviour change among the UK population were having a noticeable impact on businesses.

Given the wide-ranging business impacts already felt and the considerable uncertainty over the financial challenges ahead, the UK government moved quickly to design and launch a series of three loan guarantee schemes targeted at businesses of different sizes, namely, the Bounce Back Loan Scheme (BBLS), Coronavirus Business Interruption Loan Scheme (CBILS) and Coronavirus Large Business Interruption Loan Scheme (CLBILS).

In March 2021, the British Business Bank (BBB) commissioned London Economics and Ipsos to undertake a multi-year evaluation of the three Covid-19 Loan Guarantee Schemes. This evaluation aims to assess whether the objectives of the Covid-19 Loan Guarantee Schemes were satisfied.

The evaluation uses a mixed methods approach combining both qualitative and quantitative, and primary and secondary evidence.

The early impact assessment relies on a primary data collection exercise, as well as a number of secondary datasets including BBB management information. Survey fieldwork undertaken by Ipsos resulted in 2,143 interviews. These include 588 BBLS borrowers, 358 CBILS borrowers, 32 CLBILS borrowers, and 1,171 non-borrowers – the latter set of businesses are referred to as the 'control' group. Non-borrowers have been selected to be similar to borrowing businesses in the key respect that they have all faced challenges or opportunities because of the Covid-19 pandemic, thereby increasing the likelihood that both groups of businesses have faced similar financial and operational issues during the reference period of the evaluation.

The process evaluation drew on a combination of primary and secondary evidence including monitoring information and scheme documentation provided by the British Business Bank, depth interviews with key stakeholders, and the quantitative survey of borrowers.

The eight key findings from the process evaluation and ten key findings from the early impact assessment of the Covid-19 Loan Guarantee Schemes are presented below.

1. The Covid-19 pandemic created unprecedented levels of economic uncertainty and risks of widespread business failures. The British Business Bank, Department for Business, Energy and Industrial Strategy (BEIS), and His Majesty's Treasury were able to **establish CBILS within twelve days of its announcement, facilitated by the existence of an existing delivery template and infrastructure** (the Enterprise Finance Guarantee (EFG) programme) and effective engagement with the lending community.

2. The design of the Covid-19 Loan Guarantee Schemes was adapted several times – including the introduction of CLBILS to better serve the needs of large businesses and the introduction of BBLS to provide cashflow support more rapidly to smaller businesses. Adjustments generally prioritised the aim of increasing the speed of lending decisions and widening access in response to concerns that funding was taking too long to reach businesses.

3. This was achieved by removing requirements for businesses to demonstrate that they could not obtain funding on normal commercial terms and, in the case of BBLS, allowing businesses to self-certify their eligibility, viability and creditworthiness. This increased the potential scale of the government's contingent liability and required acceptance of greater levels of deadweight and, in relation to BBLS, fraud risk.

4. The process adopted by the British Business Bank to accredit lenders to the Covid-19 Loan Guarantee Schemes was a streamlined version of the process to accredit lenders for the EFG programme. It was possible to rapidly put in place significant lending capacity by transferring existing lenders from the EFG programme.

5. **The Covid-19 Loan Guarantee Schemes met their primary objectives of unlocking credit for businesses at scale and speed and resulted in bGBP 78 (bEUR 88.1) in guaranteed loan facilities, reaching just over a quarter of SMEs in the**

UK. There was a reasonable correlation between volumes of guaranteed lending and the size of the pandemic induced shock on individual sectors and many businesses receiving guaranteed loans had experienced significant impacts on turnover. Loans were generally either used to fund operational expenses or to boost reserves and resilience to unexpected shocks, and guaranteed lending may have had a significant protective effect.

6. High levels of demand for lending via CBILS placed considerable pressure on lenders and the introduction of BBLS helped ease pressure on lenders and accelerated timescales for loan approvals.

7. **Funding may have been critical in directly securing the survival of up to a third of the businesses receiving loan guarantees (around 500,000 businesses)**. The overall reduction in approval times achieved via the introduction of BBLS needs to be considered in the context of avoiding an extensive backlog of applications at a time where business survival was at risk.

8. The National Audit Office's investigation into BBLS in their update report dated 3 December 2021 highlighted that a British Business Bank commissioned review produced a central estimate that around 11% or bGBP 4.9 (bEUR 5.5) of loans approved were potentially fraudulent. This estimate is highly uncertain, and a subsequent assessment revised this estimate to 7.5% of approved facilities, although this estimate assumes that any fraud leads to a total loss of the loan which is likely to overestimate losses as some funds may be recoverable.

The early impact evaluation reveals the following:

1. The present impact evaluation is an early assessment of the Covid-19 Loan Guarantee Schemes' impacts, which will be refined as more data becomes available. To provide a sufficient sample size for analysis, the sample of CBILS and CLBILS borrowers were grouped.
2. **It is estimated that in the absence of the Covid-19 Loan Guarantee Schemes, an additional 10%-34% of BBLS borrowers (i.e., 146,000 to 505,000 businesses) and an additional 7%-28% of CBILS/CLBILS borrowers (i.e., 5,000 to 21,000 businesses) could have permanently ceased trading in 2020. It is also estimated that 0.5 million to 2.9 million jobs could have been lost in the absence of the Covid-19 Loan Guarantee Schemes.**
3. **It is estimated that respectively 81% and 77% of BBLS and CBILS/CLBILS loans were additional.**
4. Econometric analysis did not find evidence that the turnover or employment of borrowing businesses was higher or lower than it would have been in the absence of the Covid-19 Loan Guarantee schemes. As this analysis was based

on a sample of businesses that survived the pandemic, it measures impacts on turnover and employment net of business survival.

