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Credit Guarantee Schemes for SME lending in Central, Eastern and South-Eastern Europe

A report by the Vienna Initiative Working Group on Credit
Guarantee Schemes

November 2014

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This document summarises the discussions in the Working Group on Credit Guarantee Schemes in Central, Eastern and South-Eastern Europe (CESEE), established under the European Bank Coordination Initiative (EBCI, Vienna Initiative 2). The working group was jointly chaired by Aurora Ferrari (World Bank,) Paweł Gąsiorowski (NBP), Áron Gereben (EIB) and Debora Revoltella (EIB).

The report was edited by Aurora Ferrari, Paweł Gąsiorowski and Áron Gereben. Key contributions were made by Pierfederico Asdrubali (EC), Maciej Brzozowski (NBP), Aurora Ferrari, Paweł Gąsiorowski , Áron Gereben, Helmut Krämer-Eis (EIF), Aminata Ndiaye and Ilias Skamnelos (WB). Anna Dudkowska (EIB), Tomasz Olejnik (EIB) and Bartłomiej Osieka (NBP) provided research assistance.

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Table of Contents

Executive summary	5
Background and objectives	7
Chapter 1 - The role and rationale of SME credit guarantee schemes	9
1.1 Credit guarantee schemes: definition	9
1.2 The role of credit guarantee mechanisms for SMEs	9
1.3 The role of public sector involvement.....	11
1.4 More role to play in economies in transition	12
1.5 Credit guarantees in times of financial stress	12
1.6 Typology of credit guarantee providers	13
1.7 The regulatory framework of credit guarantees.....	15
Chapter 2 – Operational environment and characteristics of credit guarantee schemes in the CESEE	17
2.1 Bank lending in CESEE after the crisis.....	17
2.2 A bird’s eye view of the credit guarantee frameworks in CESEE	18
2.3 Main characteristics of the national credit guarantee schemes.....	20
2.4 Guarantee products provided by multinational sources (EU/EIF facilities)	28
2.5 The current regulatory environment.....	31
Chapter 3 – Current issues and challenges faced by the credit guarantee system in the CESEE region	37
3.1 The demand for SME guarantees in the region	37
3.2 The role of CGSs in alleviating the impact of the crisis.....	38
3.3 The key factors constraining the credit guarantee activity in the CESEE	41
3.4 Regulatory issues.....	42
3.5 The role of collateral.....	43
3.6 Financial sustainability and additionality.....	45
Chapter 4 – Performance and Principles for CGSs in the CESEE context	49
4.1 CGS design, performance and utilization.....	49
4.2 Key principles of operational characteristics for CGSs.....	50
Chapter 5 – Conclusions and recommendations for action	55
References	57
Annex 1 – The CGS market, country by country	59
Annex 2 – Short description of the three surveys	59
Annex 3 – The measurement of economic additionality for the MAP SMEG facility	72
Annex 4 – List of the working group participants	82

Executive summary

The role of CGSs	Credit guarantee schemes (CGSs) are used in many countries to alleviate the constraints facing small and medium-sized enterprises (SMEs) in accessing finance. They can play a catalysing role in emerging economies where the SME financing gap is generally wider than in developed economies. In times of financial downturns CGSs can be a part of a counter-cyclical public policy toolkit to support lending to SMEs. Public sector involvement is usually judged to be necessary to supply guarantee products in sufficient amounts.
The SME financing gap in the CESEE	In the aftermath of the financial crisis, economies of Central, Eastern and South-Eastern Europe (CESEE) have been left with a constrained supply of credit to SMEs as deleveraging, low profitability and rising levels of non-performing loans (NPLs) limited banks' risk-taking capacity.
The current supply of credit guarantees	CGSs have already been operating in most of the countries in the region. Outstanding volumes of guarantees in CESEE range from 1.2-1.3 percent of GDP in Hungary and Romania to negligible amounts in some non-EU countries of the South-East Europe. CGSs in CESEE show large variability in terms of operational characteristics – in their mission, institutional structure, services offered, operational practices and performance indicators – but are typically public-sector entities. Besides local CGSs, the European Investment Fund - the key multinational guarantee provider in the region – provides guarantees to lenders and also supports the local guarantee institutions with counter-guarantees. CGSs operating in the region face a complex regulatory environment, which includes their own regulation and supervision, the treatment of credit guarantees in the regulation of banks, and state aid rules at EU level (including <i>de minimis</i> provisions).
Issues and challenges	Our surveys confirm that a substantial need exists for SME credit guarantees in CESEE. The crisis further increased the interest of financial institutions in using credit guarantees, in particular for guarantees on working capital loans. Local CGSs, together with EU sources have already been implementing various measures to meet this increased demand, but our survey data suggest that more resources may be necessary, especially in South-Eastern Europe. The regulatory and supervisory treatment of credit guarantees appears to be a key constraint on their further use. The practical application of the Capital Requirements Regulation (CRR) by national supervisory authorities with respect to the credit risk mitigation of financial guarantees and the associated capital relief should be harmonised across the EU. In their current form, guarantees apparently at best ease, but in many cases do not substantially alleviate the need for collateral.
Best practices for CGSs	In the report we identify best practices for the design and operational characteristics of CGSs, covering their mandate, structure, services, loan

appraisal procedures, pricing, claim recovery, financial performance, impact measurement, risk mitigation and regulation. For some CGSs operating in the CESEE, these best practices are yet to be implemented. In particular, sizable gaps exist relative to the benchmarks with respect to additionality requirements, the parallel use of guarantees and collateral, the use of portfolio guarantees, the provision of incentives for loan recovery, and impact measurement.

Conclusions and recommendations

The key conclusions of our analysis can be summarised as follows.

- A strong demand exists for SME credit guarantees in the CESEE region, underlining the need to further develop the infrastructure that provides such products.
- Credit guarantee schemes can be an effective way to deliver public support for SMEs' access to finance. At the same time public funding is essential for the existence of CGSs in CESEE, and this support should continue in the future. EU funds and IFIs can play a key role in supporting CGSs in times when fiscal constraints exist at national levels.
- Credit guarantee schemes should be designed and operated so as to ensure the prudent and efficient use of public resources. A number of CGSs operating in CESEE have room for improvement in defining their objectives, measuring performance and additionality, and evaluating long-term sustainability. Smaller, regional guarantee providers may benefit from counter-guarantees, and from a standardisation of their product lines.
- Credit guarantees should allow a widening the universe of SMEs that have access to finance, but mechanisms should be in place to limit the adverse selection of high-risk borrowers and the moral hazard associated with existing borrowers.
- The ability of credit guarantees to substantially alleviate the need for collateral should be strengthened through appropriate contractual parameters and pricing.
- CGSs should refrain from excessive administrative requirements and narrow definitions of eligible clients, as these often discourage lenders from using credit guarantees.
- For EU countries, uniform treatment by national authorities of the credit risk mitigation provided by financial guarantees and the associated regulatory capital relief may facilitate the more widespread use of these instruments.
- A coherent approach to, and a stronger awareness of credit guarantee schemes by the national financial regulatory and supervisory authorities is desirable.
- Banks could support the use of credit guarantees by ensuring that loan officers are provided with the necessary incentives to roll out guaranteed loans.

Background and objectives

In October 2013 members of the Full Forum of Vienna Initiative 2 decided to establish a working group on credit guarantee schemes (CGSs). The Vienna Initiative was originally established at the height of the global financial crisis of 2008/09 as a private-public sector platform to secure adequate capital and liquidity support by international banking groups for their affiliates in CESEE. The initiative was re-launched as “Vienna 2” in January 2012 in response to renewed risks for the region from the Eurozone crisis. Its focus is now on fostering home and host authority coordination in support of stable cross-border banking and guarding against disorderly deleveraging. International banking groups continue to play an important role in the Initiative, both by supporting the coordination efforts and doing their own part to avoid disorderly deleveraging. The initiative has benefitted from strong participation by commercial banks active in CESEE countries, by supervisors from both banks’ home countries and the host countries in which they operate, by the European Commission and by a range of international institutions, including the IMF, World Bank, the EIB Group and EBRD.

Members of the Vienna Initiative 2 highlighted the existence of significant constraints on lending in Central, East and South-East Europe (CESEE), stemming from both the demand and the supply side. Concerns related to the level of NPLs have often been raised by the banks as an impediment to new lending. In particular, banks noted that they have little information on the ‘true’ risk of SME lending in the region, as many of these economies have not actually been through a full, proper credit cycle in the post-transition period. Good quality collateral has also been scarce; and what collateral had been available was usually negatively affected by the crisis.

A possible way to help the banks to absorb more risk is via credit guarantees issued by CGSs. A variety of such arrangements exist, and an in-depth analysis of the existing ones in the region – national CGSs, mutual CGSs, schemes already offered by IFIs – is important. The working group was set up to

- analyse the relevance of existing national guarantee schemes;
- investigate the scale (volume) and typology (ownership structure, specialisation, pricing, etc.) of existing CGSs,
- assess their effectiveness in the past along key dimensions – such as financial and economic additionality, long-term sustainability, market impact and possible distortions,
- analyse the role of existing and recently proposed EU financial instruments aiming at supporting and strengthening CGSs (both public or private) and identify areas of possible improvement and additional IFI involvement.

The key questions to be answered have been defined as the followings:

- what types of guarantee schemes exist;
- whether they are effective in practice;
- whether general “best practices” can be established;
- what kind of measures can be recommended for CGSs to improve their efficiency;
- what existing and recently proposed instruments of the European Union are available to support CGSs;
- how the uniform treatment of capital relief for guarantee products could be better achieved within the European Union, and
- whether recapitalisation, possibly with IFI involvement, should be part of these measures.

A growing literature on CGSs exists to build on. The main value added relative to existing studies is the detailed focus on the CESEE region, and the possibility of incorporating opinions/feedbacks from a broad set of

stakeholders through surveys of the CGSs, the commercial banks – or even actual SMEs – about their experience.

To support the analysis, three one-off surveys have been carried out in the first half of 2014. These surveys allowed us to obtain up-to-date first-hand information on the key issues.¹

- **CGS survey.** With the support of AECM (European Association of Mutual Guarantee Societies), we approached the national CGSs operating in CESEE and asked them to provide us information about the scale of their activities, their operational characteristics, their performance indicators and the issues and challenges they currently face.
- **Bank survey.** Banking groups operating in CESEE were asked to participate in a survey on their use of guarantee schemes. To obtain country-specific information, the questionnaires were completed by corporate credit risk specialists at the level of local subsidiaries of the banking groups. Besides providing an overall view on the scale and specificities of credit guarantee usage, banks shared their experiences with and views on the particular CGSs that have been operating in their countries.
- **Regulatory survey.** We also conducted a survey of the financial regulatory and supervisory agencies to obtain their views on the CGSs and credit guarantee products.

¹ See Annex 2 for a detailed description of the three surveys.

Chapter 1 - The role and rationale of SME credit guarantee schemes

- *Credit guarantee schemes (CGSs) are used in many developed and developing economies to alleviate the constraints facing SMEs in accessing finance.*
- *CGSs can play a strong role in emerging economies where the SME financing gap is generally wider than in developed economies.*
- *In financial downturns CGSs can be a part of a counter-cyclical public policy toolkit.*
- *Public sector involvement is often judged to be necessary for the supply of credit guarantee products in sufficient amounts.*
- *CGSs can be characterised by their mission, institutional structure, services offered, operational practices and performance indicators.*

1.1 Credit guarantee schemes: definition

Credit guarantee schemes (CGSs) provide guarantees on loans to borrowers by covering a share of the default risk of the loan. In case of default by the borrower, the lender recovers the value of the guarantee. Guarantees are usually provided against a fee, covered either by the borrower, the lender or both. In case of a default, the lender usually is obliged to proceed with the collection of the loan and share the proceeds with the guarantor. Credit guarantees allow the partial transfer of credit risk stemming from a loan or a portfolio of loans. In this respect, they show similarity to credit insurance products and credit default swaps. In this study we focus on CGSs providing guarantees on loans to small- and medium-size enterprises (SMEs).

CGSs can be public or private. Public CGSs – where funding is provided by the public sector – usually arise from policy initiatives to improve the access to finance for SMEs. Public schemes are the most prevalent type in emerging economies. However, in many developed economies private CGSs also exist. These are typically mutual guarantee schemes, based on industry associations, where members jointly provide guarantees on the loans taken by the individual members. Finally, supranational credit guarantee schemes also exist under the aegis of international financial institutions.

1.2 The role of credit guarantee mechanisms for SMEs

Public CGSs are used in many developed and developing economies to alleviate the constraints facing SMEs in accessing finance. Indeed, financial institutions are usually reluctant to extend uncollateralised credit to SMEs, even at high interest rates, in part because of the high costs of obtaining adequate information on the true credit quality of typical small, young companies. Also, many of these firms do not have the necessary amount and type of assets that could serve as collateral for the loan. As a result, many SMEs with economically viable projects cannot obtain the necessary financing from the regular system of financial intermediation. This phenomenon is often referred to as the *SME financing gap* (see for example OECD, 2006).

From the viewpoint of economic theory, the most often cited explanation for the financing gap is the credit rationing hypothesis. The concept originates from Jaffee and Russell (1976), and Stiglitz and Weiss (1981). According to this, an information asymmetry exists between the banks and the borrowers. For the banks, it is costly to obtain sufficient information on the true risk and profitability of the projects behind loan applications. On one hand, this results in an adverse selection of projects: for any given lending rate, inherently riskier projects will be over-represented in the loan application pool. On the other hand, in the presence of limited

liability of the borrowers in the event of default, it also creates moral hazard by giving borrowers an incentive to shift towards riskier projects than the ones announced to the lender. In the presence of asymmetric information, banks are reluctant to use higher interest rates to compensate for higher risk, as they are afraid of a) discouraging lower-risk borrowers while encouraging high-risk ones, b) creating incentives for existing customers to engage in riskier activities. As a consequence, the rational response of the banks is to keep the supply of credit below the demand, rather than to increase the interest rate charged on loans.

SMEs are more affected by credit rationing than larger companies, since the information asymmetry is more pronounced for small firms, and the cost of monitoring is higher. Large companies can be expected to obey recognised corporate norms and standards, formal reporting requirements etc., whereas business decision making processes, transparency rules, dividing lines between company and personal assets are less well-defined for SMEs. Credit history and operational track records are also usually shorter.

One potential solution to alleviate credit rationing – besides external guarantees – is the use of collateral. The use of collateral provides an additional source of repayment in case of a default. It also increases the cost of default for the borrower, thus giving the SME greater incentive to repay the loan. Collateralisation therefore reduces both the adverse selection and the moral hazard problem. However, collateral is not always available, and its use may have some drawbacks. First, the borrower may not have collateral of suitable size and quality. Second, the collateral may be worth more to the borrower than to the financial institution providing the loan, which may lead to undervaluation. Third, the use of collateral usually increases the cost of borrowing, as it generally involves legal and other administrative procedures.²

Well-designed and well-priced credit guarantees help close the financing gap by substituting collateral provided by a borrower with credit protection provided by an external guarantor. In practice, external guarantees and collateral are often used side-by-side on the same loan. This is not a problem if no significant overlap exists between the share of the loan covered by the collateral and the one covered by the guarantee. Having some ‘skin in the game’ through partial collateralisation can reduce the borrower’s incentive to default. However, guarantees clearly do not fulfil their policy role in broadening credit supply if they are used as a backup protection on a collateralised loan. This can happen for example when guarantee fees are set too low. Besides appropriate pricing, contractual mechanisms such as caps on the level of collateralisation can also be used to ensure that guarantees generate additional lending.³

The design and pricing of credit guarantee products should also ensure that the transfer of credit risk from the lender to the guarantor does not lead to excessive risk-taking. If the bulk of the credit risk is taken by the CGS, lenders do not have incentives to carry out proper risk screening and credit monitoring. On the contrary, they are encouraged to take on high-risk borrowers that are willing to pay high interest rates. Moral hazard can be minimised through proper risk sharing, which ensures that all parties – the borrower, the lender and the guarantor – retain a sufficiently high level of potential loss to ensure the repayment of the loan. Similarly, rules governing the collection process in case of a default event should ensure that the lender is motivated to pursue recovery efforts, for example by delaying the pay-out of the guarantee until recovery actions are initiated by the lender.

² As a consequence in the presence of credit rationing, the allocation of credit is biased towards economic activities where tangible collateral of sufficient size is easily available, eg. property development, and away from sectors where intangible assets play an important part, such as information technology, business services and other production involving research and development. Credit guarantees can be particularly important for SMEs operating in these areas (see Holton et al, 2013).

³ Saldana (2000) examines the case of parallel use of guarantees and collateral. His analysis points out that the necessary conditions for a guarantee to be welfare increasing are a) risk aversion of creditors b) the loan being collateral free or collateral deficient. The analysis concludes that to ensure additionality, guarantee programmes should screen the lenders collateral policies and only allow guarantees to be used on loans with collateral deficit.

Separate entities specialised in guarantee provision are often better suited to resolve the problems leading to credit rationing and the SME financing gap than the lenders themselves. Indeed, in some cases, suppliers of credit guarantees have arisen as purely private-sector initiatives, such as Italy's network of mutual guarantee schemes, the so-called *Confidi*. Sometimes – as in the case of mutual schemes established by industry associations – CGSs may have better information on the clients' creditworthiness than the lenders. Also, CGSs may help the diversification of credit risk if the portfolio of the lender is otherwise concentrated, either geographically or in certain industries. In some cases, regulatory arbitrage (such as the circumvention of caps on lending rates) may also play a role in the development of CGSs. The reasons mentioned above can rationalise the existence of CGSs on a pure market basis. Besides these, a variety of possible motivations exist for the public sector to be involved in the provision of credit guarantees.⁴

1.3 The role of public sector involvement

In practice, public sector resources are frequently judged necessary to supply credit guarantees in sufficient amounts. If the key role of CGSs is to mitigate the asymmetric information problem between lenders and borrowers which leads to the emergence of SME financing gap, this alone does not explain the need for public sector intervention in the establishment and funding of credit guarantee institutions. In practice, however, more often than not, the public sector plays an important role in the supply of credit guarantees to SMEs.

Governments may pursue various welfare objectives when establishing or supporting CGSs. These may include shifting the distribution of credit towards SMEs that do not have the collateral required by banks. This can be realised without any subsidy elements, although in practice most public CGSs do include some sort government subsidy. The policy objectives behind such subsidies can include expected welfare improvements stemming from supporting under-resourced entrepreneurs, industries/activities in their early stage of development, or young companies in their critical, start-up stage, etc. Evidence on whether such policy objectives are efficiently pursued through subsidised CGSs is still to be established (Honohan, 2010).

Government involvement in the establishment and funding of CGSs can also be motivated by resolving coordination failure between private-sector entities, which prevents them from pooling their resources. Anginer et al. (2014) argue that when lenders are risk averse, efficient provision of guarantees may not occur on a private sector basis due to collective action problems, i.e. although the stakeholders are all aware of the problem, the lack of action comes from the misalignment of the private interests with those of the society. They also stress that the incentives for collective action are even weaker in economies with less developed financial systems. The state, on the contrary, is able to resolve the collective action frictions that get in the way of risk spreading. However, to achieve this objective, the state has to maintain the incentives for lenders to monitor projects efficiently, and to deter the borrower from excessive risk taking. This can be done by pricing guarantees in a way that ensures the expected losses being covered by the fees charged, and promotes the risk being shared with the private sector.

Publicly supported CGSs are one possible way through which government policy can alleviate the SME financing gap – a simple alternative would be subsidised lending. Arping et al. (2010) examine alternative forms of support by the state – in the form of credit guarantees and loan subsidies – to entrepreneurs that are capital-constrained and subject to moral hazard. They conclude that government agencies with tight budget constraints are better off providing guarantees rather than subsidising loans. Furthermore, guarantees have

⁴ Honohan (2010) provides a thorough discussion of the various possible motivations behind the existence of stand-alone private and public CGSs.

certain advantages over direct subsidised government lending. First, the final lending decision stays with a market-based, private-sector entity – the bank –, which has the expertise and the necessary technology to evaluate credit applications and projects. This is likely to ensure a more efficient selection among borrowers than if the task is done by a public agency – given that the guarantee is partial, leaving some part of the risk with the lender. Second, compared to direct lending programmes, CGSs have much lower initial cash flow needs, and as such, have a leverage component. As a consequence, they can also be used when fiscal constraints are tight.

However, the small initial cash outlay of credit guarantee schemes also has disadvantages. Honohan (2010) notes that, as a large number of borrowers can be reached with only relatively small initial costs in the short run, political incentives exist for the public sector to supply guarantees generously, while concealing the true long-term fiscal costs of a programme behind the uncertainty around the expected long-term losses on the guarantee portfolio. This can result in unexpected fiscal costs further down the road.