5. **The Covid-19 Loan Guarantee Schemes may also have affected other businesses indirectly (e.g., through avoided supply chain disruptions).** These spillover effects are unquantified at this stage.
6. The most common uses of the funds from the Covid-19 Loan Guarantee Schemes were working capital, and to provide financial security.
7. Borrowers were more likely to have faced major business obstacles as a result of the pandemic than non-borrowers.
8. **Common actions undertaken by borrowers since raising external finance from one of the Covid-19 Loan Guarantee Schemes included the adoption or expansion of digital technologies, innovation activities or building business resilience.** In general, more than half of borrowers estimated that they would either have been able to undertake them but to a lesser extent, or not been able to undertake them at all in the absence of the Covid-19 Loan Guarantee Schemes.
9. Borrowers were more likely to report that the funds obtained through the Covid-19 Loan Guarantee Schemes lowered their likelihood of seeking external finance in the next three years than they were to report an increase in that likelihood.
10. Average product market displacement from the BBLS and CBILS/CLBILS schemes is estimated to be 43% and 46% respectively.

British Business Bank (2022). Evaluation of the Bounce Back Loan Scheme, Coronavirus Business Interruption Loan Scheme, and Coronavirus Large Business Interruption Loan Scheme. Link

EU Commission : Study supporting the ex-post Evaluation of the European Fund for Strategic Investments

This study supports the ex-post evaluation of Regulation (EU) 2015/1017 - subsequently amended by Regulation (EU) 2017/2396 - establishing the European Fund for Strategic Investments (EFSI), the European Investment Advisory Hub (EIAH) and the European Investment Project Portal (EIPP). The purpose of the evaluation is twofold: to support accountability and learning. It takes stock of what has been achieved under the EFSI Regulation over the period 2015-2021, thus providing accountability for the resources invested. It also examines the design and implementation of the

EFSI Regulation with the aim of capturing the lessons learned and providing actionable insights on what works.

The evaluation is based on a mixed-methods approach comprising: (i) in-depth review of programme documentation, policy documents, previous evaluations and audits as well as relevant academic and grey literature; (ii) analysis of EFSI portfolio, contextualised with data on investment levels and SME financing conditions; (iii) analysis of data on take-up and use of EIAH and EIPP;(iv) semi-structured interviews with 120+ stakeholders at EU and national levels; (v) eight country case studies; (vi) deep-dives of 60 EFSI operations.

The EFSI Regulation forms an integral part of the Investment Plan for Europe (IPE) which was launched in 2014 and which was structured around three pillars as follows:

- Pillar 1 consisting of EFSI, a budgetary instrument designed to enhance the risk-taking capacity of the European Investment Bank (EIB) Group with the ultimate objective of mobilising investment in the real economy. EFSI financing was delivered through two windows: (i) the Infrastructure and Innovation Window (IIW) was implemented by the EIB to finance investments in key areas such as energy, environment and climate action, social and human capital and related infrastructure, healthcare, research and innovation, cross-border and sustainable transport, as well as the digital transformation; (ii) the SME window – implemented by the European Investment Fund (EIF) – was designed to support financial intermediaries in improving access to finance for SMEs and small mid-caps.
- Pillar 2 included initiatives to provide visibility and technical assistance to investment projects.
- Pillar 3 of the IPE aimed at creating an investment friendly environment by removing regulatory and structural bottlenecks.

In December 2017, the EFSI Regulation was extended and enhanced ("EFSI 2.0" Regulation). The initial EFSI Regulation was envisaged to run from 2015 to 2018. However, in December 2017, it was extended until 31 December 2020 (for approvals) and 31 December 2022 (for signatures). EFSI 2.0 Regulation also had a bigger ambition. The EU Guarantee was increased from bEUR 16 to bEUR 26, and the EIB contribution from bEUR 5 to bEUR 7.5, along with an increase in the target volume of investment mobilised (from bEUR 315 to bEUR 500).

According to the results of the evaluation, EFSI remained relevant throughout 2015-2021, responding to new policy objectives, crises and investment needs. **Following the launch of the EFSI, investment conditions significantly improved. The cyclical investment gap gradually disappeared and by 2019**, investment activity in the EU had reached 22.2 per cent of the GDP (thanks in part to EFSI). However, structural investment gaps persisted in key areas such as net-zero transition, digitalisation, social infrastructure etc. And while financing conditions for SMEs also eased markedly from 2014 onward, endemic problems remained for certain types of firms i.e. those in specific segments (e.g. social enterprises, creative and cultural sector) or engaged in specific activities (e.g. innovation, investment) or in certain countries (e.g. Greece, Ireland, Latvia etc.). In the context of improving macro-economic and financing conditions, EFSI increasingly focused on addressing structural investment and financing gaps. However, macro-economic conditions changed dramatically in 2020: the Covid-19 pandemic triggered a sharp contraction in GDP and investment, while financing conditions for businesses rapidly deteriorated. In this context, **EFSI proved to be a highly relevant and useful anti-crisis tool**.

EFSI has demonstrated itself as an effective policy instrument for incentivising and accelerating investment. Looking at data as of 31 December 2021, **bEUR 87 of EFSI financing had been signed: bEUR 60 under the Infrastructure and Innovation Window (928 signed operations) and bEUR 27 under the SME Window (812 signed operations). These operations are estimated to have mobilised bEUR 492 of investment over the period 2015-2021**. However, not the entire volume of this investment is fully attributable to EFSI. Other EU financial instruments and programmes have also contributed to mobilising a part of this investment; but without EFSI support, these investments would have taken place at a reduced scale and a slower pace, and on less favourable conditions.

EFSI has responded to a range of market failures and sub-optimal investment situations across geographies and thematic areas. Apart from a few exceptions, the distribution of EFSI financing was well aligned with country-level (cyclical) investment gaps. Within the constraints of a balanced portfolio approach, EFSI financing was also well targeted to areas where the private sector is less likely to invest on its own such as supporting investment in new/unproven technologies; financing large, complex projects; investing in social objectives and public goods.

EFSI enabled financial intermediaries across Europe to increase both the volume and the riskiness of their lending. Over 760,000 businesses across Europe have benefitted from EFSI support, including those typically under-served by the market such as micro-enterprises, social enterprises and companies with specific business models (e.g. based on intangible assets) or needs (e.g. longer term financing for investment purposes). EFSI resulted not only in improved availability of finance for businesses, but also better terms and conditions such as lower interest rates, lower collateral requirements, longer repayment period and lower down-payments.

Other key achievements of EFSI include:

- Supporting Europe's net zero transition by financing a range of climate action projects in areas such as renewable energy, energy efficiency, low carbon technologies etc. 44% of EFSI-IIW financing went to such projects.
- **Crowding-in private capital. 72% of the investment mobilised by EFSI is expected to come from private sources.**
- Channelling private capital to social objectives e.g., social housing, long term care, education.
- Improving the efficiency of public spending. The **target multiplier effect (15) was exceeded** and as such, EFSI leveraged a critical mass of resources to get investments off the ground.

Overall, the macro-economic impact of EFSI is expected to be significant. **By 2025, EFSI is expected to create 2.1 million jobs and increase EU GDP by 2.4%**. In the long term some of the effects diminish but are still significant. **By 2040, it is estimated that EFSI-supported operations would still have created 1.3 million jobs and increased EU GDP by 1.6%**. Overall, modelling results suggest that EFSI will particularly benefit Cohesion regions and crisis affected countries in terms of job creation and growth.

The additionality of the EU budgetary guarantee is clear and demonstrable. The EFSI portfolio is fundamentally different from the EIB's standard operations in terms of its risk profile, average size of operations and complexity (new markets, new clients and more sophisticated products). Although some examples of operations can be found which could certainly have been delivered without EFSI support, the EIB Group would not have been able to finance the entire EFSI portfolio on its balance sheet in absence of the EU guarantee without adversely affecting its credit rating, capital consumption and financial sustainability. As far as the EIF is concerned, it has limited own capital to deploy and has to rely on mandators' resources to carry out most of its activities. Thus, **in absence of EFSI, the EIF would not have been able to carry out these activities without a capital increase**.

EFSI offers considerable EU added value. The benefits of EU level action via EFSI (as opposed to Member States acting alone) have related to the financing of multi-country operations; moving forward international cooperation (e.g. European Securitisation Initiative); providing a proof of concept for budgetary instruments as a tool for mobilising private investment efficiently and effectively; developing institutional capacities within NPBIs to implement guarantee schemes and investment platforms; piloting and scaling-up of niche products such as venture debt and addressing gaps in under-developed/under-served segments (e.g. equity, agriculture, micro-finance, leasing).

Looking ahead, **a de-risking instrument such as EFSI continues to be relevant. Europe needs large amounts of investment to meet its policy objectives and address societal needs. The geo-political uncertainty caused by the war in Ukraine together with the changing macro-economic context (high inflation-high interest rate environment, growing public debt etc.) will constrain investment going forward. In such a context, there continues to be a need for a guarantee-based financing instrument.**

European Commission (2022). Study supporting the ex-post Evaluation of the European Fund for Strategic Investments, following Regulation 2017/2396 (EFSI 2.0). Link

IMF : Evaluating the Costs of Government Credit Support Programs during Covid-19: International Evidence

To help businesses survive the Covid-19 pandemic, advanced economies made available more than tUSD 5 through government-backed credit guarantee and direct loan programmes. Despite the historically large amount of credit made accessible, no thorough examination of the financial effects has been done, and the costs of these schemes have not been transparently assessed. The largest credit guarantee programmes that were implemented in 2020 in seven advanced economies—France, Germany, Italy, Japan, Spain, the United Kingdom, and the United States—were estimated in this article. These programmes cover more than 90% of the credit support programmes for firms that were introduced in the world during the pandemic.

The authors of this study estimate the subsidies using a fair value methodology, which offers a consistent and thorough upfront measure of cost. They also discuss the reasoning behind using a fair value framework in a government context and contrast it with other methods. International Financial Reporting Standard (IFRS) 13 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The cost estimates are equivalently the net present value of expected cash flows to and from the government during the duration of the underlying loans, approximately as of the loan origination date. The authors calculated discounted net present values by discounting promised cash flows with the estimated interest rate that borrowers would be charged by banks for a comparable loan without government backing, a quoted or promised rate.

Take-up for the analysed programmes is predicted to be tUSD 1.7. With a wide variation across programmes, from 12 to 100%, the subsidy element (cash-equivalent subsidy) is estimated to represent on average 67% of loan principal (37%, omitting the US Paycheck Protection Programme). The variation is explained by differences across programmes including eligibility criteria, guarantee coverage, loan terms, and other programme design choices. **Loans to SMEs and mid-caps with partial guarantees had subsidy rates ranging from 20 to 27% of the principal**. The take-up rates and the subsidy component have a positive but weak correlation. Lenders might receive subsidies depending on the rules governing guarantee fees and benefit passthrough, whether they needed to assume a share of the risk and whether they had to screen borrowers.