Only carefully designed and continuously evaluated guarantee products have a chance to deliver the associated public policy objectives. Without such care, public CGSs can do more harm than good by misallocating resources, crowding out private collateral and unnecessarily increasing public debt.⁵

1.4 More role to play in economies in transition

In economies in a catching-up phase, such as the most of the ones in the CESEE region, the financing gap can be more pronounced.⁶ This is due to the following factors:

- **Lack of collateral.** In emerging economies, usable collateral is generally scarce relative to developed economies, and its value is usually more difficult to establish. Also, the range of assets available as collateral is often narrower than in more developed countries, and legal enforcement can be more difficult, both due to limitations in the legal framework.
- **Reliance on bank lending and lack of alternatives to bank-based intermediation.** Many of the emerging economies are capital importers, with a substantial part of foreign capital inflows arriving in the form of foreign direct investment or intercompany loans. These forms of financing are not available for SMEs. The information gap between SMEs and the non-resident capital providers are large; the latter lack the local knowledge necessary for funding small companies. Local capital markets and sources of private equity are also often less developed, therefore banks usually represent the only viable source of external financing, even more so than in developed economies.
- **Less developed networks to obtain credit information.** SMEs in emerging and transition economies tend to have shorter operational and credit histories. Furthermore, the infrastructure of company information – registrars, credit history databases, rating agencies, etc. – is generally less developed. Ineffective legal systems can also represent additional uncertainty to creditors.
- **Despite the scarcity of good collateral, bank lending to SMEs in most emerging and transition economies occurs mostly on a collateralised basis.**⁷ In such an environment, CGSs can play an important role in alleviating financial constraints for a number of small firms.

⁵ On the pros and cons of public sector intervention through credit guarantees see World Bank (2013), pp. 121-125.

⁶ OECD (2006), Chapter 1 discusses in detail why the financing gap can be wider in emerging markets than in developed economies, and presents empirical evidence on the subject.

1.5 Credit guarantees in times of financial stress

CGSs are particularly important in times of economic downturn as part of a counter-cyclical public policy toolkit. Cyclical downturns and financial crises in particular usually increase the financing gap for SMEs. Various reasons exist why the supply of credit available to SMEs declines in times of financial stress.

- The weakening of the banks' capital and liquidity position reduces credit supply in general across the economy.
- Heightened uncertainty increases the adverse selection and moral hazard embedded into SME lending, providing additional incentives for banks to limit credit supply to SMEs.
- The value of the various types of collateral declines, and/or becomes more volatile, reducing the potential for collateralised lending.
- Other sources of external financing, such as trade credit, also become scarcer.

In cyclical downturns the demand for credit is also likely to decline. It is often difficult to disentangle the relative role of demand- and supply-side factors in an observed reduction in the credit flows to SMEs. However, evidence suggests that in the ongoing financial downturn, supply-side constraints have played an important role in the decline in new bank lending to SMEs.⁸ In practice, authorities in a number of countries responded to the post-crisis slowdown by offering large-scale guarantee programs for SMEs.

1.6 Typology of credit guarantee providers

Institutions providing credit guarantees may be characterised by the following factors.⁹

Mission. Guarantee schemes and products can differ in the specific objectives they wish to promote. The mission also usually defines the target group of clients. In many countries, a network of regional CGSs exists, capitalising on their knowledge of local entrepreneurs. Other CGSs focus on certain activities: in many areas of the world, stand-alone CGSs support specifically the agricultural sector. Mutual schemes are also usually organised along regional and/or industry lines. Even guarantee schemes with general operations often offer specialised products, such as guarantees for research and innovation financing, or to support employment growth. Also, some CGSs provide guarantee services to a set of clients broader than SMEs, such as larger companies or municipalities.

Institutional structure and funding. CGSs can differ in their legal structure. Some schemes are established as private companies or mutual financial institutions, while others as public corporations, branches of publicly owned development banks, or as government structures directly linked to a ministry. From the viewpoint of funding, CGSs can be characterised as public, mixed or private. Public ownership is widespread in emerging markets, where state-owned national guarantee schemes are the most prevalent CGSs. Guarantee institutions supported by international financial organisations are also considered being part of the public sphere. Mixed ownership characterises those entities where besides the state, other stakeholders, such as banks or enterprise group associations are also equity holders. Private schemes are usually mutual guarantee funds

⁷ According to Beck et al. (2008), the share of secured loans in SME lending amounts to 80 percent in developing countries, whereas the corresponding value for developed economies is 56 percent.

⁸ For a detailed overview on the impact of the crisis on SME access to finance see Wehinger (2013) or Kraemer-Eis et al. (2013).

⁹ Some of these factors characterize the products offered by CGSs, rather than the CGSs themselves. As a single CGS may offer several different products, the two may not fully correspond with each other.

(such as the *Confidi* in Italy), which are related to industry and trade associations and intended to help members access financing.

Services. The set of products CGSs offer – both the guarantees themselves and the additional services – vary across schemes.

- The guarantees offered can cover either loan applications on an *individual* basis, or a *portfolio* of the eligible loans. In the case of individual guarantees, a part of the exposure for each loan is covered separately by the guarantor. In case of a portfolio guarantee, the guarantor covers a part of exposure for a specified number of loans from a pre-defined portfolio of loans (first loss), usually up to a specified total amount (cap).
- A key characteristic of any guarantee product is the maximum *coverage ratio*, which refers to the percent of the exposure that is guaranteed by the CGS.
- The *pricing structure* and strategy – whether the price is paid by the lender or the borrower, and whether it takes the form of a lump sum, or includes membership fees or annual contributions – also shows variability across countries and institutions.
- *Risk sharing arrangements* are crucial to adjust incentives to minimise moral hazard from the lenders' side. In case of a *pari passu* guarantee, the guarantee scheme assumes a fixed share of the loss, irrespective of its size. In case of a *first loss* guarantee, the burden from defaults is fully assumed up to a predetermined amount, above which the guarantee scheme has no further obligation. Besides these two broad categories various other arrangements exist.
- Some schemes offer their products only through banks or other financial institutions, and do not have direct contact with the clients, whereas others serve as a *first point of contact for SMEs*, also sometimes providing advisory services to entrepreneurs.

Operational practices. Some CGSs appraise credit applications independently and individually, whereas others rely only on the lenders' credit evaluation. To keep the lending process streamlined, some CGSs set a mandatory time limit of few weeks to process applications. Another key characteristic from an operational point of view is whether and how the given CGS uses risk management and transfer instruments, such as counter-guarantees, reinsurance or portfolio securitisation. In case of an actual default, sharing of execution proceeds between the bank and the guarantor usually happens on a *pari passu* basis, where the bank has to repay to the guarantor a part of all proceeds collected from the borrower. The bank needs to retain the incentive to pursue recovery efforts, e.g. by delaying guarantee pay-outs until the bank initiates recovery actions. Lacking such mechanisms, there is a higher risk of credit guarantees crowding out collateral, as a quicker, easier option for loss recovery. In such a case, the higher the share of the exposure covered by the guarantee, the smaller the incentive for the lender to require other collateral, since the lender can thus limit the total cost of execution.

Performance and impact evaluation. From the viewpoint of efficient use of public funds, it is essential to measure whether CGSs achieve their assigned policy objectives. In practice, however, given the often vaguely defined objectives, the relatively long maturity of the guaranteed credit portfolios and the lack of counterfactual evidence, the measurement of the performance and the impact of the CGSs is technically challenging, and as a result, rigorous, concise evaluations of CGSs are seldom carried out.

Measuring the performance is usually somewhat easier. The most commonly used concepts to evaluate the performance of CGSs are the followings:

- **Outreach.** Outreach refers to the capacity of the CGS to meet the demand for guaranteed loans by SMEs. In practice, outreach is assessed using simple quantitative indicators such as the number of guarantees outstanding, or the value of the guaranteed credit portfolio. These

indicators are usually relatively easy to obtain; however, the scale of activity does not necessarily say much about the efficient achievement of policy objectives.

- **Financial sustainability.** Sustainability refers to the CGSs' capacity to cover their loan losses and to maintain their equity position on an autonomous basis. It indicates the degree of reliance on public support in the operations of the schemes. A true test of financial sustainability should look at the issue over the course of a longer period, preferably through a full credit cycle.

It is much more difficult to measure the impact of the CGSs, which is usually attempted through the evaluation of financial and economic additionality. These encompass the following:

- **Financial additionality.** This concept captures the incremental credit flow towards eligible SMEs that is attributable to the activity of the given CGS or CGSs. Financial additionality is thus the amount of lending that would not have happened without the guarantee. Establishing the counterfactual baseline is hence a prerequisite of proper measurement, but hard in practice.
- **Economic additionality.** A step further is to assess not only the additional financial flow itself, but the economic welfare it generates. Economic additionality is often measured through the loan guarantees' impact on employment, investment, innovation, etc. The difficulties of proper measurement are even more pronounced here than in the case of financial additionality.

1.7 The regulatory framework of credit guarantees

From the viewpoint of financial regulation and supervision, CGSs can be divided into three categories: (i) national CGSs that are supervised by national authorities; (ii) national CGSs that are not supervised; and (iii) CGSs that are set up by international financial institutions and are not supervised. The latter two categories are most common.

Among schemes that fall under the purview of the national authorities, supervision and control of CGSs can be undertaken at various levels. CGSs may be classified as financial intermediaries, and hence be supervised by the central bank, banking supervisory authority or other financial sector supervisor. For public schemes, the ministry of finance, the competent line ministries and/or the relevant governmental institutions are generally responsible for their control, except when the CGS also qualifies as financial intermediary.

The provision of guarantees often requires licencing the guarantor as a credit institution, even if it does not take deposits. In such cases, CGSs are supervised by national financial authorities and subject to prudential regulation that defines minimum capital requirements, including Basel III rules but also solvency and disclosure requirements. This can imply compliance costs for CGSs and has led CGSs, in some cases, to seek exemption from supervision by financial authorities.¹⁰ In few countries, specific regulations exist for guarantee schemes, tailored to their ownership and management structure.

Even when CGSs are supervised, no standard thresholds for leverage – defined as exposure-to-funding ratio – exist. National regulators are thus left to their own discretion in assessing the adequacy of a CGS's capital.

¹⁰ In Germany, CGSs have agreed with the financial regulator (BaFin) to be exempted from supervision, subject to two conditions: i) the CGS is not allowed to leverage capital and ii) the capital is invested in instruments with minimum fluctuations in value (i.e. time deposits). Under this scenario, the CGS commits a certain amount of capital to a specific bank, for it to provide loans —for X-times that amount— that are guaranteed up to the amount committed. No funds are actually transferred to the bank, as they remain in the balance sheet of the CGS.

Capitalisation levels help regulators assess the sustainability of funded CGSs. For unfunded CGSs, the characteristics of the backing entity (i.e. foundation, government, etc.) are critical in assessing sustainability.

The regulatory and supervisory regime applicable to credit guarantees has direct implications for the prudential regulation of banks, in terms of loan-loss provisioning rules and minimum capital requirements.

- **Loan-loss provisions:** banks are subject to general and specific reserve requirements for the loans they provide (i.e., general provisions on loans, specific provisions for non-performing loans, special requirements for restructured loans). For loans that are covered by guarantees, the standard practice is to apply a reduction in the provisioning requirements for the covered portion of loans (i.e. guaranteed loans could be classified as cash collateral). The extent of the reduction will depend on the credit rating of the CGS. In a best-case scenario. – i.e., a funded CGS backed by an AAA-rated government – covered loans are exempted from standard provisioning requirements.
- **Capital adequacy:** Covered bank loans may also carry a lower risk weight, for capital adequacy calculation purposes. If the guarantee is classified as a credit risk mitigating instrument by the regulator, the lower risk weight will lead to reduced regulatory capital requirements for banks —i.e. regulatory capital relief.

Besides banking regulation, many other aspects of the regulatory environment may influence the design and the operation of CGSs. These include the followings:

- **Taxation.** The VAT regime may be applied to a) fees charged by the CGS to the bank; b) guarantee pay-outs by the CGS to the bank; and c) bank reflows to the CGS (e.g. recovery proceeds). This can ultimately affect the banks' incentives to use credit guarantees.
- **EU state aid regulation.** Credit guarantees provided by public sector institutions are included in the EU's definition of state aid, and as such would be subject to EU requirements. For simplified procedures, credit guarantees can fall under the scope of the General Block Exemption Regulation (GBER) and *de minimis* regulation, which are EU-granted "block exemptions" from state aid rules. However, both regulations come with specific eligibility criteria related to size (e.g. EUR 200,000 maximum funding over a 3-year period for *de minimis*), sector, guarantee coverage, maturity, etc.

Chapter 2 – Operational environment and characteristics of credit guarantee schemes in CESEE

- Credit flows to the private sector, including SMEs, have stalled in CESEE after the crisis, due to weak aggregate demand, the reversal of cross-border funding flows, and the deterioration of portfolio quality and profitability.
- Outstanding volumes of credit guarantees provided by local CGSs range between 1.2-1.3 percent of GDP in Hungary and Romania to negligible amounts in some non-EU countries of the region.
- CGSs in CESEE show large variability in terms of operational characteristics, but are typically public-sector entities.
- The key multinational guarantee provider in the region is the European Investment Fund.
- CGSs face a complex regulatory environment, which includes their own regulation and supervision, the treatment of credit guarantees in the regulation of lending institutions, and state aid exemptions at EU level (*de minimis* rules).

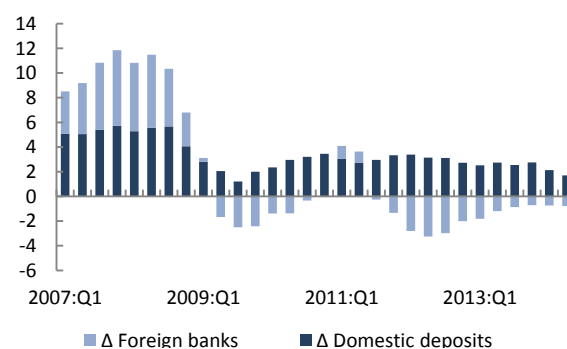
2.1 Bank lending in CESEE after the crisis

Banks in the CESEE have experienced a significant decline in external funding after the crisis. The pre-crisis model of bank funding, mainly based on ample external sources originating typically from West European parent banks, was revised after October 2008. As resources from the parents became scarce due to deleveraging at a global level, banks in the region had to increasingly rely on domestic funding (see Figure 1). Although a large-scale withdrawal of parent bank funding has been successfully avoided, the new funding environment has severely limited any broadening of operations relative to the pre-Lehman period.

At the same time, portfolio quality and profitability were also severely hit. The negative effects of the economic downturn on corporate and household income were exacerbated in a number of countries of the region by the depreciation of the exchange rates. As sizable parts of the loan stock – both in the household and the corporate portfolio – was denominated in foreign currencies, exchange rate movements contributed significantly to the deterioration of portfolio quality in a number of economies of CESEE. In many countries, the ratio of non-performing loans is now above 10 percent, and still increasing (see Figure 2).

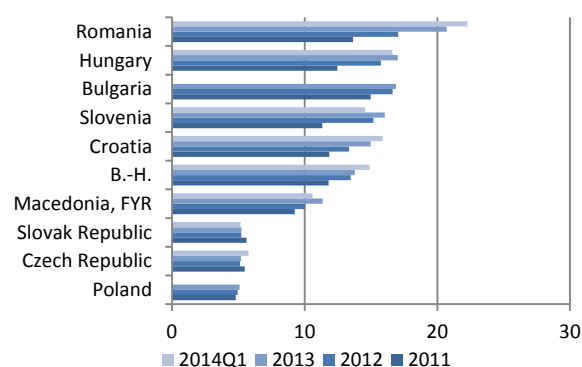
Factors affecting both credit demand and credit supply have contributed to the rapid slowdown of

Figure 1: Evolution of main bank funding sources in CESEE



Note: Notes: CESEE excl. Russia and Turkey; year-on-year change in the stock of BIS banks' exposure and domestic deposits in percent of GDP, exchange-rate adjusted. Source: EBRD and IMF calculations.

Figure 2: Ratio of non-performing loans to total loans

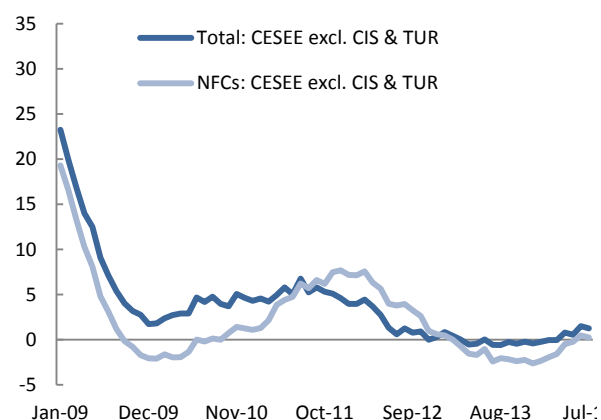


Source: IMF

more dynamic pre-crisis lending activity (see Figure 3). On one hand, the slowdown in credit growth is a natural consequence of the general decline in aggregate demand in the economy. On the other hand, the deterioration of the external funding environment, portfolio quality and profitability have limited the capacity of financial institutions to assume additional credit risk.

In such conditions, banks are reluctant to take additional credit risk onto their balance sheets, particularly in the form of lending to SMEs.¹¹ If credit supply is a binding constraint, mechanisms that allow the offloading of such risks to other entities, such as credit guarantees, could be helpful in maintaining credit flows to the sector.

Figure 3: Credit to private sector, percent change, year-on-year



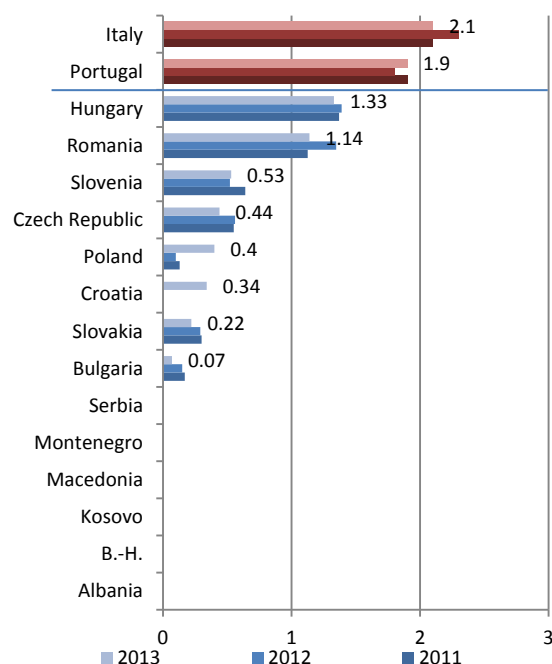
Note: Nominal, exchange-rate adjusted, GDP-weighted. Source: EBRD and IMF calculations.

2.2 A bird's eye view of the credit guarantee frameworks in CESEE

Credit guarantees are an integral part of the system of financial intermediation in many CESEE countries. Many local CGSs provide guarantee services to SMEs. The European Association of Mutual Guarantee Societies (AECM) has 15 member institutions in CESEE, and another four operating in the Baltic area. Besides the local schemes, guarantees are also provided by supranational entities, such as the European Investment Fund (EIF).

The importance of the role of local CGSs shows considerable heterogeneity within the region. In Hungary and Romania, the volume of outstanding guarantees granted by the national CGSs exceeds 1 percent of GDP. These figures are not very far from the ones seen in the EU countries with the highest level of credit guarantee activity, Italy and Portugal, where the outstanding amount of guarantees are around 2 percent of GDP. In these two countries, several well-established public guarantee schemes exist. At the other end of the spectrum, in the non-EU countries of CESEE, the activity of the local CGSs

Figure 4: Volume of outstanding guarantees granted by national CGSs operating in the CESEE, as a percent of GDP



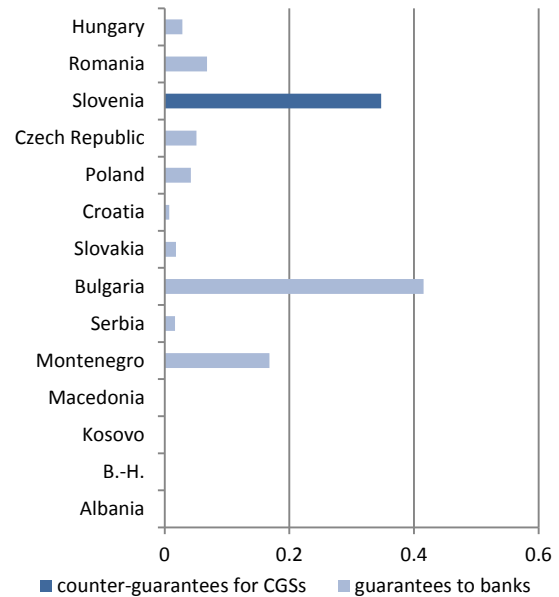
Source: AECM

¹¹ A survey of the main banking groups operating in CESEE suggests that by the second half of 2014, supply-side constraints are becoming the binding factor behind the sluggish recovery of bank lending in the region (EIB, 2014).

is generally perceived to be low, while at the same time reliable aggregate data on the scale of their activity does not exist. The other EU member states in the region are somewhere between these two extremes, with an aggregate typical credit guarantee exposure of 0.2-0.5 percent of GDP (see Figure 4.)

The key multinational provider of credit guarantees is the European Investment Fund (EIF). Similarly to the local CGSs, the EIF provides credit guarantees to banks on SME loans. In addition, it also can provide counter-guarantees to the guarantee portfolio of the local CGSs (see Figure 5.) A more detailed description of the EIF guarantee products available in CESEE can be found in the section 2.4 of this report.

Figure 5: Approximate volume of outstanding guarantees granted by the European Investment Fund in 2013, as a percent of GDP



Source: EIF calculations

Box 1: Characteristics of a “typical” credit guarantee Scheme in CESEE (based on the CGS Survey)

General information	<ul style="list-style-type: none"> Established in late 1990s, does not exclusively provide credit guarantees, but also offers other financial or consultancy services. Publicly owned, legally established as a corporation, and subject to taxation. Capitalized up front, no explicit restriction on leverage. Non-profit, with an obligation to be self-sustainable. Does not own a banking license, and is regulated by the CB or State.
Outreach	<ul style="list-style-type: none"> Targets MSMEs, following the EU definition. The primary motivation is to alleviate lack of collateral and increase lending. Uses guarantees and beneficiaries as indicators, does not monitor job creation/retention, and has never conducted an additionality study. Operations increased with the crisis, with no sunset clauses or additional funds.
Services	<ul style="list-style-type: none"> Offers guarantees to all banks, with borrowers applying directly at banks, where they are informed about the guarantee. The guarantees are for both new and existing loans, and for investment capital, working capital, and leasing. Guarantees are considered on a loan-by-loan basis, and requests are processed in a maximum of 20-29 days.
Pricing & Coverage	<ul style="list-style-type: none"> Charges only per-loan fees, paid by borrowers. Fees are risk-based and payable in advance. Coverage is between 50% and 100% of principal, not interest, for 5 years. Allows lenders to require collateral, which can even exceed the loan amount. Appraises loans based on the business plan and internal scoring system.
Claims	<ul style="list-style-type: none"> The trigger is non-payment or insolvency, with a single payment upon validation. The loss-recovery principle is <i>pari passu</i>, with recovery pursued by the lender. The lender’s rights are subrogated after payment.

2.3 Main characteristics of the national credit guarantee schemes

The CGS survey allows us to provide a detailed characterisation of the institutions providing credit guarantees in CESEE. To do that, we follow the typology introduced earlier in section 1.6, and structure the discussion along the following five dimensions: mission, institutional structure and funding, services, operational mechanism, performance evaluation. When possible, we draw comparisons with the results from other studies, such as Beck et al (2010), which provides a typology of CGSs in a global context. However, caution must be exercised in comparing the results, as only 30 percent of schemes in the sample of Beck et al. (2010) targeted SMEs. The key findings are summarised in Box 1, which describes the characteristics of a “typical” CGS in CESEE.

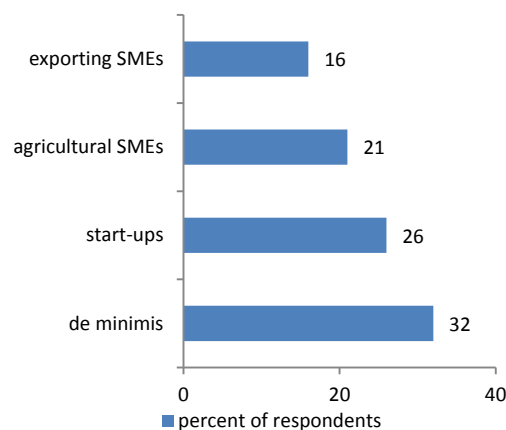
Mission

Guarantee schemes operating in the region provide financial and non-financial services to SMEs. Most credit guarantee schemes began operations prior to 2008, and offer credit guarantees along with other services such as grants, loans, equity finance, interest subsidies, and/or SME consultancy services. Also, almost all schemes target mainly or exclusively small- and medium-sized enterprises (SMEs). The exceptions to this are the CGSs specialised in supporting trade finance, which often include larger firms. For schemes operating in the EU, SMEs are defined as per the EU definition.¹²

Few CGSs in the region provide specialised products to a particular set of clients. Around 30 percent of CGSs offer guarantees as per *de minimis* rules (see section 2.5). These limit the size, sector and type of eligible firms. About one in four CGS have programs dedicated to start-ups, while others have sector-specific target groups, such as agricultural entrepreneurs (see Figure 6.).¹³

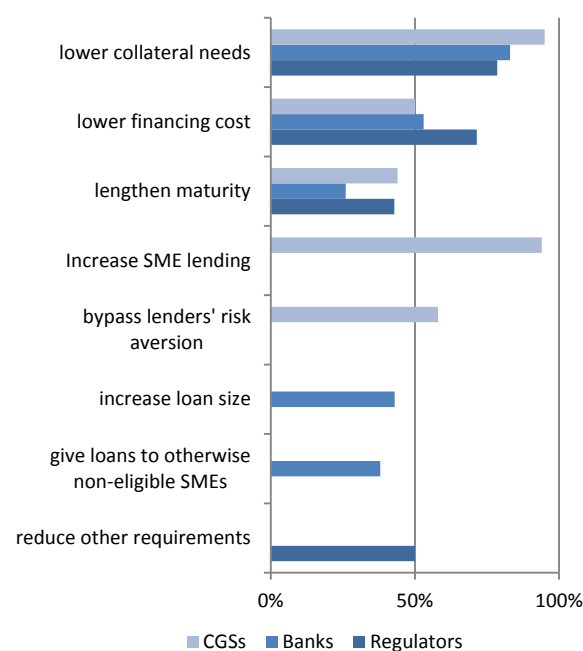
Figure 6: Specific target groups

Are there differentiated guarantee programs for the following groups? (These are not mutually exclusive)



Source: CGS survey

Figure 7: Main benefits from the guarantees



Source: CGS, bank and regulatory surveys

¹² “The category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro.” – Extract of Article 2 of the Annex of Recommendation 2003/361/EC.

¹³ Start-ups are defined as firms that have functioned for up to 3 years, except for Slovenia where it is up to 5 years.

CGSs, banks and regulators alike identify lower collateral requirements and reduced financing costs as the main benefits of guarantees. For CGSs, guarantees also aim to bypass lenders' risk aversion and thus to increase their lending capacity. Reducing the cost of borrowing, or increasing the maturity of the loans available to SMEs, are mentioned only as secondary objectives. Guarantees also help SMEs that are otherwise ineligible to secure loans with banks. Finally, supervisors consider that guarantees could to some extent lengthen loan maturities (see Figure 7).

Institutional structure and funding

Guarantee providers in CESEE are typically publicly owned and are publicly operated. More than two third of CGSs are fully publicly owned (see Table 1). Exceptions are Romania — where the three typologies (public, private and mixed) co-exist — and Hungary, where all CGSs operate as mixed public-private schemes. With regards to their legal structure, CGSs are publicly operated, most frequently as public corporations. However, about a third of the schemes still operate as government structures. This is in line with the findings of Beck et al (2010) on the basis of a global sample of 76 CGSs: 71 percent of CGSs in middle- and low-income countries are publicly operated.

CGSs are subject to taxation and are not-for-profit institutions; CGSs also reported that they are expected by their owners to be sustainable (see Table 2). Special tax regimes have implications for the CGSs' ability to re-invest the surplus earned from guarantee activity, and ultimately support their capital bases. The six CGSs that are tax exempt are also state-owned and not-for-profit. This suggests that in countries where several CGSs operate, public schemes have been operating under preferential conditions. This could possibly be justified if they offer a different type of services (counter-guarantees, direct guarantees for trade finance) or provide higher coverage.

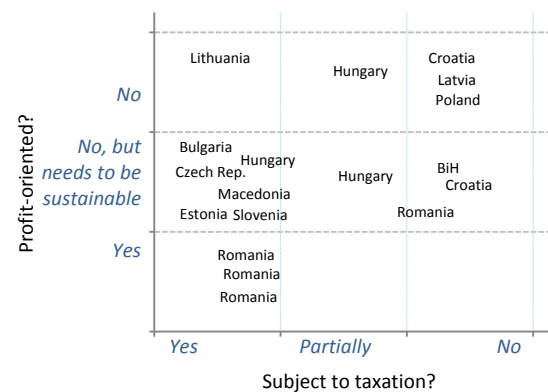
As a general rule, both public and privately-operated CGSs receive government support (see Figure 8). As for funding, almost two-thirds of CGS reported that they have been capitalized up front

Table 1: Ownership and legal structure

Ownership	Legal structure				
	Govt. entity	Public corp.	Private corp.	Foundation	S
Public	6	5	1	1	13
Public-private		2	2	1	5
Private			1		1
Total	6	7	4		19

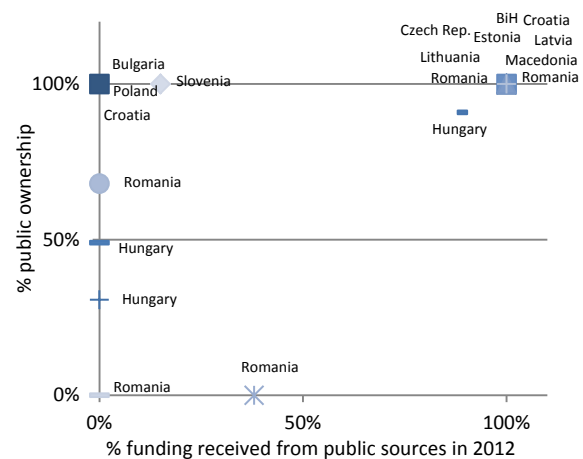
Source: CGS survey

Table 2: Taxation of CGSs



Source: CGS survey

Figure 8: Ownership and public support



Source: CGS survey

and received some transfers from the state in 2012. The level of government funding is high by international comparison: Beck et al (2010) find that 49 percent of CGSs receive funding from the government. The remaining third of CGS equally reported being under-capitalized or not capitalized up front, although this did. It is noteworthy that belonging to the latter two categories does not preclude these CGSs from receiving state funding. Indeed, there appears to be no relationship between public ownership and government funding.

Services

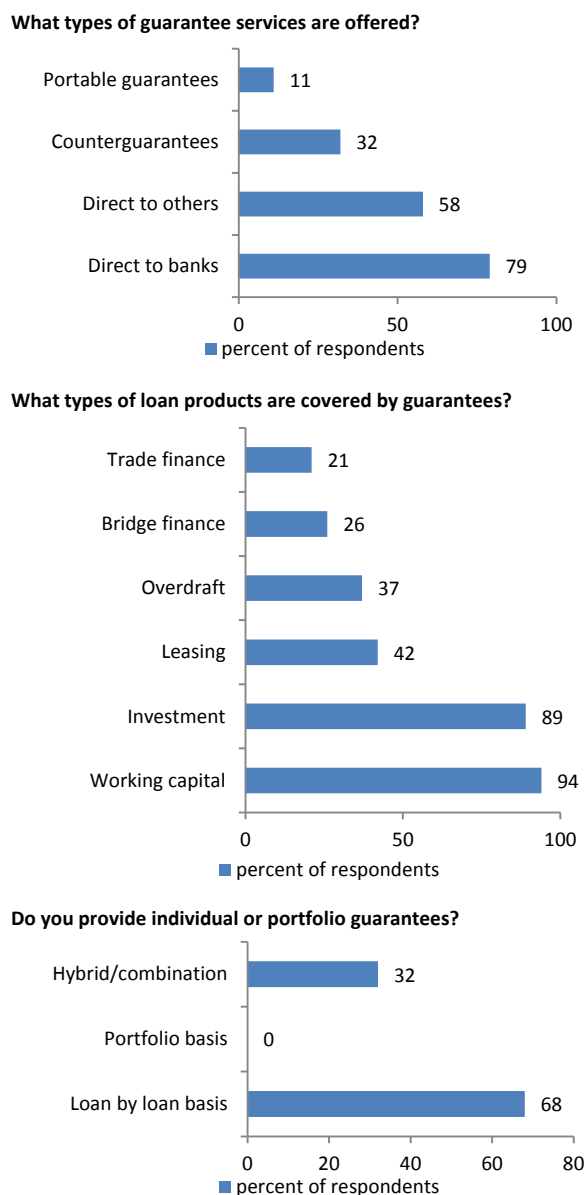
The range of products offered by CGSs varies widely across the region. Direct guarantees most often consist of guarantees to banks: more than 25 percent of CGSs provide guarantees only to banks, as opposed to other types of lending institutions. About a third of guarantee schemes surveyed offer counter-guarantees; half of these provide such guarantees alongside direct guarantees (see Figure 9).

Most often, the lending institutions are the borrowers' first point of contact, as opposed to the CGSs themselves. Only a third of CGSs have a direct contact with the borrowers at the time of application for the guarantees — in Bosnia-Herzegovina, Croatia, Czech Republic, Romania and Slovenia. These include all those CGSs that provide trade finance and those that provide portable guarantees.

Investment and working capital loans are guaranteed by almost all CGSs. In the case of a guarantor in Macedonia only investment loans are eligible. Investment loans are excluded by CGSs specialised in trade finance in Bosnia-Herzegovina and Croatia. In Romania, all CGSs cover both investment and working capital loans, regardless of their target beneficiary group. The Polish *de minimis* guarantees of BGK are also provided for the working capital and investment loans.

CGSs operating in the region provide mostly guarantees on individual loans as opposed to portfolio guarantees. Beck et al (2010) also find that more than two-third of schemes operate on a loan-by-loan basis. However, in their sample, about 15

Figure 9: Types of services and products



Source: CGS survey

percent of CGSs operated on a pure portfolio-basis. In a pure portfolio-basis approach, partnering lenders are “accredited” to guarantee loans that meet the CGS’s eligibility criteria, without previous consultation with the CGS. In such cases, only the lender would appraise the loan and guarantee applications. In our sample, a third of CGSs used a combination approach: despite running hybrid portfolio guarantee schemes, they still review loan applications after banks have finalized the appraisal of borrowers and may deny a guarantee if eligibility criteria are not met.

Most CGSs have developed some criteria, often quite lax, to identify lenders that are eligible for the guarantees. About one-third of CGS made the guarantees accessible to all licensed banks operating in the country (see Figure 10). Loan-by-loan guarantees are offered even by schemes that established criteria for partnering with eligible lenders for portfolio guarantees. De facto, CGSs mostly operate on a loan-by-loan basis.

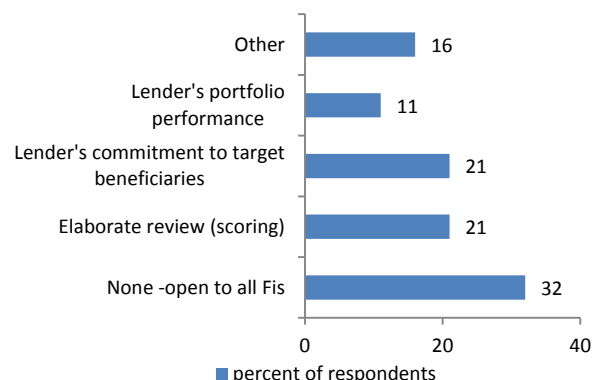
Based on the CGS survey answers, guarantee coverage ranges from 50 to 100 percent of the principal amount, depending on the type of borrower or loan product guaranteed. While the median coverage ratio of around 80 percent is in line with the results of Beck et al. (2010), the CESEE region shows less heterogeneity in this respect. For instance, in our sample, only one scheme offered 100 percent coverage, whereas in the global survey more than one-third of the CGSs provide full coverage.

The majority of CGSs do not cover interest payments and provide maturities of up to 25 years for some products. Only two Hungarian schemes have explicitly reported minimum maturity requirements for their SME guarantee products – 90 days and 12 months. The regulatory survey also indicated that some of the guarantee products impose limits on the maturity or on the interest rate charged. This latter – imposing a cap on the interest rate charged on borrowers – may help discourage excessive lending to risky customers.

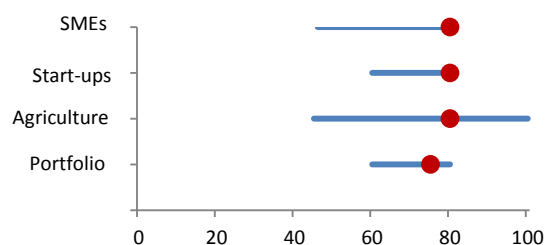
When it comes to pricing, CGSs rely mostly on guarantee fees, which are reviewed annually. Only 20 percent of schemes have application fees in

Figure 10: Product specifications

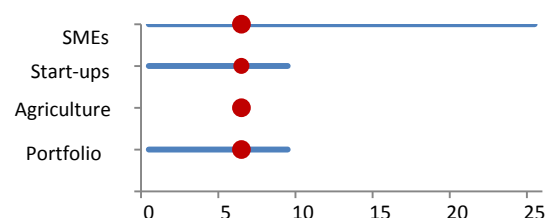
What are the criteria for partnering with eligible lending institutions?



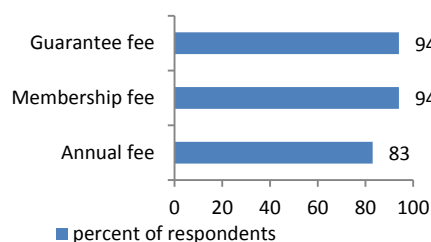
What is the coverage by guarantee product? (per cent – range & median)



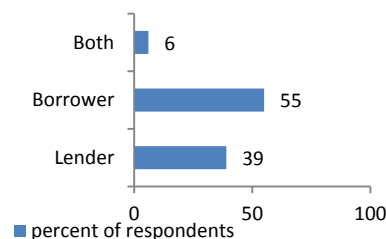
What is the maturity of the guarantee product? (years – range & median)



What is the scheme’s pricing policy?



Are fees paid by...?



Source: CGS survey

addition to a guarantee fee. Macedonia's national guarantee scheme has no fee at all. In Poland, during the first year of operations of BGK's *de minimis* guarantee program, guarantees were provided at no cost. Half of CGSs review their pricing policy at least annually, the remainder less frequently.

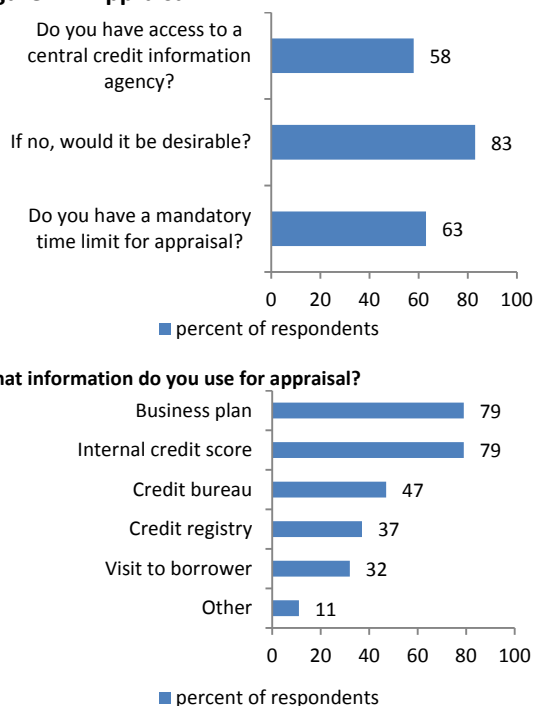
Fees are mostly paid by borrowing SMEs. There are most often no penalty rates, in case of default on the payment of guarantee fees. Also, hardly any schemes reward success in the repayment of loans with lower prices of future guarantees. However, for 60 percent of CGSs, failure to repay may result in higher fees or denials in the future.

Operational mechanism

When it comes to the appraisal of guarantee applications, as mentioned earlier, CGSs most often appraise borrowers' applications individually, after the lender's appraisal (see Figure 11). Most schemes reported having access to a centralized credit reporting system. CGSs that do not have such access indicated that they would like to have it. All CGSs operating in countries that joined the EU before 2007 responded that they have access to a credit bureau or registry. About 25 percent of them, however, do not use such information in appraising guarantee requests.

Guarantee schemes use common appraisal procedures, based on commercial practices. More than half the schemes report setting a mandatory time limit for processing guarantees requests, ranging from 7 to 75 days. The median processing time was 12 days in 2012. Based on self-reported data, the average turnaround time for issuing guarantees has improved over the past three years from an average of 23 to 18 days. Schemes that had a long turnaround time have implemented drastic measures that led to a quicker appraisal process by up to 15 days.

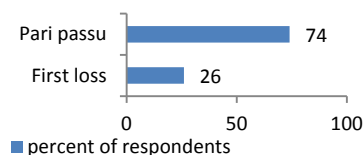
Figure 11: Appraisal



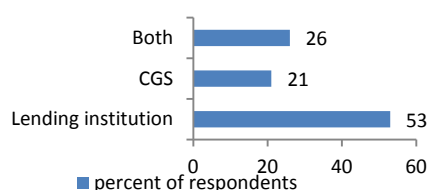
Source: CGS survey

Figure 12: Claims

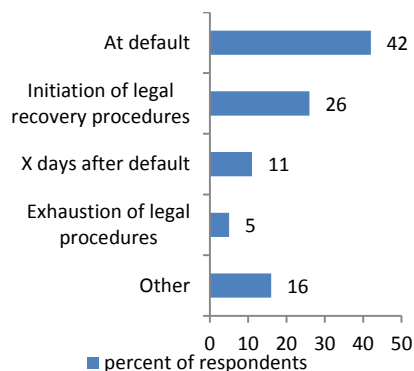
What is the principle of loss sharing?



Who is in charge of loan recovery?



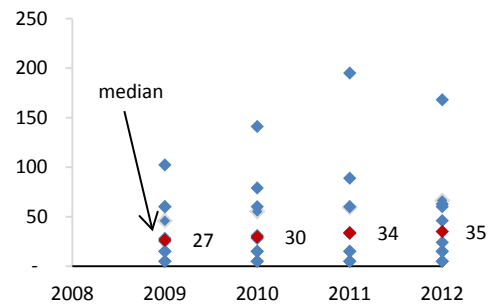
What is the trigger for calling the guarantee?