Hong, G., Lucas, D. (2023). Evaluating the Cost of Government Credit Support Programs during Covid-19: International Evidence. Link

Overview table of impact studies' results

Table 1 : Empirical evidence for the effectiveness of guarantee institutions

Study	Geo	Data[a]/ Methodology	Financial additionality	Microeconomic additionality	Macroeconomic additionality	Results
Schmidt, Elkan (2006)	DE	B, U/ Macroeconomic simulation model	60%/82%[b]/95%[c] credits+, 40% interest-, 43% information+	67%[b]/72%[c]/79% investments+, 22%[b] investment volume+, 60% jobs+, per guarantee 7.5 jobs+, default rate-	Net benefit+, GDP multiplier 3.2, investment multiplier 2.1	
Kramer (2008)	DE	B, U/ Simulations	67% security+, 33% information+	Per mEUR 1 of counter-guarantee mEUR 64.1 investments+ and 2,000 jobs+		
Neuberger, Räthke (2008)	DE	U/ Descriptive	50% credits+, 23% credit volume+, 9% interest-, 16% credit volume+, after support 71% credits+	61% turnover+, 59% market share+		
Zecchini, Ventura (2009)	IT	B, C/ OLS, IV, DID	Credits+, interest-	Default rate-		
Carbonero et al. (2019)	ES	DID, Matching	20% credits+	Investment+, employment+, 12% assets+, 12% turnover+		

Carbonero et al. (2021)	ES	DID, Matching	15.46% credits+	11% assets+, employment+, 17% turnover+		
Columba et al. (2010)	IT	K, U/ OLS	Interest-, information+			
Crowling (2010)	UK	U/ Matching, regressions, cost-benefit-analysis	Credits+	Investments+, turnover+, employment+, productivity+	GDP+, net benefit+, GDP multiplier 1.05	
Federal ministry of economy and technology (2010)	DE	U/ Descriptive	90% credits+, interest-			
Garcia-Tabuenca, Crespo-Espert (2010)	ES	A, B/ ANOVA, Kruskal-Wallis, factor and regression analyses	Credits+, interest 0	Productivity+		
Lelarge et al. (2010)	FR	A, B/ Matching model	Credit volume+, interest-	Turnover+, employment+, default rate+		
Schmidt, Elkan (2010)	DE	B, U/ Macroeconomic simulation model		71%[b]/60%[c] investments+, 31% turnover+	Net benefit+	
Althammer et al. (2011)	DE	B, U/ Descriptive	67% credits+, interest-, information 0	100%[c] investments+	GDP+, employment+	
Mistrulli et al. (2011)	IT	A, U/ OLS, Probit	Credit volume+, interest-	Default rate+		
Allinson et al. (2013)	UK	U/ Matching, OLS, cost-benefit-analysis	Credits+	Growth+, employment+	Net benefit+, GDP multiplier 7.1	
Bartoli et al. (2013)	IT	C/ IV	Credits+, information+			
Valentin, Henschel (2013)	DE	U/ Descriptive	68% credits+, 68% regular information+, 49% information+, 43% credit relation+			
Boschi et al. (2014)	IT	B, C/ DID	Credits+/-			
Breemersch et al. (2014)	BE	A, B, C		Growth+, employment+, value added+		

Asdrubali, Signore (2015)	CE-SEE	A, C/ PSM, CEM, DID		Turnover+, employment+, short-term productivity-		
Holtemöller et al. (2015)	DE	Macroeconomic simulation model			Net benefit+, GDP multiplier 1.3-1.5	
Briozzo, Cardone-Riportella (2016)	ES	A/ ATE		Assets+, turnover+, assets/turnover+, employment+, turnover/employment+		
Gai et al. (2016)	IT	B, C/ Logit		Default rate+		
Muller et al. (2017)	UK	A / PSM, DID		Turnover+, employment+, default rate-	Net benefit+	
Neuberger et al. (2017), Hennecke et al. (2019), Hennecke, Neuberger (2020)	DE	B, K, U/ Macroeconomic simulation model	59%/63%[b]/89%[c] credits+, 19% credit volume+ and interest-, 6% credit volume 0 and interest-, 15-25% credit volume+,85%[b]/78%[c] interest-, 35%[b]/36%[c] information+, after support 84% credits+, 57% interest-	70% turnover+, employment+, default rate-	Net benefit+, GDP multiplier 1.15-1.22	
Bertoni et al. (2018)	FR	A/ PSM, CEM, DID		Assets+, turnover+, employment+, default rate-, productivity +/-		
De Blasio et al. (2018)	IT	B, K/ RDD	Credits+, interest 0	Investments 0, default rate+		
Duarte et al. (2018)	PT	A, B/ Regressions	Long-term credits+			
Rodrigues et al. (2018)	PT	A, B/ DID, Input-output-analysis	Credits+, interest-, information+	Investments+, employment+, short-term profitability-, default rate-	GDP+	
Barrot et al. (2019)	FR	A, B / OLS		Employment+	Net benefit+	

Bertoni et al. (2019)	BE, DK, FI, IT, LU, NL, NO, SE	A, C/ PSM, CEM, DID		Assets+, turnover+, employment+, immaterial assets+, default rate-		
Brault, Signore (2019)	EU	A, C/ PSM, CEM, DID		Assets+, turnover+, employment+, immaterial assets+, default rate-		
Carbonero Ruz et al. (2019)	ES	B / DID, ANOVA	Credits+	Assets+, employment+, growth+		
Martín-García, Santor (2019)	ES	A/ OLS, PSM	Credits+	Turnover+, investments+		
Amamou et al. (2020)	EU	PSM, DID		Employment+		
Bpifrance (2020)	FR	A, B / PSM, DID		Default rate-, growth+, employment+		
Ciani et al. (2020)	IT	C/ IV	Credits+, interest-			
D'Ignazio, Menon (2020)	IT	B, K/ IV	Long-term credits+, interest-	Investments 0, default rate+		
Akcigit et al. (2021)	TR	A, B/ CEM, DID		Employment+, sales+, default rate-		

[a] *A : Administrative data, B : Guarantee institution data, C : Commercial data, K : Credit bureau data, U : Survey data;* [b] *established companies,* [c] *start-ups,* [d] *company takeovers; positive, mixed, negative results; table based on Neuberger (2020), adapted by AECM.*

List of Literature

Akcigit, U., Seven, Ü., Yarba, I., Yilmaz, F. (2021). Firm-Level Impact of Credit Guarantees: Evidence from Turkish Credit Guarantee Fund. Link

Allinson, G., Robson, P., Stone, I. (2013). "Economic Evaluation of the Enterprise Finance Guarantee (EFG) Scheme". Link

Albertazzi, U., Bijsterbosch, M., Grodzicki, M., Metzler, J., Ponte Marques, A. (2020). "Potential impact of government loan guarantee schemes on bank losses". Financial Stability Review, May 2020. Link

Althammer, W., Hoßfeld, O., Siegert, G. (2011). "20 Jahre Bürgschaftsbank Sachsen: Effekte auf die wirtschaftliche Entwicklung in Sachsen." Study mandated by the Guarantee Bank of Saxony. Link

Amamou, R., Gereben, A., and Wolski, M. (2020). *"Making a difference: assessing the impact of EIB's funding to SMEs."* EIB Working Paper. Link

Asdrubali, P., Signore, S. (2015). "The economic impact of EU guarantees on credit to SMEs: Evidence from CESEE countries". EIF Working Paper 2015/29. Link

Barros, J., Martin, T., Sauvagnat, J., Vallée, B. (2019). *"Employment Effects of Alleviating Financing Frictions: Worker-level Evidence from a Loan Guarantee Program".* In Proceedings of Paris December 2019 Finance Meeting EUROFIDAI-ESSEC. Link

Bartoli, F., Ferri, G., Murro, P., Rotondi, Z. (2013). "Bank–firm relations and the role of Mutual Guarantee Institutions at the peak of the crisis". Journal of Financial Stability, 9, 90–104. Link

Bertoni, F., Brault, J., Colombo, M., Quas, A., Signore, S. (2019). "Econometric study on the impact of EU loan guarantee financial instruments on growth and jobs of SME". EIF Working Paper 2019/54. Link

Bertoni, F., Colombo, M., Quas, A. (2018). "The effects of EU-funded guarantee instruments of the performance of small and medium enterprises: Evidence from France". EIF Working Paper, No. 2018/52. Link

BGK (2022). Outcomes of the de minimis guarantee scheme – Report of 2022 study. Link.

Boschi, M., Girardi, A., Ventura, M. (2014). "Partial credit guarantees and SMEs financing". Journal of Financial Stability, 15, 182–194. Link

Bpifrance (2020). *"Evaluation de l'impact économique des fonds de garantie de place opérés par Bpifrance."* Link

Brault, J., Signore, S. (2019). "The real effects of EU loan guarantee schemes for SMEs: A pan-European assessment". EIF Working Paper, No. 2019/56. Link

Brault, J., Signore, S. (2020). "Credit Guarantees in the COVID-19 crisis – Relevance and Economic Impact". SUERF Policy Note, issue no 176, June 2020. Link

Breemersch, K., Decramer, S., Lecocq, C., Reynaerts, J. (2014). *"Economische analyse van de Waarborgregeling"*. Link

Briozzo, A., Cardone-Riportella, C. (2016). "Spanish SMEs' Subsidized and Guaranteed Credit during Economic Crisis: A Regional Perspective". Regional Studies, 50, 496–512. Link

British Business Bank (2022). Evaluation of the Bounce Back Loan Scheme, Coronavirus Business Interruption Loan Scheme, and Coronavirus Large Business Interruption Loan Scheme. Link

Brülhart, M., Lalive, R., Lehmann, T., & Siegenthaler, M. (2020). COVID-19 financial support to small businesses in Switzerland: Evaluation and outlook. Swiss Journal of Economics and Statistics, 156(15), 1–13. Link

Carbonero Ruz, M., Molina Sánchez, H., Pombo González, P., Ramírez Sobrino, J. (2019). *"Evaluation of the financial and economic additionality of IBERAVAL, SGR in 2016."* Link

Carbonero, M., Molina, H., Ramirez, J.N. (2021). Evaluacion Adicionalidad Financiera 2021, Iberaval. Link

Caselli, S., Corbetta, G., Rossolini, M., Vecchi, V. (2020). "Public Credit Guarantee Schemes and SMEs' Profitability: Evidence from Italy". Journal of Small Business Management. Link

Caselli, S., Corbetta, G., Cucinelli, D. , Rossolini, M. (2021). A survival analysis of public guaranteed loans: Does financial intermediary matter?, Journal of Financial Stability. Link

Ciani, E., Gallo, M., Rotondi, Z. (2020). "Public credit guarantees and financial additionalities across SME risk classes". Banca d'Italia Working Paper 1265. Link

Columba, F., Gambacorta, L., Mistrulli, P. (2009). "The effects of mutual guarantee consortia on the quality of bank lending. Revue Bancaire et Financière. Link

Columba, F., Gambacorta, L., Mistrulli, P. (2010). "Mutual guarantee institutions and small business finance". Journal of Financial Stability, 6, 45–54. Link

Corredera-Catalán, F., di Pietro, F., Trujillo-Ponce, A. (2021). "Post-COVID-19 SME financing constraints and the credit guarantee scheme solution in Spain". Journal of Banking Regulation. Link

Cowling, M. (2010). "Economic evaluation of the small firms loan guarantee (SFLG) scheme". Link

Cowling, M., Ughetto, E., Lee, N. (2017). "The innovation debt penalty: cost of debt, loan default, and the effects of a public loan guarantee on high-tech firms. Technological Forecasting and Social Change. Link