Source: CGS survey

With regards to the payment of guarantee claims, almost 75 percent of schemes adopted a *pari passu* loss-sharing rule (see Figure 12). The remaining CGSs follow a first loss principle. In most cases, the lender is in charge of loan recovery, but is rarely provided with incentives to maximize proceeds.¹⁴ When the CGS is not in charge of loan recovery, it is always subrogated to the lender's rights after the claim is paid out. The guarantee is most often called before recovery procedures are exhausted, i.e. at the time of default or as soon as recovery procedures are initiated. Based on self-reported data for 2012, in some cases it can take up to 6 months from the moment the lender sends the claim to the moment it is settled by the guarantee schemes, but the median is 35 days (see Figure 13).

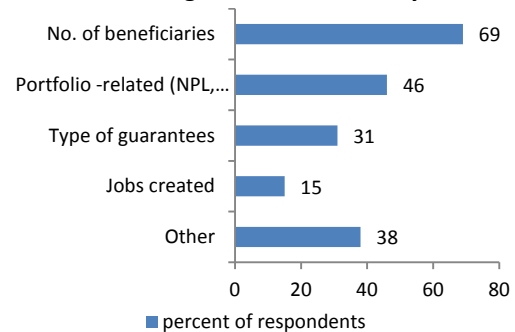
Figure 13: Claim processing time (days)



Source: CGS survey

Only 20 percent of guarantee schemes reported not using any risk transfer instruments to avoid excessive concentration of risk (see Figure 14). This is close to what Beck et al (2010) find: in their global sample 76 percent of the CGSs use some instruments to manage or offload risk. Most schemes rely on counter-guarantees. Two schemes have other state guarantees – in the form of risk funds provided by the State, or refunds when indemnifications exceed available funds. The state and the European Union are the main reinsurers in 70 percent of cases. Also, while six schemes have reported risk concentrations, only two of these indicated that this had caused problems.

Figure 14: Risk management tools used by CGSs



Source: CGS survey

Performance and impact evaluation

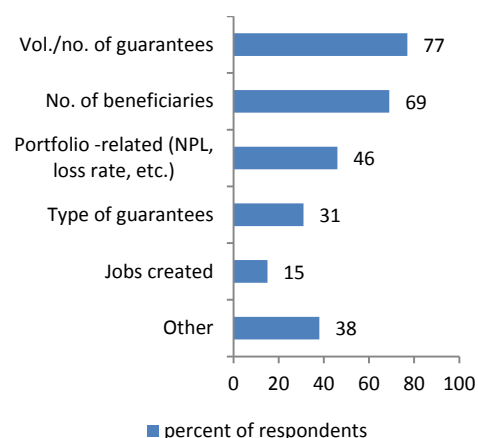
In 2012, close to 90,000 guarantees of about EUR 2.8 billion were provided by the CGSs surveyed. The average guarantee size was about EUR 300,000, with a 68 percent coverage ratio. Almost all schemes have recovered from losses incurred since 2009 on account of large pay-outs, and had become profitable again. In 2012, the guarantee pay-out rate ranged from 0.1 to 9 percent, based on data provided by eight schemes.

¹⁴ Loan recovery proceeds, when they are shared, also follow a *pari passu* principle, in 80 percent of cases.

When asked how they measure their performance, 13 guarantee schemes disclosed their performance indicators (see Figure 15). In addition to basic indicators such as the number and volume of guarantees and the number of beneficiaries, several schemes also monitor the performance of their portfolio through its growth rate, non-performing loan ratio, recovery and loss rate.

To assess their impact, CGSs generally assume they generate additional lending, and only very few of them measure explicitly their financial or economic impact. At the time of the guarantee application, five CGSs ask SMEs to estimate the number of potential jobs created. Only two of these conduct post-financing surveys to account for the actual jobs created.

Figure 15: Performance indicators used by CGSs



Source: CGS survey

¹⁵ The payout rate is defined as the ratio of the total payout amount for the year over the average outstanding guarantee portfolio over that year.

Box 2: The system of credit guarantees in Poland – the BGK *de minimis* guarantee programme

The system of credit guarantees in Poland consists of two blocks: guarantees provided by more than 50 regional guarantee funds, and the so-called *de minimis* guarantees provided by the state owned bank *Bank Gospodarstwa Krajowego* (BGK). The regional funds are characterized by a heterogeneous, non-standardised product line, lack of transparency and regulation, and low, decreasing activity.

The BGK *de minimis* portfolio guarantee facility was activated in March 2013 by the Polish government. It was a reaction to the economic slowdown, and the low efficiency of the existing framework of credit guarantees to provide support to SMEs. Guarantees under the program are currently granted by the BGK to 23 commercial banks. The program allows SMEs to seek guarantee for working capital and investment loans of up to 3.5 million PLN for the period of up to 27 months (working capital loan) or 99 months (investment loan), with the following key characteristics:

- simple procedures for SMEs,
- zero charge for guarantees in the first year of the guarantee, and
- low commission of 0.5% of the guarantee amount for the second and third year,
- possibility of getting the financing without own collateral (Formally, the bank may request the collateral for the part of loan not covered by the guarantee.).

The program was designed also to encourage banks to increase their supply of credit, by:

- a risk transfer to the government up to 60% of the loan value,
- short period of guarantee payout (15 working days),
- no capital charges on the guaranteed amount.

Since the beginning of the programme until Autumn 2014, guarantees were issued for about EUR 3.3 billion. They cover loans of about EUR 6 billion (7.5 percent of total receivables of the banking sector), vast majority of which for working capital needs. The program has supported 65 thousand clients, mainly micro enterprises, which represent 3.7 percent of total number of SMEs registered in Poland.

According to the BGK survey, almost half of the beneficiaries are young companies (up to 3 years) and start-ups. These type of companies usually lack sufficient collateral/credit history and have a strong need of external financing. About 29 percent of the respondents decided to apply for the *de minimis* guarantee mainly because of lack of sufficient collateral. According to the survey, 22,500 new work places have been created, and EUR 1.3 billion of additional loans were provided to SMEs that would have not received financing without a guarantee. The eligibility criteria are designed in a way to limit credit risk by creditworthiness checks by the commercial banks, the use of the banking register and a credit bureau. Moreover, the potential beneficiary should not have overdue payments.

Some regulatory adjustments were needed to make the program more successful. The Polish Financial Supervisory Authority (KNF) facilitated the *de minimis* program by the relaxation of certain prudential requirements with respect to BGK. In particular, in 2013, BGK was allowed to deviate from some of the rules of the Polish Banking Act related to the assessment of creditworthiness of each borrower on individual basis, and the large exposure limit on exposures resulting from the *de minimis* guarantees. In effect, the portfolios of particular banks protected by the *de minimis* guarantee are recognized by BGK not as the exposure to a commercial bank but as an exposure to individual SME borrowers. Moreover, BGK does not have to assess creditworthiness of each individual, but relies on the assessment made by the commercial bank granting the loan. This allowed BGK to keep extended cooperation with banks without danger of breaching the prudential regulation. Since BGK is not subject to CRR/CRDIV, this decision has not infringed the principles of a "single rule book".

According to the Polish authorities, the success of the BGK *de minimis* guarantee program points to the followings:

- The scope of public intervention should be sufficiently large to make an impact, but adjusted to the current needs of SMEs. State aid regulations should be fulfilled.
- Guarantee fees should be subsidised, as fees set at a level covering all costs are usually unacceptable for the SMEs.
- Guarantee products should complement the operations of commercial banks: terms of guarantee should be unified and standardized to fit commercial banks' centralized structures and standardized credit products.
- A portfolio guarantee scheme is the best choice for low value guarantees as it minimizes bureaucracy and speeds up procedures. However, portfolio guarantees need efficient IT solutions on both public and private side.
- As credit risk assessment is performed by the guarantor only at the level of the portfolio, the portfolio quality should be carefully monitored, and decisions on granting/renewing limits to the participating banks should be based on the assessment of the portfolio quality.
- Unfunded credit risk protection and capital relief is an important incentive for the banks to participate in the programme. A clear recognition by the financial regulator/supervisor is needed in this regard.
- The impact of the program on SME sector should be constantly monitored.

2.4 Guarantee products provided by multinational sources (EU/EIF facilities)

The European Investment Fund (EIF) is the key multinational provider of credit guarantees in the CESEE region.¹⁶ The guarantee activity encompasses “mandate” transactions, where the EIF manages and distributes the resources allocated to EIF by the European Commission or the EIB, and “own risk” transactions where the EIF deploys its own capital. Most of the transactions fall into the “mandate” category. The EIF’s role is to provide either portfolio guarantees directly to local banks, or counter-guarantees to local guarantee providers. The details of the individual products are as follows.

The EIF manages the SME Guarantee Facility (SMEG) on behalf of the European Commission (EC), as part of the Competitiveness and Innovation Framework (CIP) programme. The budget allocated to SMEG for 2007-2013 amounted to EUR 550 million, and covers operations throughout the EU. The programme aimed to enhance access to finance for SMEs and to foster their productivity and innovation. Under the SMEG, the EC – through the EIF – guarantees and counter-guarantees part of the loss a bank or a guarantee institution may incur on their SME loans or lease portfolio. In this way, financial intermediaries are encouraged to increase their lending volumes. This guarantee is provided to the intermediary free of charge. To qualify for such cover, financial institutions have to demonstrate that they offer enhanced access to finance for SMEs by taking more risk than they would usually take, such as, for example by reducing their collateral requirements, increasing their loan volumes or lending to SMEs they would not normally lend to (start-ups for example). SMEG offers a broad range of products addressing SME needs, e.g. guarantees covering loans, micro-credit, equity and quasi-equity and securitisation transactions.

Table 1: EIF products availability in the CESEE

Country	Facility/Product
Albania:	WB GF
Bosnia - Herzegovina:	WB GF
Bulgaria:	SMEG Facilities, EPMF, JEREMIE (PRSL, FLPG), RSI
Croatia:	SMEG Facilities, RSI, EPMF
Czech Republic:	SMEG Facilities, RSI
Estonia:	SMEG Facilities
Hungary:	SMEG Facilities, RSI
Kosovo:	WB GF
FYRO Macedonia:	SMEG Facilities
Montenegro:	SMEG Facilities
Poland:	SMEG Facilities, EPMF, RSI
Romania:	SMEG Facilities, EPMF, JEREMIE (PRSL, FLPG)
Serbia:	SMEG Facilities
Slovakia:	SMEG Facilities, EPMF, JEREMIE (PRSL, FLPG)
Slovenia:	SMEG Facilities, EPMF

Source: EIF

Table 2: : Aggregated maximum portfolio volumes of EIF transactions in the CESEE

Country	EUR mn
Albania:	20
Bosnia - Herzegovina:	20
Bulgaria:	875.4
Croatia:	119.5
Czech Republic:	546.4
Hungary:	522.4
Kosovo:	20
FYRO Macedonia:	15
Montenegro:	20
Poland:	1320.9
Romania:	718.1
Serbia:	16
Slovakia:	501.2
Slovenia:	192.9
CESEE	4907.8

Source: EIF

¹⁶ This section focuses on the EIF’s activities related to debt financing, and does not cover its other activities in the CESEE region, such as equity financing.

The Risk Sharing Instrument (RSI) for Innovation and Research-oriented SMEs and small mid-caps is a joint initiative of the EIF, the EIB and the EC. It is financed by the EU under the 7th Framework Programme for Research and Technological Development and was exceptionally successful in 2013. The instrument was speedily introduced to financial intermediaries with absorption and deployment to SMEs following swiftly thereafter. After only a year, the facility's capacity was topped up and a counter-guarantee was included within the product offering.

Since May 2010, the EIF manages the European Progress Microfinance Facility (EPMF). Under EPMF, guarantees/counter-guarantee instruments have been provided to a wide range of microfinance institutions (MFIs) to the ultimate benefit of micro-enterprises (enterprises employing fewer than 10 people) and the self-employed. Microfinance under the EPMF consists of microcredits, typically very small loans or lease receivables below EUR 25,000.

Under the Joint European Resources for Micro to Medium Enterprises (JEREMIE), the EIF offers First Loss Portfolio Guarantees (FLPG), Funded Risk Sharing Products (FRSP) and Portfolio Risk Sharing Loans (PRSL). The availability of these products depends on the eligibility in each country.

Other products offered by the EIF in the region are the Guarantee Facility under the Western Balkans Enterprise Development & Innovation Facility (WB EDIF). This facility provides First Loss Portfolio Guarantees (FLPG).

Other than traditional credit guarantees, the EIF is involved in several credit enhancement transactions in the CESEE region based on its own resources. These transactions are aimed at catalysing securitisation in countries with little experience in this field. Recent examples are the two transactions that were executed for ProCredit in Serbia and Bulgaria, as well as securitisation of SME loans and leases in Poland. These securitisation transactions allow banks and financial institutions to diversify their funding sources, with the aim to providing regulatory capital relief through credit risk transfer. These actions generate additional funding and/or release capital for those institutions that is then redeployed for the provision of additional lending to SMEs in the relevant countries.

Despite the continuing challenging economic environment, the EIF played an important role in tackling the prevailing financing shortage conditions for the small and medium-sized enterprises (SMEs) in CESEE. During the period 2007-2013, the EIF has entered into more than 100 guarantee transactions in CESEE under the above-mentioned instruments, thus providing substantially improved access to finance for the SMEs. By mid-2014, the aggregated maximum portfolio volume of pure guarantee transactions in the region, supported by the EIF, is close to EUR 5 billion.

Box 3: EU-supported guarantee programmes after the EIF capital increase and in the 2014-20 framework period

The European Council conclusions of June and October 2013 required an increase of the credit enhancing capacity of the EIF, with the purpose of supporting the financing of European SMEs. This request resulted in the capital increase of the EIF (by EUR 1.5 billion), together with the EIB Group Risk Enhancement Mandate (EREM). The EREM contribution (EUR 4 billion from the EIB supplemented by EUR 2 billion from the EIF) will allow the credit enhancement capacities of EIF to be raised with a view to increasing access to finance for SMEs and small mid-caps (enterprises with up to 500 employees), mainly through financial institutions, including guarantee institutions and microfinance institutions. EU member states within the CESEE countries are eligible under EREM.

The European Union continues to provide substantial financial support targeted for the development of the SMEs for the CESEE countries via various programmes in the new 2014-2020 programming period. Some of these – the Structural and Investment Funds – target the EU member states, whereas others – the Instrument for Pre-accession Assistance II – target the non-EU member countries in the region. Yet other instruments are opened both for the EU and non-EU member countries in the region, such as COSME and Horizon 2020.

The increase of the use of innovative financial instruments, which include credit guarantees, is a key priority for the 2014-2020 programming period. This leads to a further development of the credit guarantee instruments such as JEREMIE implemented under the Operational Programmes for Competitiveness (ERDF). Credit guarantee instruments may also be developed under the Operational programmes for Fisheries (EMFF), the Operational Programmes for Human resources development (ESF), and the Programmes for Rural Areas Development (EAFRD).

For the new framework period 2014-20, the EIF continues to be the manager for several mandates on behalf of the European Commission or of national and regional Managing Authorities. The main programmes in this context that are going to be offered are the following:

- **Programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME) – Loan Guarantee Facility (LGF):** COSME LGF is the successor of the SMEG facility and many CESEE countries are eligible under COSME. Products offered are guarantees and counter-guarantees, including securitisation of SME debt finance portfolios.
- **InnovFin SME Guarantee Facility (under Horizon 2020):** The InnovFin SME Guarantee Facility is a demand-driven, uncapped instrument that builds on the success of the Risk Sharing Instrument (RSI), developed under FP7, the 7th EU Framework Programme for Research and Technological Development (2007-2013) managed and implemented by the EIF. Like for COSME, many CESEE countries are eligible under the InnovFin SME Guarantee Facility. The InnovFin SME Guarantee Facility will be deployed by eligible local banks, leasing companies, guarantee institutions, etc. which are selected after a due diligence process following the launch of a Call for Expression of Interest. Once selected by the EIF, these local partners act as financial intermediaries. The EIF covers a portion of the losses incurred by the financial intermediaries on loans, leases and guarantees between EUR 25 000 and EUR 7.5 million which they provide under the InnovFin SME Guarantee Facility.
- **SME Initiative:** The SME Initiative is a joint initiative of the EIB Group and the EC as a crisis measure with the purpose of supporting the impaired financing of European SMEs, by expanding joint risk-sharing financial instruments, co-financed by European Structural and Investment Funds, to leverage private sector and capital markets investments in SMEs.
- **JEREMIE successor:** The EIF intends to expand its regional development activity capitalising on the experience acquired through its involvement in the management of financial engineered instruments co-financed by Structural Funds and fund-of-funds managers and through strategic partnerships established during the last programming period. Discussions have begun with several regions and Member States to plan for the second generation of financial instruments (JEREMIE's successor programme) and to assess market needs so that investment solutions can be designed through standardised agreements and partnerships with national agencies.
- **EPMF successor:** The program for Employment and Social Innovation, EaSI, will build on the experience of EPMF and widen the range of beneficiaries and the geographical scope beyond EU-28 to candidate and potential candidate countries of the European Union, many of which are in the CESEE. It puts particular emphasis on the need of financial intermediaries to adhere to the Code of Good Conduct for European microfinance providers, as well as combining microcredit with tailored mentoring and business support services. Products offered are capped guarantees and counter-guarantees with guarantee coverage of up to 80 percent.

The EU-supported credit guarantee instruments will continue to be distributed in cooperation with the commercial banks. Further active dialogue and partnership between all the key stakeholders (EC, national authorities managing EU funds, national regulators, credit guarantee providers and the commercial banks) in the programing and implementation phases be among the key factors of success for the effective and efficient usage of these instruments.

2.5 The current regulatory environment

Credit guarantee institutions face complex, and in many aspects heterogeneous, regulatory environments.

In the following, three key areas of this environment are discussed using both the regulatory survey and auxiliary information. These three areas are the treatment of credit guarantees in bank regulation, the regulation and supervision of CGSs themselves, and the state aid exemption regulations (the so-called *de minimis* rules) that apply to publicly funded CGSs in the EU.

Credit guarantees in bank regulation.

Guarantees may provide regulatory capital relief for banks. In jurisdictions which follow the Basel II rules, guarantees are treated as credit protection and may decrease the risk weight applicable to the covered exposures, and thus the value of risk-weighted assets used in calculating the capital adequacy ratio.

In the EU, the treatment of guarantees for the calculation of capital adequacy is regulated by the CRDIV/CRR. EU Member states are subject to the Directive (CRDIV) and the Regulation (CRR) which determines, among other issues, the way capital adequacy is calculated. In line with the idea of a single rulebook, the CRDIV/CRR rules are unified, and the scope for discretionary local regulations is strictly limited. The capital adequacy calculation rules - including the treatment of guarantees for this purpose - are described in a regulation that is directly applicable in all EU countries, leaving no room for potentially different local interpretation. The European Banking Authority, by responding to CRDIV/CRR related questions, ensures the common interpretation of rules across the EU. Those questions may be asked by any interested party.

Credit guarantees are instruments recognized under the CRR as unfunded credit protection. The CRR describes two types of credit protection: *funded* and *unfunded*. Under unfunded credit protection, the reduction of the credit risk is based on the obligation of a third party to pay an amount in the case of default by the borrower. The rationale for unfunded credit protection is based on the assumption that the credit protection provider is less risky than the borrower, so transferring credit risk from the borrower to the provider of protection diminishes the lender's risk. Unfunded credit protection includes guarantees and credit derivatives: however, not all of them may be used in calculating capital adequacy.

To be eligible as credit protection under the CRR, the credit guarantee should fulfil a set of conditions. These conditions in principle relate to the credibility of an issuer of a guarantee and the guarantee's legal certainty. The CRR specifies who may be a recognized guarantee (or counter-guarantee) provider of credit protection. These may be governments, central banks, local authorities, multilateral development banks, international organizations, public sector entities, institutions, or rated corporate entities among others.

Other conditions specified in the CRR relate to the widely understood quality of the guarantee. In principle, guarantees should fulfil conditions for unfunded credit protection and be legally effective and enforceable in all relevant jurisdictions. The provided protection has to be direct and its scope has to be clearly defined and unquestionable. The protection contract should not contain any clauses out of the creditor's control, and especially cannot allow for the:

- cancellation of the protection unilaterally by the provider;
- increase of the effective cost of protection in if the credit quality of exposure deteriorates;
- non-payment in a timely manner if the borrower fails to make any payments due; and
- shortening of the maturity of the guarantee by the protection provider.

The conditions for credit guarantees should also specify (among other things) that:

- the instrument shall give the documented right to the bank to receive in a timely way payment from the guarantor on the qualifying default or non-payment by the counterparty;

- the payment by the guarantor shall not be subject to the bank's first having to pursue the obligor; and
- the guarantee should cover all types of payments of the obligor in respect of the claim, or if certain types of payment are excluded from the guarantee, the bank has to adjust the value of the guarantee to reflect the limited coverage.

The CRR contains also some additional provisions related to sovereign and public sector counter-guarantees as well as guarantees provided under mutual guarantee schemes. It also allows, under certain conditions, for using guarantees to modify the calculation of risk-weighted exposure amount under the IRB approach (see below).