De Blasio, G., De Mitri, S., D'Ignazio, A., Finaldi Russo, P., Stoppani, L. (2018). "Public guarantees to SME borrowing. A RDD evaluation". Journal of Banking and Finance, 96, 73–86. Link

D'Ignazio, A., Menon, C. (2020). "Causal Effect of Credit Guarantees for Small and Medium-Sized Enterprises: Evidence from Italy". The Scandinavian Journal of Economics, 122, 191–218. Link

Duarte, F., Rodrigues, L., Madeira, M. (2018). "Credit Guarantee and the impact in financial structure of the Portuguese SME's". Chinese Business Review, 17, 179–190. Link

Estep (2021). Impact assessment of the use of financial instruments to invest European Union funds (in Lithuanian). Link

European Commission (2022). Study supporting the ex-post Evaluation of the European Fund for Strategic Investments, following Regulation 2017/2396 (EFSI 2.0). Link

European Court of Auditors (2020). "Report of the European Court of Auditors on the performance of the EU budget – Status at the end of 2019". Link

Falagiarda, M., Prapiestis, A., Rancoita, E. (2020). "Public loan guarantees and bank lending in the COVID-19 period". ECB Economic Bulletin, Issue 6/2020. Link

Federal Ministry for Economy and Technology (2010). "Evaluierung des erweiterten Bürgschaftsprogramms der Bürgschaftsbanken. Zusammenfassung der wichtigsten Ergebnisse".

Fuhrer, L., Ramelet, M., Tenhofen, J., (2021). Firms' participation in the Swiss COVID-19 loan programme. Swiss Journal of Economics and Statistics Link

Gai, L., Ielasi, F., Rossolini, M. (2016). "SMEs, public credit guarantees and mutual guarantee institutions". Journal of Small Business and Enterprise Development, 23, 1208–1228. Link

Garcia-Tabuenca, A., Crespo-Espert, J. (2010). "Credit guarantees and SME efficiency". Small Business Economics, 35, 113–128. Link

Hennecke, P., Neuberger, D., Ulbricht, D. (2019). „The economic and fiscal benefits of guarantee banks in Germany". Small Business Economics, 53, 771–794. Link

Hennecke, P., Neuberger, D. (2020). "Gesamtwirtschaftliche Effekte der Tätigkeit von Bürgschaftsbanken in den Neuen Bundesländern," Vierteljahrshefte zur

Wirtschaftsforschung / Quarterly Journal of Economic Research, DIW Berlin, German Institute for Economic Research, vol. 89(2), pages 63-80. Link

Holtemöller, O., Brautzsch, H., Drechsel, K., Drygalla, A., Giesen, S., Hennecke, P., Kiesel, K., Loose, B., Meier, C., Zeddies, G. (2015). "Ökonomische Wirksamkeit der Konjunktur stützenden finanzpolitischen Maßnahmen der Jahre 2008 und 2009. Forschungsvorhaben im Auftrag des Bundesministeriums der Finanzen". IWH Online 4/2015. Link

Hong, G., Lucas, D. (2023). Evaluating the Cost of Government Credit Support Programs during COVID-19: International Evidence. Link

Kaufmann, D. (2020). Does government-backed lending prevent unemployment? An assessment of the Swiss COVID-19 lending program. University of Neuchâtel, Mimeo. Link

Kramer, D. (2008). "Bürgschaftsbanken als Instrument zur Überwindung von Kreditrationierung in Deutschland? Eine empirische Untersuchung in den Ländern Brandenburg und Berlin".

Lelarge, C., Sraer, D., Thesmar, D. (2010). "Entrepreneurship and Credit Constraints: Evidence from a French Loan Guarantee Program." Link

Martín-García, R., Morán Santor, J., (2019). "Public guarantees: a countercyclical instrument for SME growth. Evidence from the Spanish Region of Madrid. Small Bus Econ (2021) 56:427-449. Link

Mistrulli, P., Vacca, V., Corbisiero, G., del Prete, S., Esposito, L., Gallo, M., Graziano, M., Lozzi, M., Maffione, V., Marangoni, D., Migliardi, A., Tosoni, A. (2011). "Mutual Guarantee Institutions (MGIs) and small business credit during the crisis". Questioni di Economia e Finanza, 105, Bank of Italy. Link

Molina, H., Pombo, P., Ramirez, J.N., Figueiredo, J.F. (2018). Conceptual framework for information on the outreach, additionality and financial sustainability of Public Credit Guarantee Schemes (CGSs), AECM, ALIDE, REGAR. Link

Muller, P., Devnani, S., Julius, J. (2017): *„Economic impact evaluation of the Enterprise Finance Guarantee (EFG) scheme."* London Economics, Ipsos MORI. Link

Neuberger, D., Räthke-Döppner, S. (2008). "Wirksamkeit von Landesbürgschaften und Bürgschaftsbanken: eine empirische Studie für Mecklenburg-Vorpommern". Zeitschrift für öffentliche und gemeinwirtschaftliche Unternehmen, 31, 386–406. Link

Neuberger, D., Ulbricht, D., Hebebrand, L., Hennecke, P., Kholodilin, K., Laatz, W., Stähr, D. (2017). "Gesamtwirtschaftliche und fiskalische Effekte der Tätigkeit von Bürgschaftsbanken in den Neuen Bundesländern". Link

Neuberger, D. (2020). "Der Mehrwert von Bürgschaftsbanken und (Rück-) Bürgschaften für KMU: ein Literaturüberblick," Vierteljahrshefte zur Wirtschaftsforschung

/ Quarterly Journal of Economic Research, DIW Berlin, German Institute for Economic Research, vol. 89(2), pages 41-62. Link

Rodrigues, V., Leitão, A., Nascimento, A., Santos, F., Guedes de Oliveira, F., Ribeiro, R. (2018). "The Mutual Guarantee System in Portugal, Economic and financial additionality over the 2011–2016 period". Link

Schmidt, A., van Elkan, M. (2006). „Der gesamtwirtschaftliche Nutzen der deutschen Bürgschaftsbanken". Link

Schmidt, A., van Elkan, M. (2010). „Quantifizierung der gesamtwirtschaftlichen Effekte der Aktivitäten der deutschen Bürgschaftsbanken unter den Rahmenbedingungen der weltweiten Finanz- und Wirtschaftskrise".