Banks shall also introduce arrangements to reduce risk of excessive concentration of collateral in the form of guarantees. Besides, a bank should assure itself (by doing appropriate reviews) that guarantees are enforceable if they are issued by a provider from some other jurisdiction.

The CRR describes two approaches to capital adequacy calculation for credit risk: standardised and internal ratings based (IRB). In both methods guarantees may be used to mitigate credit risk, thus allowing regulatory capital relief for a bank.

- **Under the standardized approach, every exposure is multiplied by an appropriate risk weight.** The risk weights are in principle determined by external ratings attributable to the exposure (however, for part of them the regulatory risk weights should be used). If guarantees are applied as credit risk mitigation, the exposure should be divided into two parts: that part protected and that part not protected by collateral. For each part of the exposure, risk weights are assigned. For the non-protected part, the risk weight relevant for the exposure type, and for the part covered by guarantee, the risk weight relevant for the guarantee provider. In principle, under the standardized approach 100 percent is the risk weight for all exposures, unless an external rating is attributed to them or they represent some "privileged exposure class," such as: exposure to a central bank, exposure to an international organization, exposure to a multilateral development bank, where a zero percent risk weight may be used. If the exposure is fully protected by a guarantee provided by an entity to which the zero percent risk weight may be assigned, the value of the risk-weighted asset would be zero.
- **In the IRB approach, risk weights are estimated on a basis of mathematical formulas using probability of default (PD) and loss given default (LGD) parameters.** The credit protection effect of guarantees for IRB is based on the substitution of the part of exposure by the guaranteed amount. For the protected part of exposure, the PD and in principle LGD of the guarantee provider is attributed. For the unprotected part of exposure, the PD and LGD of the borrower are applied.

CESEE countries outside the EU do not have to apply the CRDIV/CRR; however the results of the survey indicate that some of them use a similar concept. Three out of the eight non-EU countries are applying domestic regulations (or will soon do so) where they allow for capital relief due to guarantees. In one country, the regulatory benefits from the use of CGS would be applicable starting from January 2015, when the regulation on capital requirements - based on the European Union CRDIV - enters into force, and allows for capital relief in the form of lower risk weights assigned to exposures covered by guarantees meeting specific criteria. In a second country, loans covered by guarantees have zero weighting in the evaluation of credit risk. Another country indicated that guarantees, other sureties, and counter-guarantees can be recognized as eligible unfunded credit protection instruments only if they are issued by eligible credit protection providers and if they meet the general and specific conditions for recognition of credit protection.

Besides the issues related to capital relief, the use of CGSs by banks is generally not regulated. In our regulatory survey, only two authorities indicated that they regulate CGSs by issuing binding opinions on particular instruments. One supervisor indicated that the regulation of CGS providers - if it is possible - is

equivalent to the regulations regarding credit institutions, and covers, among others thing, capital requirements, disclosure requirements and ICAAP-SREP processes. Another supervisor assesses CGSs from the perspective of their being used for credit risk mitigation by the banks, and one supervisor indicated that it oversees credit risk in the context of conducting on-site supervision. These institutions sometimes have a public body (e.g. a ministry of finance) as a main shareholder and therefore they or the ministry are subject to the public audit or the ministry.

The capital relief resulting from the use of CGS is allowed in five out of six countries that regulate their CGSs. EU countries are obliged to apply the CRR rules when using guarantees as credit risk mitigation, but this obligation was not openly presented in the survey.

Banks can modify risk-weighted exposure amounts for credit risk by assigning to the secured part of the underlying exposure the risk weighting of the protection. The extent of reduction differs by country and instrument. It is possible that the reported differences in the modification of risk-weighted exposure are related to differences in the design of guarantee products available in particular countries.

The conditions for granting capital relief follow generally the requirements for defining unfunded credit protection in the CRR/CRDIV, even in those countries which are not members of the EU. The use of guarantees and counter-guarantees provided by central governments and multilateral development banks provides the highest capital relief (100 percent of the covered exposure).

The regulatory capital treatment of some guarantee products – such as first loss, capped, guarantees (FLCG) – is not fully homogeneous across Europe. First loss portfolio guarantees provide credit risk coverage up to a certain amount of the reference portfolio (cap amount), typically comprising the portfolio expected loss and part of its unexpected loss.

The risk transfer benefit of FLCG is assessed by regulated banks using the synthetic securitization framework envisaged by the CRR. According to the Article 4.1.61 of CRR, securitization is a transaction or scheme, whereby the credit risk associated with a pool of exposures is tranching, having both of the following characteristics: a) payments in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures; b) the subordination of tranches determines the distribution of losses during the life of the transaction. Furthermore, according to Article 242 of CRR, 'Synthetic securitisation' means a securitisation where the transfer of risk is achieved by the use of guarantees, and the exposures being securitised remain exposures of the originator institution. Following this definition, the FLCG may fulfil the criteria for securitization as it refers to a specified portfolio of exposures (i.e. a pool of exposures), payments in the transaction are dependent upon the performance of the portfolio of loans, liability of the FLCG provider is limited to a specific cap, representing the "first loss" tranche of risk.

Capital relief can be achieved if a significant credit risk is transferred to the credit guarantee provider under the FLCG. Pre-condition for regulatory capital relief under the securitisation framework is that "significant risk transfer" (SRT) is achieved by the beneficiary of the FLCG. The SRT is regulated by Art. 243 and 244 of CRR and guidelines have been provided by the European Banking Authority (EBA) in this respect in July 2014.

National financial regulation and supervision of the CGSs

The regulatory and supervisory framework of credit guarantee schemes shows significant heterogeneity. Our survey of national financial regulators indicates that CGSs, or institutions providing CGSs, are regulated in six countries and not regulated in seven countries. The requirement of supervision over the use of CGSs was pointed out by five respondents. The detailed comments on regulation were provided by authorities of those six countries which regulate their CGSs.

There is no one type of regulator for CGS. The issue of regulation seems to be blurred, and the various authorities answering our questionnaires interpreted the issue of regulation in different manners. Some answers referred to the regulations related to financial stability, some to the rules governing the provision of state aid, while in other cases as compliance with rules for banking system or strict regulation of guarantee funds. Three supervisors indicated that CGSs have reporting requirements for financial stability purposes. Surprisingly, only two supervisors noted that the use of CGS is regulated. Where indicated, it was the central bank that regulates the institutions providing CGS. Non-bank CGSs, in general, are not subject to any particular supervision.

The key reason for not regulating CGSs was the small size of the loan portfolios covered by guarantees. One supervisor noted that there is no specific regulation for CGSs, as all have to operate in line with general rules and regulations. A few other supervisors pointed to the limited role of the CGSs, and low related systemic risks. Another pointed to the insignificant use of high quality guarantees, i.e. issued by the government, the member countries of the OECD, or the international development banks.

State aid regulation

Credit guarantees provided by public entities may also fall under state aid regulations. In principle state aid to private companies is prohibited in the EU as it may affect trade between Member States or distort competition. If a member state provides a state aid, it must notify the European Commission so that it can assess whether the aid is compatible with the single market.¹⁷

Certain categories of aid can be exempted from the notification requirement.¹⁸ These refer to either small aid amounts under the *de minimis* rule or General Block Exemptions.¹⁹ The key conditions under which public support is excluded from the notification are the following.

- **Amount of the support.** The total amount of *de minimis* aid granted per Member State to a single undertaking shall not exceed EUR 200 000 over any period of three fiscal years. This limit is reduced to EUR 100 000 for undertakings performing road freight transport for hire or reward and this *de minimis* aid may not be used for the acquisition of road freight transport vehicles.
- **Time period.** The period of three years should be assessed on a rolling basis so that, for each new grant of *de minimis* aid, the total amount of *de minimis* aid granted in the fiscal year concerned and during the previous two fiscal years needs to be taken into account.
- **Sectors.** *De minimis* support cannot be provided for the sectors of primary production of agricultural products, fisheries and aquaculture, and should also not apply to export aid or aid contingent upon the use of domestic over imported products, establishment and operation of a distribution network in other member states or in third countries.
- **Beneficiary.** A group of linked enterprises should be considered as one single undertaking for the application of the *de minimis* rules.

¹⁷ See Articles 107(1) and 108(3) of the Treaty on the Functioning of the European Union (TFEU)

¹⁸ See [Regulation \(EC\) No 994/98](#)

¹⁹ Commission Regulation [\(EU\) N°651/2014 of 17 June 2014](#) declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty

- **Recognition of the moment of granting support.** *De minimis* aid is deemed granted at the moment the legal right to receive the aid is conferred on the undertaking irrespective of the date of actual payment of the aid to the undertaking.
- **Calculation of the ceiling.** For the calculation of the amount of support granted, each aid must be expressed as a cash grant, gross before any deduction of tax or other charge. Where aid is granted in a form other than a grant, the aid amount shall be the so called “gross grant equivalent” of the aid. Aid payable in several installments shall be discounted to its value at the moment it is granted. The interest rate to be used for discounting purposes shall be the discount rate applicable at the time the aid is granted.
- **Loans.** The gross grant equivalent for loans should be calculated on the basis of market interest rates prevailing at the time the aid is granted..²⁰
- **Guarantees.** The gross grant equivalent for guarantees should be calculated on the basis of premiums laid down in a Commission notice for the type of undertaking concerned. Guarantees which do not exceed 80 percent of the underlying exposure, where the guaranteed amount does not exceed EUR 1.5 million and the duration of the guarantee does not exceed 5 years (or EUR 0.75 million for guarantees with a 10-year maturity) can be considered as having a gross grant equivalent not exceeding the *de minimis* ceiling. This rule is not applied to undertakings that may not be able to repay the loan.
- **Monitoring.** Member states should establish the monitoring tools to ensure that the total amount of the aid granted to a single undertaking does not exceed the *de minimis* ceiling and the cumulation rules are complied with. The system is based on declarations of the undertakings or on a central register with complete information on *de minimis* aid granted.

The Commission adopted a temporary framework for state aid in December 2008 as a response to the global financial crisis. The framework provided Member States with additional possibilities of access to state aid for a period of two years, until the end of 2010. This included the possibility of providing subsidised guarantees for SMEs. SMEs were able to receive a reduction of up to 25 percent of the annual premium to be paid for new guarantees granted in accordance with the temporary framework’s so-called *safe-harbour* provisions. For large companies the reduction was limited to 15 percent. The guarantee could relate to both investment and working capital loans and it may cover up to 90 percent of the loan. The *safe-harbours* premiums could be applied during a period of 2 years with reduction, plus 8 additional years without reduction. The maximum loan benefiting from the guarantee was not allowed to exceed the total annual wage bill of the beneficiary for 2008. In 2010, the temporary framework was prolonged for another year in a more limited form (Campo, 2011).

²⁰ In order to simplify the treatment of small loans of short duration, the Commission treats loans that are secured by collateral covering at least 50 percent of the loan and that do not exceed either EUR 1,000,000 and a duration of five years or EUR 500 000 and a duration of 10 years as having a gross grant equivalent not exceeding the *de minimis* ceiling. This rule is not applied to undertakings that may not be able to repay the loan.

Box 4: The treatment of state guarantees in the ESA 2010 framework and its potential impact on CGSs

The European System of National and Regional Accounts (ESA 2010) is the newest internationally compatible EU accounting framework for a systematic and detailed description of an economy. From September 2014 onwards, data transmission from EU member states to Eurostat will follow ESA 2010 rules. These rules replace the preceding ESA 95 framework.

One of the differences of the ESA 2010 system relative to the ESA 95 relates to the treatment of government guarantees. According to Eurostat's pamphlet on the ESA 2010 conversion (Eurostat, 2013), "...The treatment of loan guarantees has been clarified, and a new treatment (was) introduced for standardised loan guarantees, such as export credit guarantees and student loans guarantees. The new treatment is that, to the extent of the likely call on the guarantees, a financial asset and liability are to be recognised in the accounts." In other words, if a credit guarantee is extended by a government, expected losses from it are accounted for ex ante, unlike in the old ESA 95 system where losses were only added when the guarantee was actually called.

Do these changes affect the statistical treatment of CGSs? In particular, does the new methodology imply that under the ESA 2010 the guarantees extended by publicly owned CGSs will, in expected value terms, enter into the fiscal indicators of the surveillance framework defined by the Stability and Growth Pact (SGP)?

If this is the case, the change in the statistical methodology may also alter governments' incentives to support CGSs. One of the reasons why CGSs have been attractive from a public policy viewpoint was the lack of front-loaded costs associated with them. If credit guarantees have to be shown ex ante in the SGP-relevant fiscal indicators, public policymakers may become more reluctant to use or support them.

The statistical treatment of CGSs in the ESA 2010 system depends heavily on the institutional framework.

- **CGSs operating as public corporations.** The majority of the publicly owned CGSs operate, from a statistical viewpoint, as public corporations, and as such they are not part of the general government. This is generally the case when the CGS is operating as a separate institutional entity, and when at least 50 percent of its operating costs are recovered from fees or other charges. Guarantees granted by these entities are treated similarly by both the ESA 95 and the ESA 2010 system: they do not affect ex-ante the SGP-relevant debt and deficit indicators.
- **CGSs operating within the general government.** Some CGSs are classified as part of the general government. This is the general rule when the CGS operates within the government structure – e.g. as part of a ministry – or when the majority of the operating costs is covered by general budget revenues rather than fees charged by the CGS. If such an institution issues guarantees, then under the new ESA 2010 rules expected losses associated with them will have an impact on general government net lending/net borrowing – i.e. will increase the government deficit (or decrease the surplus). Although the total liabilities of the general government will increase, the corresponding liability ("Provisions for calls under standardised guarantees - AF.66" – see Eurostat, 2014) does not form part of the government debt measure used for the purposes of the SGP (the so-called Maastricht debt definition.)
- **Government counter-guarantees.** Even for CGSs operating as public corporations, the portfolio of guarantees is often backed by counter-guarantees, most often from the government. Sovereign counter-guarantees are often preferred method to direct capital transfers for increasing the scale of activities of CGSs. They are also often necessary to obtain the credit rating necessary for obtaining regulatory capital relief on guarantees. From a statistical viewpoint, such counter-guarantees are treated as guarantees issued by the general government. As a consequence, in expected value terms, they will appear in the general government deficit under the ESA 2010 framework. Again, the general government debt used in the SGP framework will not be affected ex ante.

From a public policy perspective, the changes related to the treatment of public credit guarantee schemes in the ESA 2010 framework can be summarised as follows:

- The methodological change will, on the margin, deteriorate the general government deficit *ex ante* for CGSs operating as part of the general government. The treatment of CGSs operating as public corporations will only be affected if they are backed by government counter-guarantees. The changes will only affect the general government deficit, but not the EDP-debt statistics.
- In any case, given the relatively small size of public CGSs, the deterioration of the government balance will be at most in the range of 0.1-0.2 percent of GDP even in the EU member states with the largest CGS activity. In this regard, reducing the support to CGSs would not bring significant benefits towards achieving the targets specified in the SGP fiscal surveillance procedures.
- In addition, the switch will render counter-guarantees provided by multinational financial institutions marginally more attractive relative to government counter-guarantees, as the former do not have a deteriorating effect on general government balances.

Chapter 3 – Current issues and challenges faced by credit guarantee systems in the CESEE region

- Substantial demand exists for SME credit guarantees in the CESEE region.
- The crisis increased the demand for credit guarantees, especially for working capital loans, and CGSs implemented various measures to meet this increased demand.
- The regulatory treatment of guarantees is a constraint deemed important both by banks and CGSs.
- The practice of recognising capital relief on credit guarantees has not been uniform across the different national supervisory authorities within the EU.
- In practice, guarantees apparently at best reduce, but do not eliminate, the need for collateral.

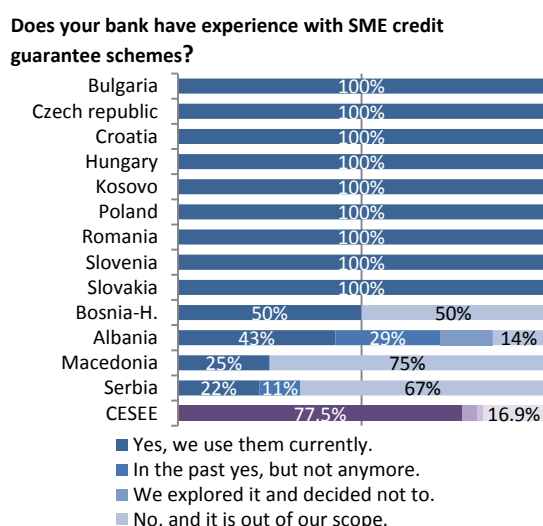
3.1 The demand for SME guarantees in the region

Most of the banks operating in the CESEE have already been actively using the guarantee schemes in their SME lending activity (Figure 16). More than 75 percent of banks had loans guaranteed by CGSs in their current portfolio. In the EU member states, all banks are active users of CGSs, whereas in the countries outside the EU, guarantee usage is less widespread.

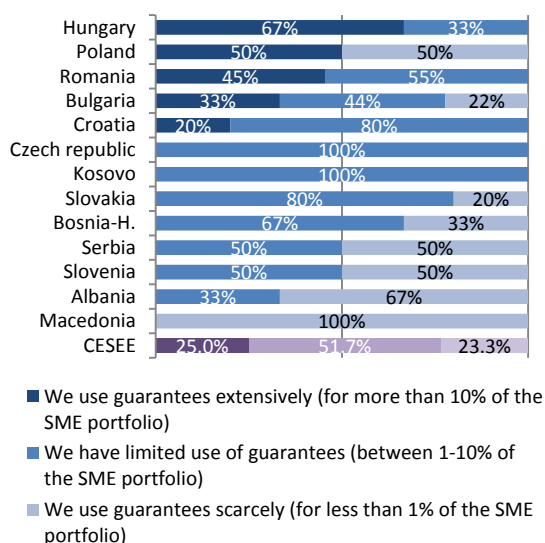
As to the importance of CGSs in lending to the SMEs, the picture is more varied. On average, guarantees cover between 1 and 10 percent of the SME loan portfolio of banks. In the most developed markets, such as Hungary, Romania and Poland, more than half of the banks reported that credit guarantees represent a significant portion of the SME loan portfolio. In countries with less developed CGS markets, typically non-EU countries, Guarantee coverage is below 1 percent of total SME loans. This heterogeneity is also confirmed by the regulatory survey.

For banks, the supply of guarantees is below the demand in some parts of CESEE (see Figure 17). Half of banks perceive demand for guarantees to be higher than supply, whereas the other half believes that the supply meets the demand. Again, large differences exist between countries. In the most developed CGS markets, supply seems to be close to sufficient. In Hungary, for some financial institutions, supply even exceeds demand. The CGS survey complements this picture, pointing towards the general lack of credit demand as a major constraint to the development of credit guarantees in Hungary

Figure 16:: The use of credit guarantees



How important is the use of credit guarantees within your SME lending activity?

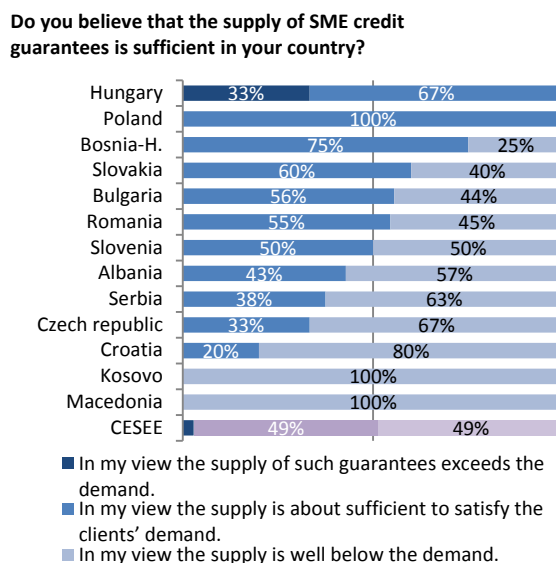


Source: Bank survey

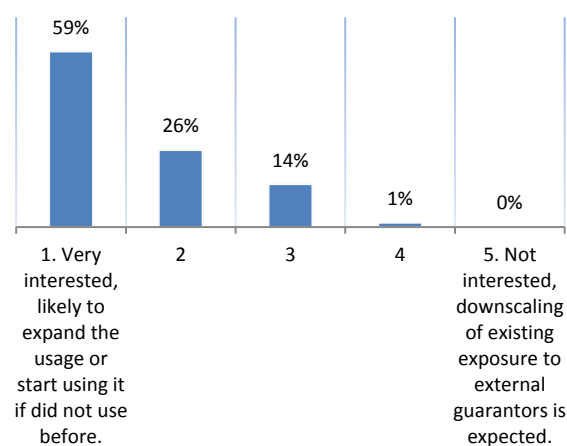
and Romania. Nevertheless, the shortage in the supply of credit guarantees is detectable in the less developed markets of CESEE.

All in all, it appears that banking groups operating in the CESEE region actively use CGSs to manage and offload SME credit risk. This usage is however often limited to a relatively small share of the SME portfolio. Although limited in scope, our survey suggests that current demand exceeds the supply of SME guarantees in some parts of the CESEE region, particularly in the countries with less developed systems of CGSs. Our analysis in section 3.3 explores the factors that may lie behind this limited supply.

Figure 17: Revealed demand for credit guarantees



Looking into the future, are you interested in using external credit guarantee products?