Valentin, A., Henschel, T. (2013). "Do guarantee banks mitigate credit restrictions for SMEs?". International Journal of Entrepreneurship and Small Business, 20, 481–496. Link

Zecchini, S., Ventura, M. (2009). "The impact of public guarantees on credit to SMEs". Small Business Economics, 32, 191–206. Link

Zoller-Rydzek, B., Keller, F. (2020). COVID-19: Guaranteed loans and zombie firms. MPRA Paper, No. 100897. Link

VI Methodological and Editorial Note

i. Methodological note

Scoreboard Survey

As in the previous years, we asked our members to report data on their outstanding and new guarantee volumes and numbers as well as on the numbers of supported SMEs (stock and flow). Furthermore, we collected data on agricultural guarantees, counter-guarantees, the use of EU programmes and coverage rates. One additional question was also included in the online questionnaire. The survey ran from 1st February to 3rd March 2022 and was extended several times. We collected 45 out of 46 possible responses. For members who did not report their data, we used recurrent data in order to avoid a distortion of the overall development of the AECM total values[14].

Monetary values were reported in EUR and members that do not have the EUR as their national currency calculated the EUR values using official exchange rate of December 2022 published on the website of the European Commission.

It is important to note that the presented data refers to guarantees implemented by AECM members, i.e. it includes both – guarantees for which our members assume at least part of the risk as well as guarantees that are fully covered (explicitly and implicitly) by their respective governments.

Concerning the definition of the data, we would like to remind the reader that the term outstanding guarantee is not uniformly defined across our membership base. From the Scoreboard survey 2019, we know that at the beginning of the guarantee, ¾ of the respondents include guarantees from the moment on when the underlying loan has been disbursed (only active guarantees), around 11% of the respondents include guarantees after they were granted but before the underlying loan has been disbursed. At the end of the guarantee, nearly half of the members include guarantees until the moment of the calling of the guarantee and around 40% until the moment of disbursement of the guarantee. In the H2 2020 survey, we enquired about the definition of newly granted guarantees. As a result, 15 respondents confirmed that the reported volume of newly granted guarantees of their respective organisations include refinancing operations and/or prolongations. 18 members stated that

[14] We furthermore used recurrent data for Garfondas/LT which became part of INVEGA Group/LT.

their organisations do not include refinancing operations and/or prolongations in the data concerning newly granted guarantees.

In order to calculate the share of our members' guarantee value of the GDP in their respective countries, we used the gross domestic product at market prices (current prices, in EUR) extracted from the Eurostat database. For the calculation of the share of AECM members' number of supported SMEs in relation to the amount of all SMEs in the respective countries, we used the number of enterprises that employ between 0 and 249 employees. Here, Eurostat data is only available until 2020. That is why we use recurrent data for 2021 and 2022[15]. Both GDP and SME data are not available for all countries of AECM members. For Kosovo, we used 2019 SME data of the Kosovo Tax Authority. For the United Kingdom, we used GDP data from statista.com. For Turkey we used recurrent GDP data from 2021.

AECM members can access the complete databank in the member area under the following link: Scoreboard data 2022

Guarantee Activity Survey

As in previous years, we asked our members about their perception of the guarantee activity during the past year and about their expectations for the current year. This survey was undertaken between 5th and 30th December and the deadline for submission was several times extended. 41 out of 45 members replied. The results of this survey are not weighted. A stabilisation is defined as growth of -1 to 1% for the purpose of comparison with Scoreboard data.

ii. Editorial note

The AECM Statistical Yearbook 2022 publication was elaborated by Felix HAAS VINÇON, Director of Studies at AECM, with the statistical data sent by the members, whom we would like to thank for their contributions. The section on agricultural guarantees was developed by Felicia COVALCIUC, Senior Policy Officer for Agricultural Policies at AECM. A big thank you also for her great support. Furthermore, we thank Marijana OREB, Chairwoman of the AECM Working Group Statistics and Impact, Katrin STURM, Secretary General of AECM as well as Lucia RIEGELSBERGER, intern at AECM, for their important support.

[15] For the United Kingdom, SME data is only available until 2018. Since then we use recurrent data.

Glossary

Abbreviations

AECM	European Association of Guarantee Institution (in French : Association Européenne du CautionneMent)
BBLS	Bounce Back Loan Scheme
BEIS	Department for Business, Energy and Industrial Strategy
CBILS	Coronavirus Business Interruption Loan Scheme
CCS	Cultural and Creative Sector
CEM	Coarsened exact matching
CGP	Credit Guarantee Programme
CLBILS	Coronavirus Large Business Interruption Loan Scheme
COSME LGF	Competitiveness of Enterprises and Small and Medium-sized Enterprises Loan Guarantee Facility
EAFRD	European Agricultural Fund for Regional Development
EaSI	EU Programme for Employment and Social Innovation
EBITDA	Earnings before Interest, Taxes, Depreciation and Amortisation
ECA	European Court of Auditors
ECB	European Central Bank
EFG	Enterprise Finance Guarantee
EFSI	European Fund for Strategic Investment
EGF	European Guarantee Fund
EIAH	European Investment Advisory Hub
EIB	European Investment Bank
EIF	European Investment Fund
EIPP	European Investment Project Portal
ERDF	European Rural Development Fund
ERP	Enterprise Resource Planning
ESG	Environmental, social, governance
EU	European Union
EUR	Euro - kEUR, mEUR, bEUR (respectively thousand, million, billion)
GDP	Gross domestic product
GHG	Greenhouse Gas
GVA	Gross Value Added
HMT	His Majesty's Treasury
IFRS	International Financial Reporting Standard
IIW	Infrastructure and Innovation Window
IPE	Investment Plan for Europe

IT	Information Technology
PGE	Prêt Garanti par l'Etat (in English : State guaranteed loan)
QW	Quality of Wage
R&D	Research and Development
RRF	Recovery and Resilience Facility
RWA	Risk weighted assets
SME	Small and medium-sized enterprises
SMEG	SME Guarantee Facility
TCF	Temporary Crisis Framework
TF	Temporary Framework for State aid measures to support the economy in the current Covid-19 outbreak
TMS	TMEDE Microfinance Solutions
US	United States of America
USD	US Dollar – tUSD (trillion)

Member list

AT	aws Austria Wirtschaftsservice GmbH NÖBEG Niederösterreichische Bürgschaften und Beteiligungen GmbH
AZ	MCGF Azerbaijan Mortgage and Credit Guarantee Fund
BE	Brussels Guarantee Fund Fonds Bruxellois de Garantie-Brussels Waarborgfonds PMV Standaardwaarborgen Participatie Maatschappij Vlaanderen WE Wallonie Entreprendre
BA	GF Srpska Guarantee Fund of the Republic of Srpska
BG	NGF National Guarantee Fund MGFSME Sofia Municipal Guarantee Fund for SMEs
HR	HAMAG-BICRO
CZ	NRB Národní rozvojová banka
EE	KredEx
FI	Finnvera
FR	Bpifrance Banque publique d'investissement EDC Européenne de Cautionnement SIAGI Société de caution mutuelle pour les petites entreprises SOCAMA Société de caution mutuelle artisanale
DE	VDB Verband Deutscher Bürgschaftsbanken
GR	HDB Hellenic Development Bank TMEDE Greek Engineers and Public Works Contractors Fund
HU	AVHGA Rural Credit Guarantee Foundation Garantiqa

IE	SBCI Strategic Banking Cooperation of Ireland
IT	Garanzia Etica ISMEA Istituto di Servizi per il Mercato Agricolo Alimentare
XK	KCGF Kosovo Credit Guarantee Fund
LV	ALTUM
LT	INVEGA Investiciju ir verslo Garantijos
LU	MC Mutualité de Cautionnement MPME Mutualité des PME
MT	MDB Malta Development Bank
MD	ODA Organizația pentru Dezvoltarea Antreprenoriatului
NL	RVO Rijksdienst voor Ondernemend Nederland
PL	BGK Bank Gospodarstwa Krajowego
PT	BPF Banco Português de Fomento
RO	FGCR Romanian Rural Credit Guarantee Fund FNGCIMM National credit guarantee fund for SMEs FRC Fondul Roman de Contragarantare S.A.
RS	GF Vojvodina Guarantee Fund of the Autonomous Province of Vojvodina
SI	SEF Slovenian Enterprise Fund SRDF Slovenian Regional Development Fund
ES	CESGAR Confederation of Spanish Mutual Guarantee Societies
CH	NSGI Network of Swiss Guarantee Institutions
TR	KGF Kredi Garanti Fonu TESKOMB Türkiye Esnaf ve Sanatkarlar Kredi ve Kefalet Kooperatifleri Birlikleri Merkez Birliği
UK	BBB British Business Bank

Country code

AT	Austria	DE	Germany	NL	Netherlands
AZ	Azerbaijan	GR	Greece	PL	Poland
BE	Belgium	HU	Hungary	PT	Portugal
BA	Bosnia and Herzegovina	IE	Ireland	RO	Romania
BG	Bulgaria	IT	Italy	RS	Serbia
HR	Croatia	XK	Kosovo	SI	Slovenia
CZ	Czechia	LV	Latvia	ES	Spain
EE	Estonia	LT	Lithuania	CH	Switzerland
FI	Finland	LU	Luxembourg	TR	Turkey
FR	France	MT	Malta	UK	United Kingdom
		MD	Moldova		

About us

The 46 members of the **European Association of Guarantee Institutions (AECM)** are operating in 31 countries in Europe. They are either private /mutual sector guarantee schemes or public promotional institutions or banks. Their mission is to support SMEs in getting access to finance. They provide guarantees to SMEs that have an economically sound project but do not dispose of sufficient bankable collateral. This so-called SME financing gap is recognised as market failure[16]. By guaranteeing for these enterprises, guarantee institutions help to successfully address this market failure and facilitate SMEs' access to finance. The broader social and economic impact of this activity includes the following:

- Job creation and preservation of jobs by guaranteed companies
- Innovation and competition: crowding-in of new ideas leading to healthy competition with established market participants
- Structure and risk diversification of the European economy
- Regional development since many rural projects are supported
- Counter-cyclical role during crises

SME guarantees generally pursue a medium- and long-term and our members, if public, private, mutual or with mixed ownership structure, have a promotional mission.

AECM's members operate with counter-guarantees from regional, national, and European level. At the end of 2022, AECM's members had about bEUR 267 of guarantee volume in portfolio, thereby granting guarantees to around 5.2 million SMEs. AECM's members are by far the most important counterparts of the EIF concerning EU counter-guarantees, handling EU guarantees from the very beginning in 1998.

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[4] OECD (2006). The SME finance gap. Vol. 1. Theory and evidence.
For an overview of market failures in SME lending and mitigation techniques: OECD (2018). Financing SMEs and entrepreneurs 2018. An OECD Scoreboard, OECD Publishing, Paris.