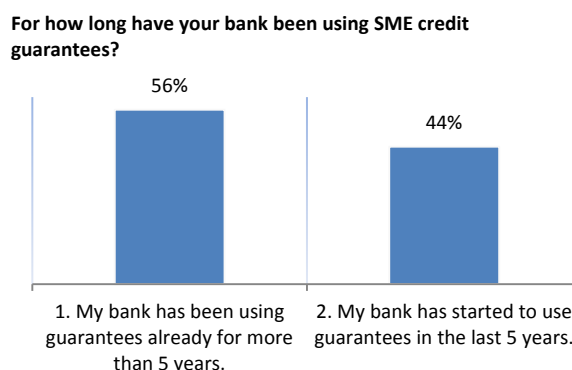
Source: Bank survey

3.2 The role of CGSs in alleviating the impact of the crisis

The crisis and the resulting difficulties in access to finance by SMEs have contributed to the demand for credit guarantees in the CESEE region (Figure 18). More than 40 percent of the commercial banks using SME guarantee products banks started using credit guarantees in the last 5 years, i.e. in the aftermath of the crisis. Also, the majority of the banks reported that they had increased their guarantee usage to some extent as a result of the financial downturn.

According to the CGS survey, the number of guarantees issued between 2009 and 2012

Figure 18: The crisis's impact on the banks' guarantee use



increased by 35 percent; yet, the aggregate value of guarantees issued decreased (see Figure 19). This decrease is mainly due to the downsizing of two relatively large guarantee schemes that faced substantial guarantee claims. The other explanation is that CGSs responded to the increased demand by providing more, but smaller and shorter-term guarantees.

The number of guarantee requests received increased on average by more than 80 percent over the period. Also, close to 80 percent CGSs increased their operations in response to the crisis (see Figure 20). Furthermore, based on self-reported data, CGSs responded with a median increase in guarantees issued by 30 percent in number and 11 percent in volume.

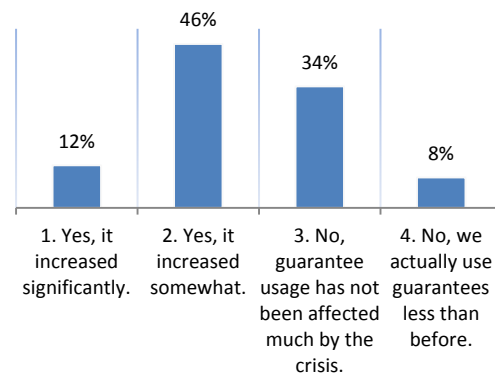
Both the CGS and the bank surveys indicate that the post-crisis increase in demand for guarantees is mainly related to working capital loans, rather than investment financing. This shift in credit demand from investment towards working capital as a result of the crisis has been studied by many, including Bain and IIF (2013). There are two possible dynamics at play: (i) the reduced profitability of investment projects when aggregate demand is lower than production capacity; and (ii) difficulties in accessing alternative sources of working capital finance, such as trade credit from suppliers.

CGSs in the CESEE region have reacted to the crisis with various measures to increase their activity. As documented by AECM (2010), these included, among others:

- Obtaining additional funding for broadening their operations, often from EU structural funds (Czech Republic, Estonia, Hungary, Lithuania, Romania, Slovenia)
- Developing products for working capital or strengthening the existing ones (Czech Republic, Estonia, Lithuania)
- Increasing the maximum amounts for guarantees (Estonia)
- Increasing the guarantee coverage (Hungary, Lithuania, Romania, Poland)
- Reducing fees (Hungary, Romania)
- Simplifying the decision-making process (Hungary, Romania).

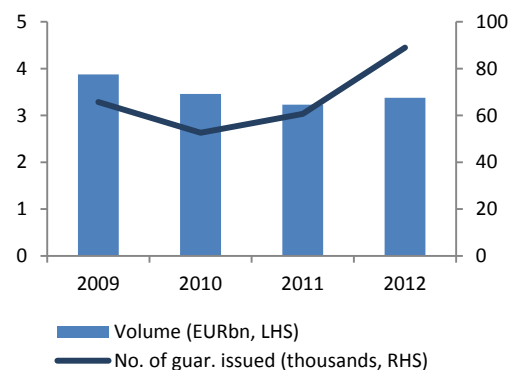
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Does your bank's usage of credit guarantees increased after the crisis?



Source: Bank survey

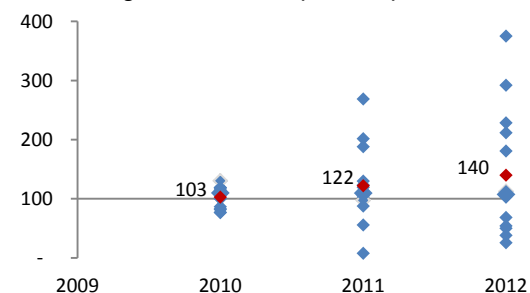
Figure 19: The crisis's impact on aggregate CGS activity in CESEE



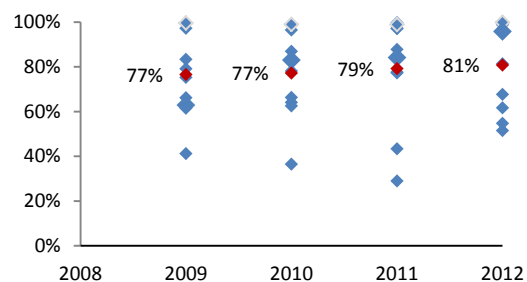
Source: CGS survey

Figure 20: The crisis's impact on individual CGSs

Evolution of guarantee volumes (2009=100)



Guarantee approval rates

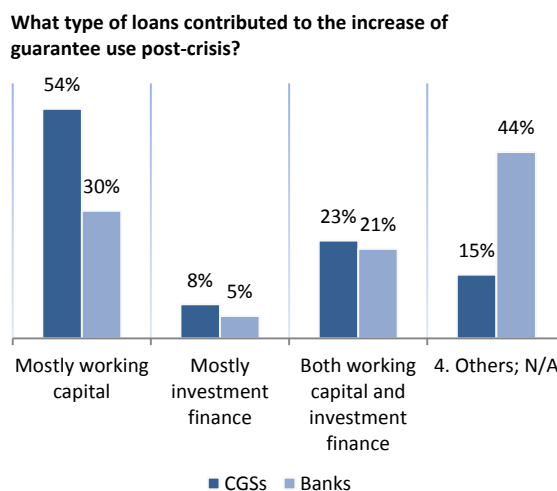


Source: CGS survey

Many of these measures were enabled by the temporary relaxation of EU state aid rules since December 2008. As described by Campo (2011), this change in regulation allowed EU member states to use additional state aid in the forms of grants, subsidised guarantees and loans to support the SME access to finance. The temporary rules were originally established for a period of two years, but have been prolonged since then in a somewhat different form.

Only a quarter of the CGSs that reported an increase in their operations had any explicit sunset clauses for any of their products. Similarly, most commercial banks do not expect the guarantee activity to decline once the crisis is over, despite the role of the financial crisis in motivating the increase of credit guarantee use.

Figure 21: The crisis's impact on the type of guarantees requested



Source: Bank survey/CGS survey

Box 5: Credit guarantees as complementary instruments to targeted long-term liquidity measures by central banks

As part of the response to the crisis and its impact on access to finance, some central banks have introduced targeted measures to support lending to the corporate sector, and SMEs in particular. The first of these instruments was the Bank of England's *Funding for Lending* scheme. For the Eurozone, the ECB's *Targeted Long-Term Refinancing Operation (TLTRO)* serves a similar purpose. Within the CESEE region the National Bank of Hungary has also launched a programme in similar vein under the name *Funding for Growth*.

These instruments are based on the presumption that credit supply constraints stemming from lack of liquidity are a main factor behind the slowdown of lending. Central banks can strengthen banks' lending capacity by providing liquidity that is inexpensive, available for the long-term, and accessible against a wide set of collateral. The lack of liquidity, however, may not be the only factor behind the supply constraints for bank credit.

In many European economies, including the ones in the CESEE, the banks' risk-taking capacity is also a binding constraint for lending. In this case, liquidity provision in itself may not be a sufficient policy measure to alleviate credit constraints to the corporate sector: solutions that allow the off-loading of credit risk from the commercial banks' balance sheets may also be necessary.

The use of credit guarantees is a possible policy option. In the UK, to complement the *Funding for Lending* scheme, the government established the *Enterprise Finance Guarantee (EFG)* for this purpose. In Hungary, the largest guarantee scheme, *Garantiqa* has been adjusting its product palette to better support the central bank's liquidity measures. All in all, suitable guarantee programs have the potential to increase the efficiency of central bank liquidity measures by going hand-in-hand with them.

Policy makers, however, have to bear in mind that both low-cost central bank liquidity provision and credit risk transfer from the private sector to public CGSs may incur fiscal costs in the long run. A thorough analysis of the costs and benefits are crucial to establish the necessity and scale of public sector involvement.

3.3 Factors constraining the credit guarantee activity in CESEE

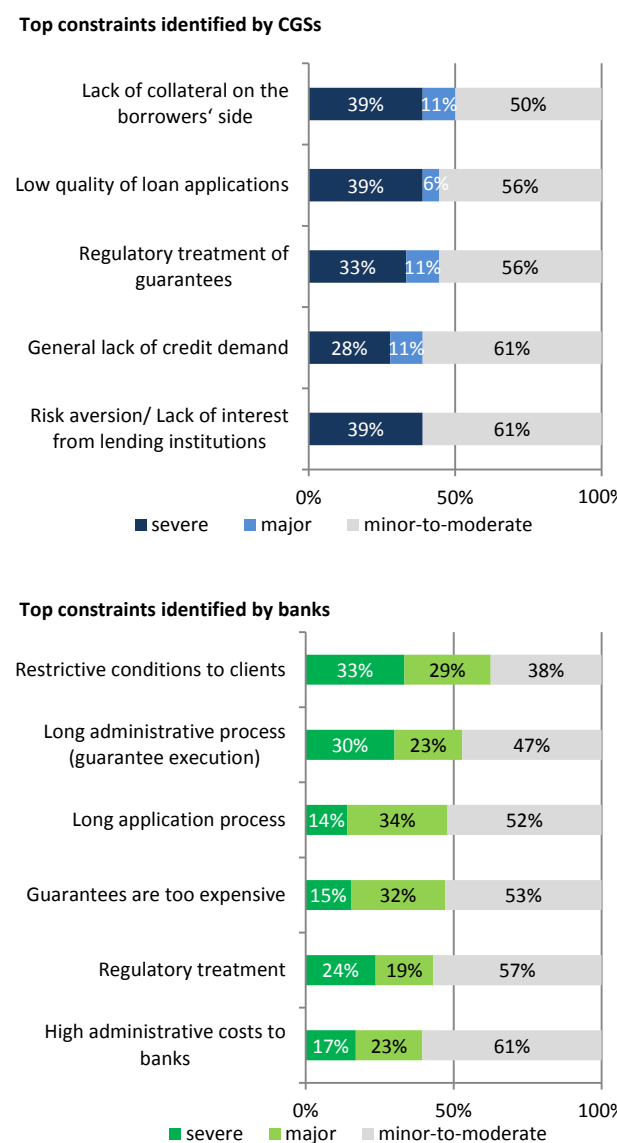
In our respective surveys, banks and CGSs were asked to identify key constraints to the development of guarantees. The top constraints—defined as factors identified as major-to-severe or relevant or very relevant by more than a third of respondents—differ for banks and CGSs (see Figure 22).

The one area that is qualified as an important constraint in both surveys is the regulatory treatment of guarantee products. Close to one in three CGSs and one in four banks identified this issue as the most salient to the development of guarantees. This was confirmed through conversations with the representatives of commercial banks active in the CESEE region. It appears that the way regulators consider credit guarantee products, especially from the viewpoint of regulatory capital relief, is rather heterogeneous across jurisdictions, even within the European Union. This creates an operational uncertainty that discourages banks from engaging in guarantee-based SME lending in certain jurisdictions.

Besides regulatory issues, the key constraints identified by CGSs relate mainly to borrowers, and, to a smaller extent to lenders. In line with their main objective of making up for the lack of borrowers' collateral, most CGSs believe that the development of guarantees is hindered by the lack of collateral, which in turn adversely affects the quality of credit applications, increases lenders' risk aversion and results in low credit demand. Actually, almost all schemes ranked at least one of these factors as major or severe hindrances. This suggests that these concerns would be alleviated, if guarantee programs were better designed to effectively reduce the need for borrowers' collateral. At the moment, collateral requirements still appear to impede the development of guarantees.

The most important constraints identified by banks are all related to CGS's eligibility criteria and operating processes. Many commercial banks believe that guarantees offered by CGSs are accessible only to a narrow range of clients.

Figure 22: Top 5 factors – answers from the Bank and CGSs Surveys

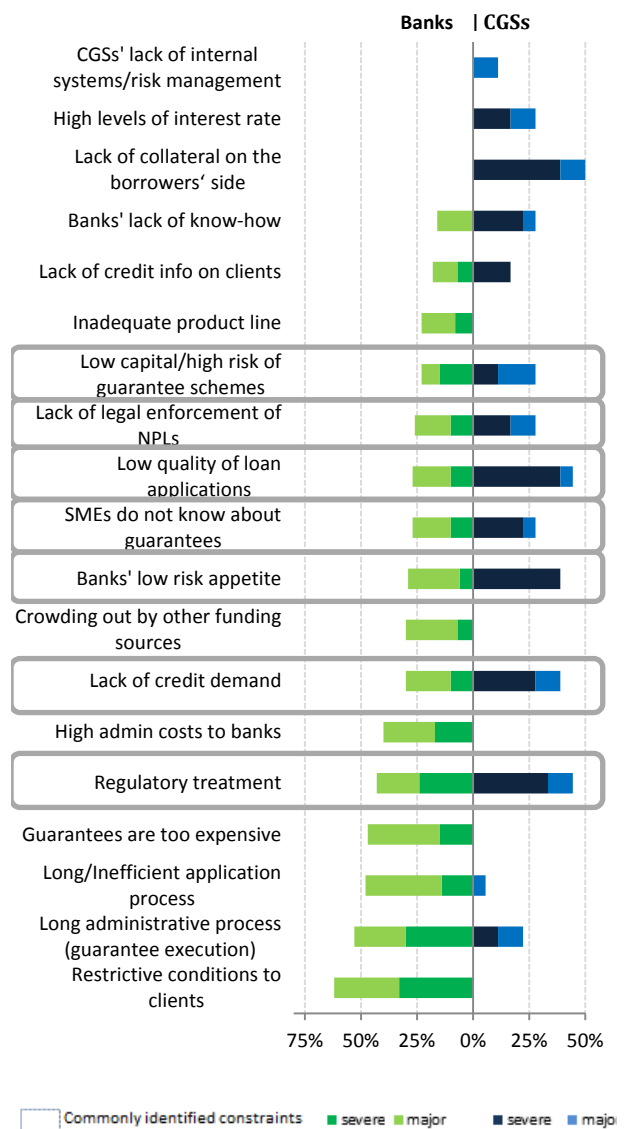


Source: Bank survey/CGS survey

Guarantee products that are targeted to specific SMEs or activities – e.g. guarantees for innovative companies or guarantees for investments creating new jobs – may not achieve a sufficient scale for the banks to justify the costs of setting up the necessary processes and product support. This is particularly true in markets where the guarantee system is in an early stage of development, and the necessary know-how and infrastructure are still nascent. The second constraint that 30 percent of banks considered very relevant relates to the long administrative processes that they face to trigger the guarantee, after a loan defaults.

Comparing answers received from banks and CGSs highlights the similarities and divergences of these two parties in explaining the low usage of credit guarantee schemes. Figure 23 groups common constraints that were ranked as severe or major by CGSs and banks, as well as constraints that were identified by either. We find that the lack of a strong legal enforcement framework that enables banks to efficiently recover NPLs, the low capitalisation and high level of riskiness of the guarantee schemes, the lack of awareness of SMEs about the guarantees (i.e. the CGSs’ lack of marketing) as well as the lack of credit information about borrowers are other important issues that received relatively high ranking from both groups.

Figure 23: Constraining factors – answers from the CGS and Bank Surveys



Source: Bank survey/CGS survey

3.4 Regulatory issues

Our surveys indicate that the regulatory treatment of SME credit guarantees is an important issue for banks and CGSs in the CESEE region. We explore three different aspects of the regulatory environment in more depth: the regulatory capital relief, the harmonisation of credit guarantee regulations across the EU and the state aid (*de minimis*) regulations.

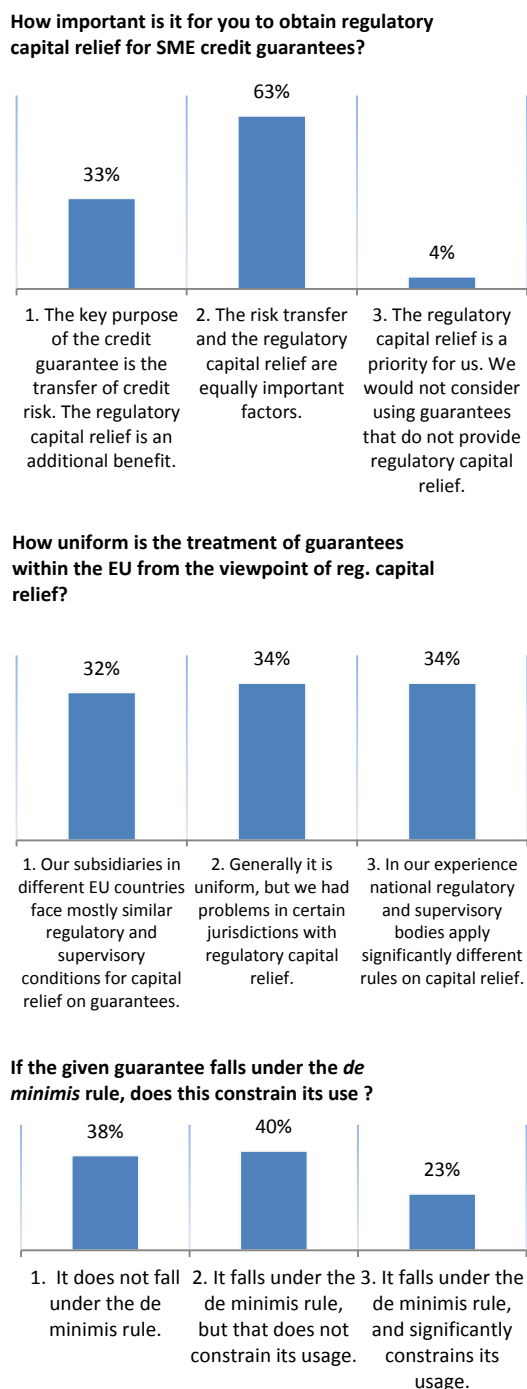
A key aspect of the regulatory environment relates to the regulatory capital relief obtained for the use of guarantees. Credit guarantees, on the one hand, offload the risk from the balance sheet of banks using the guarantees. On the other hand, they also, in principle, allow these banks to hold lower regulatory capital for a guaranteed loan or portfolio (see section 2.5 for details).

Obtaining regulatory capital relief is an equally important component of guarantees as the transfer of credit risk for banks in the CESEE (see Figure 24). This finding of the bank survey is confirmed by the regulatory survey. This does not come as a surprise in this post-crisis economic environment, in which banks' profitability has been low and, at the same time, supervisors and markets apply pressure on them to increase their capital.

More than two-thirds of the banks answering the survey have been facing problems obtaining regulatory capital relief at least in certain jurisdictions, even within the EU. This has also been confirmed by the CGSs survey. About a third of guarantee schemes indicated that they have received complaints from banks about their inability to receive capital relief for the guarantees provided. Bilateral interviews with banks also revealed that supervisory agencies are often reluctant to provide *ex ante* opinions on the regulatory capital charges applied on guaranteed loans.

A uniform *ex ante* treatment of credit guarantees from this aspect could be a significant step forward. It would contribute significantly towards a more predictable business environment that promoted the more efficient use of the available guarantee products.

Figure 24: Regulatory issues and credit guarantees



Source: Bank survey

Harmonization of regulation at the EU level

About 70 percent of the CGSs participating in the survey indicated that the regulatory environment should move towards recognizing exceptions through national legislation, rather than seeking greater uniformity at the EU level. Similarly, only four (out of fourteen) supervisors saw a need for having a unified CGS regulation at the pan-European level. Those supervisors indicated that such a treatment would further incentivize credit institutions, provide a playing field for European beneficiaries, and increase transparency. One of the

supervisors indicated that unified regulation would be less favourable to the local SME sector, as in this country the CGS may cover up to 80 percent of the exposure, which is significantly higher than in the more developed countries. The same supervisor also pointed to the need to change the instruments offered by the European IFIs to make them more suitable for the market, as – in its opinion – the portfolio guarantees offered by the European IFIs cannot reduce the capital requirement for banks.

Two authorities gave their views about a difference between regulatory treatment of instruments provided by the guarantees granted by international financial institutions (IFIs) and guarantees by local public CGSs. One of them acknowledged that the risk weight assigned to IFI guarantees is 20 percent, while public guarantees are assigned risk weight of zero. Another supervisor noted that some IFI guarantees are provided with respect to a pre-defined tranche of a portfolio, while the CGSs covered with a state counter-guarantee usually applies to every covered exposure. The concerns related to these guarantees were reflected in the lack of clear guidance on them for the capital relief treatment.

About a third of CGSs confirmed that the regulatory requirements of guarantees backed by EU and IFI funds differ from those with other funding sources. One of those schemes also mentioned the risk of misinterpreting EU state aid regulations as a key constraint to its activity. It is noteworthy that all such schemes then also indicated a preference for greater uniformity at the EU level.

Guarantees and state aid regulations

Competition regulation is also relevant from the point of view of guarantee usage, as many guarantee products include an element of state subsidy. CGSs operating within the EU mainly use either the *de minimis* regulation, or the crisis-related temporary relaxation of the state aid regulation to account for state aid (see section 2.5).

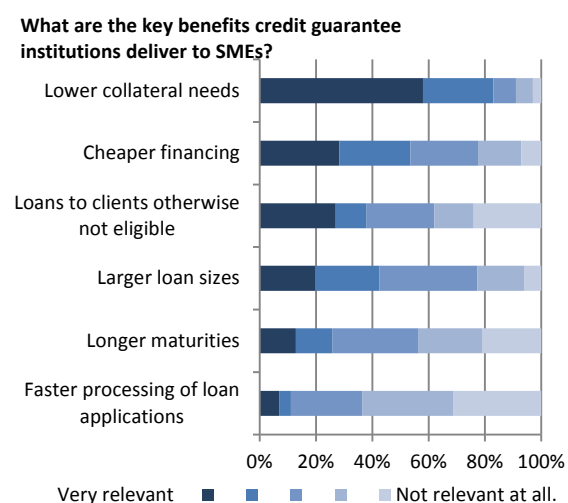
Banks and CGSs view differently the extent to which state aid regulations constrain the use of credit guarantees. Less than a quarter of banks indicated that, for any given guarantee product, the application of the *de minimis* regulation significantly affects their usage. On the other hand, several CGSs point out that the type of eligible activities and investments, the definition of firms in difficulty (which are excluded) and the *de minimis* guarantee limits are key constraints to their activity.

3.5 The role of collateral

A wide consensus seems to exist that the main raison d'être of CGSs is to resolve the collateral gap. Banks, CGSs and regulators believe that the most important benefit of guarantees to SMEs is the lowering of collateral needs (see Figure 25 and section 2.4 on CGSs' mission). Similarly, the most important reason for the banks themselves to use external guarantees is that their SME clients lack sufficient collateral.

Guarantees, however, apparently at best reduce, but certainly do not eliminate the need for collateral. According to the bank survey, in most cases commercial banks require SME clients to provide collateral additional to the guarantees

Figure 25: The role of collateral



provided by the CGSs.

All responding guarantee schemes confirmed that lenders are allowed to request collateral from SME borrowers. Almost 90 percent of CGSs believe that guarantees would lower the collateral requirements, while for 44 percent of CGSs; the guarantee would lead to lower interest rates. Collateral requirements exceed 100 percent of the loan amount in several cases, despite the use of guarantees. The average collateral required in two countries exceeds 100 percent.

The limits of credit guarantees in reducing the need for collateral in practice have been documented before. In a study of CGSs operating in the Philippines, Saldana (2001) finds that for more than 70 percent of guaranteed loans obtained from private financial intermediaries, SMEs also had to provide collateral of a value exceeding the loan's size. ECA (2011) finds that under the European Commission's SME Guarantee Facility only less than half of the guarantees were granted to borrowers with collateral constraints.

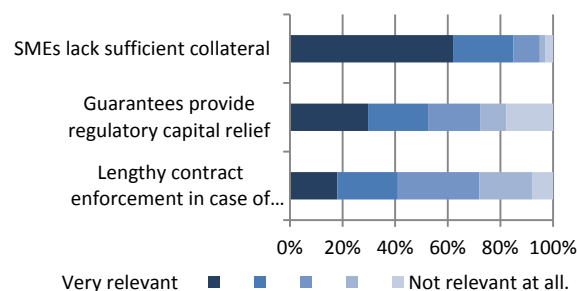
It seems that, even for guaranteed loans, borrowers with higher levels of eligible collateral are often preferred and selected by commercial banks. This calls for, on the one hand an appropriate alignment of incentives in the design of credit guarantee products that prevents the crowding out of clients with low collateral – the targeted beneficiaries – from the use of the product. On the other hand, specific guarantee products should be developed for companies with no collateral at all, which is often the case for start-ups. For instance, conditions for lenders may include caps on the level of collateralisation for certain type of guarantees.

3.6 Financial sustainability and additionality

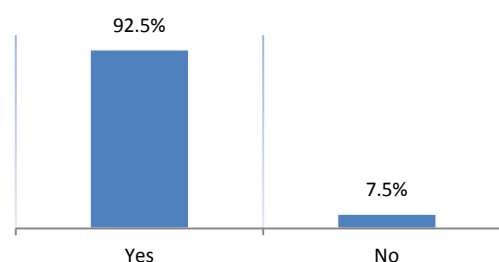
Financial sustainability refers to the CGS's capacity to absorb losses and maintain an adequate equity base. We assess it through the analysis of the leverage ratios (outstanding guarantees to equity) and the net loss ratio (payment of claims/outstanding guarantees).

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What are the main reasons for your bank to use external credit guarantees?



Does your bank usually asks for collateral for loans covered by guarantees for the given guarantor?



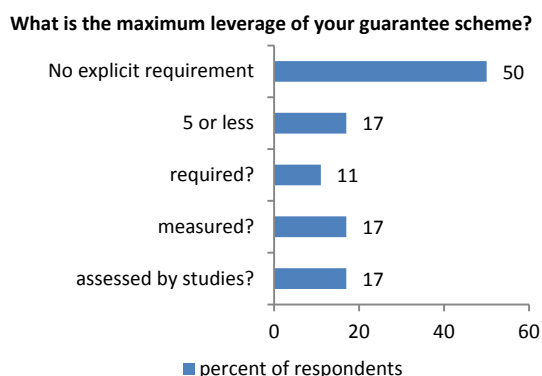
Source: Bank survey

Most schemes have not been imposed such prudential requirements, however, in practice the majority of CGSs have a leverage ratio of less than 5 (see Figure 26). Between 2009 and 2012, the median leverage ratio of the sample has decreased. This dissimulates great heterogeneity among CGSs: the average leverage is 13 times equity in 2012, compared to 2.7 in 2009. However, overall, in the aftermath of the crisis, CGSs have become less leveraged.

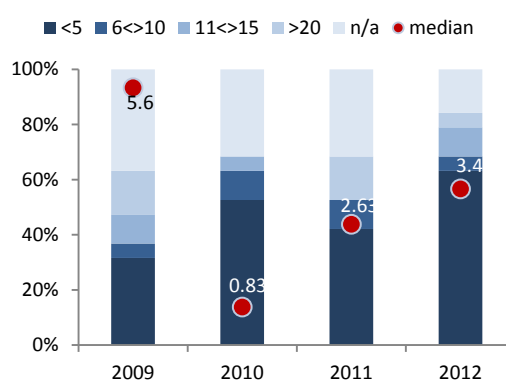
Net loss information was not readily provided, and was found quite heterogeneous among the six schemes that provided responded. The recovery rate, defined as the share of guarantee pay-outs that has been recovered through recovery procedures, was about 12 percent on average, with a maximum of 23 percent. The net loss ratio.²¹ averaged 3 percent, ranging from 0.3 to 9 percent. Low loss rates can be attributed to the CGSs' prudent risk management, but also to banks' requirements for minimum borrower contribution and collateral (on top of the scheme guarantee). They may also reflect the fact that guarantees are not reaching the smaller SMEs.

CGSs seem to assume that guarantees have an inherent additionality. Only two national schemes require proof of financial additionality at the time of application. In Macedonia, lenders must provide their loan procedures with ceilings and approval authorizations, based on collateral provided. This aims to ensure that borrowers get better financing conditions – i.e., more funding for the same amount of collateral that borrowers provide. The same scheme also developed indicators to measure its broader economic additionality – in terms of contributions (profitability, taxes and social impact), job generation, and adoption of new technologies.²² Several schemes assert that without their guarantees, SMEs would not receive financing. Such assumptions have however not been verified by

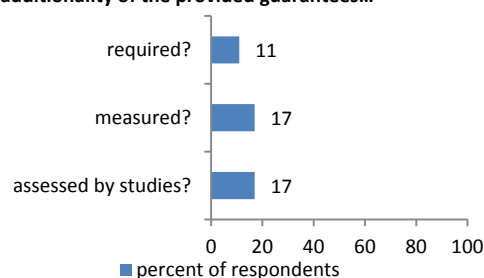
Figure 26: Sustainability and additionality



Evolution of the leverage ratio for the sample (2009-2012)



Is the additionality of the provided guarantees...



Source: Bank survey

²¹ The net loss ratio was defined as net payouts (payouts minus proceeds from recovery) over a year, as a percentage of the outstanding guarantee amount over the same year.

²² Both the intended and actual additionality of the Macedonian scheme have been confirmed by the bank survey (i.e. high score in both categories)

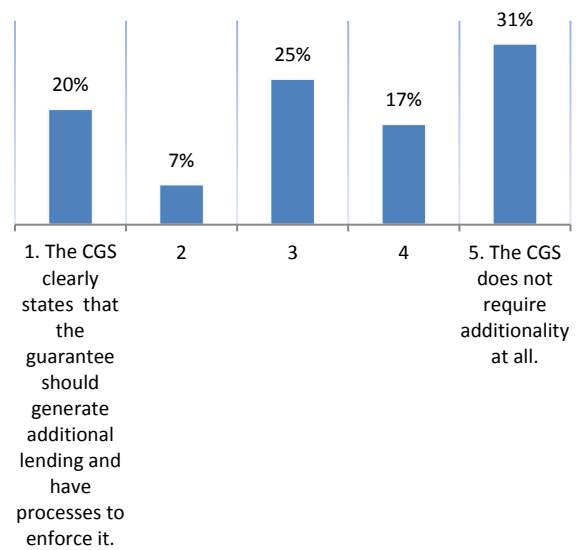
them as studies have not been conducted.

The bank survey also reveals that CGSs seldom provide clear indications about additionality requirements, and they usually do not have the necessary processes to enforce additionality (see Figure 27). Given that restrictions to potential clients and high bureaucratic costs scored high on the banks' list of constraining factors for guarantee use, this result is somewhat surprising. It may indicate that efforts by CGSs towards ensuring additionality may not be efficient, despite the conditionality and the required paperwork. Commercial bank's views differ about the intended additionality of the national schemes versus the EU-funded programmes; these latter seem to communicate stronger additionality requirements.

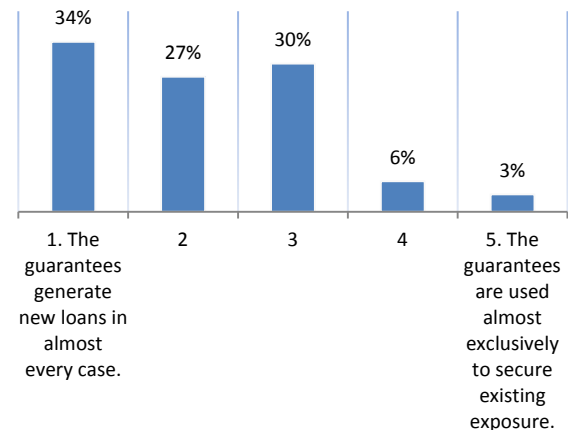
As to the actual additionality of the credit guarantees they use, banks believe that guarantees generate additional lending rather than securing existing exposure. Similarly, more than half of CGSs report that guarantees are exclusively used for new loan applications. The remaining CGSs allow loans to be used both for new loans and for refinancing existing ones.

Figure 27: The banks' view on additionality

Please score the given CGS according to its intended additionality



Please score the given CGS according to its additionality in practice



Box 6: Assessing the economic additionality of the European Commission/EIF MAP SMEG facility.

As part of the programme of the working group, the European Commission (DG ECFIN) and EIF have jointly analysed existing data on the SME Guarantee facility under the MAP programme (SMEG MAP). The aim of the exercise was to design and implement a methodology to analyse the economic additionality of the credit guarantee programmes in the CESEE region. The ultimate objective was on one hand to assess whether this methodology can be used in practice, and on the other hand to use the experience in the design and calibration of financial instruments of this type in the future.

In order to obtain longitudinal data that can be used to measure the impact of the guarantee facility at final beneficiary level, information on companies' balance sheets and profit/loss accounts was merged with the MAP database constructed by the EIF.

The economic additionality analysis focused on the impact assessment of the SMEG MAP facility. In order to assess the "pure" effect of the MAP facility the study constructed a control group of firms most similar to the MAP beneficiary firms using a propensity score matching technique; it then employed difference-in-difference regression analysis to estimate the effect of the MAP-guaranteed loan on firm performance.

The study found the followings:

1. Overall the MAP Facility in the CESEE region had, on average, a positive effect on firms' employment, as measured by the number of employees. In fact, compared to the control group of firms, MAP beneficiaries were able to increase (or preserve) their workforce up to 15 percent, in the 5 years following the issuance of the guaranteed loan.
2. Positive effects have also been found with respect to the total factor productivity of MAP beneficiaries, as well as their medium-term return on assets.

Hence the impact evaluation of the MAP Facility in the CESEE region shows that, on average, the programme has generated positive returns on the beneficiary economies, by easing access to finance conditions of potentially underserved SMEs. A more extensive description of this exercise can be found in Annex 3.

The study also used the MAP database to analyse the different purposes of the loans requested by SMEG MAP beneficiaries, and focused on the link between the purpose itself and the other financial characteristics of the loan. The main insights to be drawn from this specific analysis are:

1. Reported loan purposes are in the order of few thousands. It would thus be very useful to provide financial intermediaries adhering to future facilities with a standardised form to be filled for each guarantee transaction in order to have a more consistent categorisation of the purpose of the loan (equipment, machinery, vehicles, real estate etc.) This might be relevant for monitoring purposes and to facilitate statistical analyses;
2. The purposes differ across countries. This brings out very specific investment needs in each country, suggesting that requiring from financial intermediaries a minimum fixed percentage of transactions within each category may actually hinder the attainment of greater economic additionality;
3. Differences in financing needs arise depending on the investment purpose: for example, requests concerning vehicles tend to be financed by a greater percentage than equipment. In terms of recommendations for future actions, this indicates that within certain categories, financial intermediaries or countries might be offered a larger support and/or preferential conditions, while the others might be incentivised to increase, when risk considerations permit, the intensity of their financing schemes. In terms of "positive" economic analysis, this finding suggests that the leveraged investment amount may also depend on the loan purpose. Further exploration would thus be important to gauge more precise measures of leverage, depending on the type of expenditure financed.

The further findings of this exercise, together with a more thorough description of the analytical framework and analysis of results, will be published in a forthcoming joint EIF/European Commission working paper.

Chapter 4 – Performance and principles for CGSs in the CESEE context

4.1 CGS design, performance and utilization

This section aims to briefly contrast the design features of CGSs against key performance characteristics and the revealed CGS rating by banks. To that end it compares data from the CGS survey (providers) and the bank survey (users). Going beyond the descriptive analysis undertaken in the previous chapters, a simple correlation analysis reveals:

- **CGSs that receive public funding offer higher coverage rate and increased their operations during the crisis.** Public funding (national or EU) may incorporate a subsidy element reflected in higher coverage, and may reflect public mandates expressed by a greater countercyclical role during the global financial crisis.
- **Fully publicly owned schemes have longer appraisal processes.** This could be the counter-weight to incorporating a public subsidy (see previous point) or the result of inefficiencies (typically the result of human resources related constraints). This observation does not apply to public-private schemes, which are generally believed to have different business practices, independently from the percentage of publicly owned shares.
- **Profit-oriented CGSs have guarantees covering more loan products, risk-based fees and have adopted *pari passu* for sharing losses and recovery proceeds.**
- **Profit-oriented CGSs report having a maximum leverage ratio.** High leverage calls for even more prudent risk management practices. CGSs that do not have a maximum leverage ratio were reported by banks as having high counterparty risk and their guarantees not being eligible for capital relief.

Contrasting CGS design features with bank’s revealed rankings, the relationship between the two is based on the expected net value of coverage, process costs and regulatory treatment. We contrast the features that banks indicated as being very relevant in their decision to use a particular CGS, and how they ranked CGSs in the bank survey, against design issues of CGSs from the CGS survey. All other features held constant, we find:

High Ranking	Low Ranking
High coverage	Slow appraisal
First loss coverage	High counter- party risk
	Regulatory constraints

- Banks tend to give higher rankings to CGSs that have higher coverage rates.
- The least preferred CGSs are those that present a high counterparty risk for banks and have slow appraisal processes. Low upfront capitalization, non-standard documentation, and a slow application process deter banks from using certain CGSs.
- Low ranked CGSs report major-to-severe regulatory constraints and have opted for a *pari passu* loss-sharing principle.
- The ability to obtain capital relief, although not found statistically significant for this sample, could be further explored. It is possible that banks rated the requirements for obtaining capital relief rather than the ease of obtaining relief itself. This is plausible, since banks that faced higher reporting requirements are more likely to obtain capital relief.

4.2 Key principles of operational characteristics for CGSs

The literature identifies a number of good practices in the design of CGS. A weak design of guarantee schemes may increase adverse selection and moral hazard, and ultimately severely limit the welfare-enhancing potential of CGSs. This section draws extensively on reports and studies undertaken since 2008 on credit guarantee schemes and state owned financial intermediaries (Anginer et al, 2014; Beck et al, 2010; DFID, 2005; Douette et al, 2014; Gutierrez et al, 2011; Honohan, 2010; OECD, 2013, World Bank, 2013).

Mission, institutional structure and funding

CGSs should have a clear mandate, a distinct legal structure and be subject to taxation in accordance with these.

State-owned CGSs (SOCGSs) should have a clear mandate, including at least the following factors: i) a target sector, ii) market positioning, and iii) financial sustainability objectives. The successful operation of a SOCGS is based on: i) a market failure that has been identified and which can be mitigated through public intervention; ii) the absence of significant market distortions derived from the existence of a SOCGS, and; iii) an adequate governance structure that ensures its financial sustainability. A mandate that is clear in addressing these three areas is essential for the good functioning of a SOCGS.

Survey findings

- 32 percent of CGSs operate within government structures.
- 50 percent of CGSs are non-profit but are subject to some taxation.
- All (but one CGS) had no specific additionality requirements.
- 73 percent of CGSs did not have any sunset clause for their crisis-related windows.

The chosen target sector will directly depend on the identified market failure that the creation of a SOCGS is going to address. The concept of “gap-filling” (Gutierrez et al, 2011) resonates most with the mandate of such institutions. For example, SME banking requirements are inadequate for microfinance institutions (too large) and corporate banking models (too small, too risky or too costly); trade financing is constrained by the complexity and risks of international trade; remote areas are too expensive to service; or agriculture financing is complex due to risks associated with crop yields.

Mandates should also be clear with respect to market positioning and ensuring financial sustainability. SOCGSs should be positioned so as to ensure maximum impact from their operations while minimizing possible distortions. When more than one SOCGS operates in a country, strong coordination and clear mandate setting are recommended to avoid overlaps that lead to inefficiencies. With regards to financial sustainability, the mandate should include, as an explicit objective, that the SOCGS generates sufficient resources to be financially sustainable over time, so as not to be a financial burden to the state. However, the SOCGS’s objective should not be to maximize profits, since this very objective creates the market failure that the SOCGS is trying to address.

The “gap-filling” nature of the SOCGS’s mandate provides a rationale for its countercyclical role. Given private banks’ limited incentives to increase lending when the economy is in recession and interest rates are low, SOCGS should back the continued provision of credit to the economy. In addition, the banks’ pro-cyclical risk aversion provides a justification for the state’s risk absorption role in periods of economic downturn. However, the countercyclical role of the SOCGSs does not need to be explicitly defined in the mandate. Governance mechanisms should address its timing and duration. Such mechanisms include a protocol to communicate the change in government priorities (i.e., increasing activities in the target sector) and also the areas that the government is interested in supporting. In addition, in order to avoid compromising the financial stability of the institution, the shareholder should be willing to support these additional risks with capital.

Finally, mechanisms that provide for a downscaling of the SOCGS's operations and balance sheet once the financial sector recovers are important in ensuring that state intervention remains countercyclical.

Private sector participation should be encouraged when possible. CGSs are encouraged to engage participating banks early in the scheme's capital, at least in equal equity amount to the aggregate contribution of the Government, municipalities and donors. The presence of private banks in the ownership structure not only brings needed equity and increases demand from lenders, but also ensures effective peer monitoring and close-to-market business practices. Moreover, such CGSs could possibly offer guarantee products better tailored to the needs of banks, thanks to standardization of documentation, conditionalities, etc. In addition, the government should consider termination clauses that allow them to gradually withdraw their support when no longer needed. The only permanent role of the state is that of an enabler – reducing information asymmetries and improving the legal enforcement systems as a solution to market failures (Anginer et al, 2014).

Coverage and pricing of the guarantee

Coverage ratios should be on a risk-sharing basis with the financial intermediary providing adequate protection against default risk and moral hazard, while preserving incentives for effective loan origination and monitoring.

Lenders should retain a significant part of the risk (e.g. 30 to 40 percent) so that they are not exempted from any responsibility related to the guaranteed loan. Overly generous coverage ratios leave lenders merely with the function of funding provider and interest rate manager; and thus limited incentives to assess and monitor

borrowers. Schemes with coverage ratio of 90-100 percent have been found to generate large losses (World Bank, 2013). Conversely, if the coverage ratio is too low (below 50 percent), then high loan administration costs could deter lenders from participation (OECD). The introduction of performance-based guarantee services (i.e. scaling services to reflect the claims experience from each lender) can provide the lender with incentives for greater use of guarantees in their loan portfolio (Honohan, 2010).

Survey findings

- Sample distribution of CGS coverage ratio:
 - (i) 50-60% coverage by 18% of CGSs;
 - (ii) 70-75% coverage by 23% of CGSs;
 - (iii) 80% coverage by 53% of CGSs;
 - (iv) >80% coverage by 6% of CGSs.
- 32 percent of CGSs have risk-based guarantee fees.
- All (but one CGS) have no incentives for high performers.

Fair pricing provides lenders with adequate incentives to participate in the scheme and properly use and monitor guarantees. Guarantee fees should be risk-based when feasible. Fair pricing entails that the State does not subsidize [private] market participants' risk-taking and guarantee prices reflect expected losses. The price of guarantees should reflect the risk exposure, but remain attractive to prevent adverse selection of high-risk SMEs. When fees are sufficiently high, they will build greater additionality. Lenders are indeed less able to use the guarantee for SMEs that would otherwise be able to obtain loans. In addition, scaling fees to reflect the claims experience to reward high performers can provide stronger lender incentives.

Appraisal

CGSs should outsource credit risk assessment to the private sector, as it has better capacity to assess credit risks. Honohan (2010) notes that best-regarded CGSs – which provide portfolio guarantees— do not carry out credit appraisal and undertake an ex-post compliance evaluation against the scheme's eligibility criteria. A portfolio approach often offers a more simple and efficient mechanism, especially for a portfolio of smaller

Survey findings

- De facto all CGS appraise individual loans.
- 42 percent of CGSs do not have access to credit reporting systems.
- Processing time ranges from 7 to 75 day, and averages 18 days.
- All CGSs require collateral and 22 percent of CGSs allow collateral that exceed loan amounts.

loans. However, there may be a trade-off between, on the one hand, lending volumes, operating costs and risk assessment quality, and, on the other hand, portfolio quality. Indeed, portfolio guarantees schemes often experience lower quality portfolio and higher default rates, as screening may be less meticulous and lenders have a tendency to assign guarantees to the riskiest borrowers. The increased credit default risk of portfolio guarantees may be mitigated if CGSs adopt performance-based mechanisms that penalize lenders with high claims. In any case, access to credit reporting systems are essential for proper risk assessment. With regards to appraisal processes, parties should aim to take a decision within a maximum of two weeks from the receipt of the guarantee request.

Collateral should be allowed, but, based on the objectives of the scheme, could be capped as a percentage of the loan amount. Collateral requirements may vary for schemes, as influenced by their objectives and target beneficiaries. When guarantees completely substitute for the collateral required from SME borrowers, the risk of adverse selection and moral hazard is compounded. This may ultimately lead to large losses for the schemes. To mitigate this risk, the scheme should be allowed to impose floors and caps on collateral as percentage of the loan value (e.g. 50 percent in France).

Claims

Sustained interest in guarantee schemes requires reliable, efficient and attractive claim payout procedures.

As a general rule, payouts should take place only after the bank initiates legal recovery proceedings, otherwise lenders might be too quick to write off a loan after default (World Bank, 2013). Guarantees should at the end of the process only cover the net loss of the credit institution after recoveries, and incentives may maximize recoveries (e.g. *pari passu*). Payout should be predictable and quick. The challenge will be to design a reliable payment rule, that takes into account the efficiency of the judicial system and provides incentives for loan recovery.

Survey findings

- For 42 percent of CGSs, the guarantee is triggered at the time of default.
- All (but one CGS) provide no incentives for loan recovery.
- Claim processing may take up to 6 months, with an average of 35 days.

Risk mitigation

Effective and permanent risk-mitigation tools (including counter-guarantee mechanisms) can be beneficial.

CGSs should ensure: proper evaluation of counterparty risk, sufficient loan loss provisioning, adequate leverage, risk diversification and limited single exposure. As a guiding rule, appropriate leverage for a CGS should be 3 in the early stage, gradually increasing to a maximum of 7 as the scheme reaches a well-diversified guarantee portfolio. This would be equivalent to a prudential capital ratio of 15 percent, compared to 8 percent generally required of financial institutions, also reflecting the more risky nature of SME lending. Through the use of appropriate risk mitigation tools (as a form of reinsurance), CGSs may be able to reach a higher leverage

Survey findings

- Sample distribution of risk mitigation tools:
 - (i) Counter guarantees used by 53%;
 - (ii) State “guarantees” used by 16%;
 - (iii) (Re)insurance used by 5%;
 - (iv) Portfolio securitization by 5%;
 - (v) None by 21%.
- 50 percent of CGSs have no explicit leverage threshold.

Performance and Impact

Increased transparency of the additionality, impact and cost of guarantee schemes is warranted, through rigorous assessments.

CGSs should regularly assess their financial performance, and undertake periodic reviews of operational processes, design features, performance,

Survey findings

- Additionality of credit guarantees is seldom required or measured.
- Net loss rate can reach up to 9 percent.
- CGSs use output-oriented indicators (number, type and volume of guarantees mostly).

client satisfaction, additionality, outreach, new products, etc. As some form of public support is extended to all guarantee schemes, accountability and enhanced transparency are essential. Proper evaluation of contingent liabilities is necessary. The evaluation of CGSs should involve a cost-benefit analysis of such risk-sharing facilities, in addition to impact and additionality assessments.

Regulation

The regulatory framework applicable to CGSs and the regulatory treatment of credit guarantees should be well defined. Regulation should allow for national characteristics of CGSs. However, supervisors have an important role to play in ensuring that CGSs have adequate risk management practices, as well as providing up front clear guidelines on capital relief for particular guarantee products.

Survey findings

- 28 percent of CGSs were required to own a banking license.
 - 31 percent of CGSs were unable to provide capital relief to banks using their guarantees.
-

Chapter 5 – Conclusions and recommendations for action

A strong demand exists for SME credit guarantees in the CESEE region, underlining the need to further develop the infrastructure for such products. In countries where financial intermediation is more developed, credit guarantees are a well-established, important component of SME financing. In countries with less developed financial systems, banks are also willing to use these instruments in larger scale. Our evidence suggests that, in those economies, the supply of credit guarantees is below the actual demand.

Credit guarantee schemes can be an effective way to deliver public support for SME access to finance. At the same time, public funding is essential for the existence of CGS in the CESEE region, and public support should continue in the future. Unlike in some other European countries, where guarantee institutions evolved as private sector initiatives in the form of mutual schemes, guarantee providers in the CESEE economies are typically public entities. In the aftermath of the financial crisis, as fiscal constraints are typically tight, multinational sources - in the form of EU funds and support from international financial institutions – could play a significant role in maintaining and developing the SME credit guarantee frameworks. The priority to use the European Structural and Investment Funds in the 2014-2020 programming period through innovative financial instruments, such as credit guarantees, is an important step in this direction. Effective communication on the availability, use and benefits of these facilities to the stakeholders, such as commercial banks, and local credit guarantee schemes is crucial for their success.

Credit guarantee schemes should be designed and operated so as to ensure the prudent and efficient use of public resources. Objectives and performance criteria should be established *ex ante*, the proper risk sharing should be ensured, additionality and long-term sustainability should be continuously evaluated using quantifiable indicators, among others. Coordination with other public and private initiatives supporting access to finance for SMEs should be ensured. Many credit guarantee mechanisms operating in the CESEE have room to improve in these fields. Smaller, regional guarantee providers may have better knowledge of local businesses, their needs and their risk characteristics. However, to avoid excessive concentration of risks, their operation should be supported by counter-guarantees, and their products should be promoted by ensuring a level of standardisation.

Credit guarantees should allow a widening of the universe of SMEs that have access to finance, but mechanisms should be in place to limit the adverse selection of high-risk borrowers and the moral hazard associated with existing borrowers. Credit guarantees should allow banks to assume higher credit risk (higher probability of default) from SME clients. However, proper risk-sharing mechanisms should be in place. These are necessary to ensure that the partial transfer of the default costs does not encourage banks to select only highly risky customers and projects.

Guarantees may reduce, but in practice do not eliminate, the need for collateral in the CESEE region. The overwhelming majority of financial institutions in the CESEE require sizable collateral from borrowers beside the guarantees. In this respect, guarantees cannot fully fulfill their role in alleviating the financial constraints of entrepreneurs who lack collateral. This gap could be addressed through fair pricing of the guarantees and through imposing caps on the level of collateralisation for guaranteed loans.

Financial institutions operating in the CESEE report that excessive administrative requirements and narrow definitions of eligible clients often discourage them from using of credit guarantees. Credit guarantee providers should keep these factors in mind when designing new products.

A coherent approach to, and a stronger awareness of credit guarantee schemes by the national financial regulatory and supervisory authorities is desirable. The results of the survey show that the knowledge of

regulators and supervisors about CGS is rather limited. Regulators' and supervisors' understanding of CGS could be strengthened. Regulators and supervisors need to know and recognize CGS products used by banks. This is a necessary condition to ensure fair and uniform regulatory and supervisory treatment.

For EU countries, uniform treatment by national authorities of the credit risk mitigation provided by financial guarantees and the associated regulatory capital relief may facilitate the more widespread use of these instruments. For banks, the regulatory capital relief is an important benefit of credit guarantees. Existing variations in the local interpretations of the relevant EU regulation (CRR) are a source of uncertainty for financial institutions; it limits their use of guarantees in certain jurisdictions. A uniform treatment of credit guarantees could be an important contribution towards a more predictable business environment. The approach towards identical CGS products should be the same in all EU countries, and should be fully compliant with CRD IV/CRR provisions, especially related to regulatory capital relief.

Banks could support the use of credit guarantees by ensuring that lending officers are provided with the necessary incentives to roll out guaranteed loans. Properly designed internal processes and effective communication have to be in place to raise awareness of credit guarantee products. Furthermore, IT systems should be capable of properly accounting at all levels of the decision-making process for the lower capital charges that may come with guaranteed loans. Regulatory support may also play a role in ensuring that credit guarantees are adequately reflected in internal systems.

References

- AECM, 2010. *Guarantees and the recovery: the impact of anti-crisis guarantee measures*. European Association of Mutual Guarantee Societies.
- Anginer, Deniz & Augusto de la Torre & Alain Ize, 2014. "Risk-bearing by the state: When is it good public policy?," *Journal of Financial Stability*, Elsevier, vol. 10(C), pages 76-86.
- Bain & IIF, 2013. *Restoring Financing and Growth to Europe's SMEs - Four sets of impediments and how to overcome them*. Bain and Company and Institute for International Finance.
- Beck, Thorsten & Leora F Klapper, and Juan Carlos Mendoza, 2010, "The typology of partial credit guarantee funds around the world", *Journal of Financial Stability*, Elsevier, vol. 6(1), pages 10-25, April.
- Beck, Thorsten & Asli Demirguc-Kunt & Maria Soledad Martinez Peria, 2008. "Bank Financing for SMEs around the World: Drivers, Obstacles, Business Models, and Lending Practices," *Policy Research Working Paper Series* 4785, The World Bank.
- Blundell, Richard & Monica Costa Dias, 2000. "Evaluation methods for non-experimental data," *Fiscal Studies*, Institute for Fiscal Studies, vol. 21(4), pages 427-468, January.
- Campo, Mercedes, 2011. "Prolongation of the state aid temporary framework", *Competition Policy Newsletter*, Competition Directorate-General of the European Commission, #1, pages 40-44.
- DFID, 2005. "Do Credit Guarantees lead to improved Access to Financial Services? - Recent Evidence from Chile, Egypt, India and Poland", *DFID Policy Division Working Paper*, Department for International Development, February, London.
- Douette, André & Dominique Lesaffre & Roland Siebeke, 2014. *SMEs' Credit Guarantee Schemes in Developing and Emerging Economies: Reflections, Setting-up Principles, Quality Standards*. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).
- ECA, 2011. "The audit of the SME Guarantee Facility", *ECA Special Report #4*, European Court of Auditors.
- EIB, 2014. *CESEE Bank Lending Survey - H2 2014*. European Investment Bank.
- Eurostat, 2013. *Major differences between ESA 2010 and ESA 95*. Pamphlet.
- Eurostat, 2014. *Manual on Government Deficit and Debt – Implementation of the ESA 2010*. European Union, 2014.
- Gutierrez, Eva & Heinz P Rudolph & Theodore Homa & Enrique Blanco Beneit, 2011. *Development Banks : Role and Mechanisms to Increase their Efficiency*. World Bank.
- Holton, Sarah & McCann, Fergal & Kathryn Prendergast & David Purdue, 2013. "Policy measures to improve access to credit for SMEs: a survey," *Quarterly Bulletin Articles*, Central Bank of Ireland, pages 91-110, October.
- Honohan, Patrick, 2010. "Partial credit guarantees: Principles and practice," *Journal of Financial Stability*, Elsevier, vol. 6(1), pages 1-9, April.

- International Finance Corporation (IFC), 2011. *SME Policy Guide*, edited with G-20 Global Partnership for Financial Inclusion (GPFI), Washington D.C.
- Jaffee, Dwight M & Thomas Russell, 1976. "Imperfect Information, Uncertainty, and Credit Rationing," *The Quarterly Journal of Economics*, MIT Press, vol. 90(4), pages 651-66, November.
- Kraemer-Eis, Helmut & Frank Lang & Salome Gvetadze. "Bottlenecks in SME financing" in: Atanas Kolev & Tanja Tanayama & Rien Wagenwoort (eds.), *Investment and Investment Finance in Europe*, European Investment Bank.
- Leone, Paola & Gianfranco A Vento, 2012. *Credit Guarantee Institutions and SME Finance*, Palgrave Macmillan.
- Levinsohn, James & Amil Petrin, 2003. "Estimating Production Functions Using Inputs to Control for Unobservables," *Review of Economic Studies*, Wiley Blackwell, vol. 70(2), pages 317-341, 04.
- OECD, 2006. "The SME Financing Gap: Theory and Evidence," *Financial Market Trends*, OECD Publishing, vol. 2006(2), pages 89-97.
- OECD, 2013a. *Financing SMEs and Entrepreneurs 2013: An OECD Scoreboard*, OECD Publishing.
- OECD, 2013b. *SME and Entrepreneurship Financing: The Role of Credit Guarantee Schemes and Mutual Guarantee Societies in supporting finance for small and medium-sized enterprises*. Final report of the WPSMEE. OECD Publishing.
- OECD/EU, 2010 *Facilitating Access to Finance – Discussion Paper on Credit Guarantee Schemes*, OECD Publishing.
- PAG Uniconsult, 2014. *Analiza stanu rynku funduszy poręczeń kredytowych w Polsce, ocean I perspektywa rozwoju*. PAG Uniconsult on the request of Związek Banków Polskich.
- Petri, H & J Urquhart, 1991. "Channeling bias in the interpretation of drug effects", *Statistics in Medicine*, 10, pp. 577–581.
- Rocha, Roberto & Youssef Saadani, 2010. A Review of Credit Guarantee Schemes in the Middle East And North Africa region, *Financial Flagship*, World Bank.
- Rubin, Donald, 1974. "Estimating Causal Effects of Treatments in Randomized and Nonrandomized Studies", *Journal of Educational Psychology*, 66 (5), pp. 688–701.
- Saldana, Cesar G, 2000. "Assessing the Economic Value of Credit Guarantees." *Journal of Philippine Development*, 27(1).
- Stiglitz, Joseph E & Andrew Weiss, 1981. "Credit Rationing in Markets with Imperfect Information," *American Economic Review*, American Economic Association, vol. 71(3), pages 393-410, June.
- Wehinger, Gert, 2013. "SMEs and the credit crunch: Current financing difficulties, policy measures and a review of literature", *OECD Journal: Financial Market Trends*, issue 2, pages 115-148.
- World Bank, 2013. "Rethinking the Role of State in Finance", *Global Financial Development Report*, 2013.

Annex 1 – The CGS market, country by country

Albania

Credit guarantees have been introduced in Albania only recently.²³ The majority of banks (67 percent) have started to use guarantee schemes in the recent 5 years. (In comparison, on average 56 percent of agents in the whole CESEE region have been using credit guarantees for more than five years.)

We are not aware of any domestic credit guarantee scheme for SMEs operating in Albania at the time of writing.

Two multinational guarantee providers are active on the market: *European Investment Fund (EIF)* and the *USAID Development Credit Authority (DCA)*.

Two facilities of the European Investment Fund are available in Albania: The guarantee facility under the *Western Balkans Enterprise Development and Innovation Facility (WB EDIF)* and the *First Loss Portfolio Guarantee and Risk Sharing Instrument for Innovation and Research oriented SMEs and Small mid-caps*. It is the WB EDIF facility that has been used mostly.

USAID is American government agency helping countries to reduce extreme poverty and to realize their potential. In 1999 DCA was founded to mobilize capital through local private financial institutions sharing the risk of investment. At the end of 2012 *USAID* signed loan agreement with *ProCredit* and *Banka Kombatare Tregtare (BKT)* in order to support Albanian farmers and agribusinesses in gaining access to finance.

Our survey suggests that bureaucratic and complicated administration is hindering the usage and functioning of credit enhancement schemes in Albania, similarly to other countries in the region. Albanian companies seem to be less informed about the credit possibilities supported by guarantees, what also results in the low quality of the applications. Additionally, the availability of the credit information on clients is perceived as one of the major problems in Albania (see Table A1.1).

Table A1.1: Key constraints of using credit guarantees in Albania

Bank survey

What are the relevant factors that may limit the use and the proper functioning of the overall system of credit guarantees in your country?	
(1-minor, 5- very relevant)	
SMEs do not know about guarantees	3.71
Low quality of loan applications	3.71
Excessive bureaucracy when guarantees are called	3.71
Lack of credit information on clients	3.43
Cumbersome application processes	3.43

²³ The contents of this annex are based on the Bank survey and the CGS survey, together with information from the AECM, the EIF and the websites of various CGSs.

Bosnia and Herzegovina

Credit guarantees have been introduced in Bosnia-Herzegovina only recently. The majority of banks (67 percent) have started to use guarantee schemes in the last five years.

There are many institutions providing guarantees on SME loans in Bosnia and Herzegovina:

- The *Export Credit Agency BiH (Izvozno Kreditna Agencija BiH)* provides credit guarantees related to financing export.
- *USAID* in cooperation with *Swedish International Development and Cooperation Agency (SIDA)* launched in 2013 *Growth-Oriented Local Development (GOLD)* project, which aims at unlocking economic potential and expanding employment promoting direct investment and competitive supply chains through local development and sustainable growth of regions.
- In addition, there are several regional guarantee funds in the country – the *Razvojno-garantni fond Brcko*, *Regionalni garancijski fond - LiNK Association* or *Kreditno-garantni fond SERDA (Sarajevo Economic Regional Development Agency)*, among others –, which are aiming at stimulating enterprise development in particular geographic areas.

Two facilities of the European Investment Fund are available in Bosnia and Herzegovina: Guarantee Facility under the Western Balkans Enterprise Development and Innovation Facility (WB EDIF) - First Loss Portfolio Guarantee and Risk Sharing Instrument for Innovation and Research oriented SMEs and Small mid-caps. WB EDIF has been used the most.

The bank surveys suggest that regulatory treatment, cumbersome application processes and restrictive conditions for customers are perceived as main drawbacks against the use of the bank guarantees. Also, banks are somewhat discouraged by the risk rating of local guarantee schemes. Moreover, clients often lack the required collateral and the legal environment does not support the enforcement of distressed loans (see Table A1.2).

Table A1.2: Key constraints of using credit guarantees in Bosnia-Herzegovina

Bank survey		CGS survey	
What are the relevant factors that may limit the use and the proper functioning of the overall system of credit guarantees in your country? (1-minor, 5- very relevant)		Are the following issues an impediment to the operations and development of your guarantee scheme? (1-minor, 4-very severe)	
regulatory treatment	4.75	Low capitalization/ high level of riskiness of guarantee schemes	4
restrictive conditions for clients	4.5	Lack of collateral on the borrowers' side	4
cumbersome application processes	4	Lack of strong legal enforcement for non-performing loans	4
low capitalisation/high level of riskiness of NGS	3.75	Inefficiency of the repayment procedure (uncertain, slow, complicated)	4
SMEs do not know about guarantees	3.75		

Bulgaria

The Bulgarian credit guarantee market is still relatively young, although more than half of the agents have been providing credit guarantee schemes for over five years. The volume of guarantees in portfolios in 2013

amounted only to 0.07 percent of GDP. However, the interest in further exploration of the lending possibilities is relatively high, almost all of the respondents called for an expansion of CGS use.

The main guarantee institution is the *National Guarantee Fund EAD*, which was created in 2008 as a fully public subsidiary of the Bulgarian Development Bank. Since 2010 its activity has decreased in volume and scale: from EUR 60 million and 1959 guarantees in 2011 to EUR 30 million and 1041 guarantees in 2013). The Fund signed a partner agreement with ten retail banks and launched a new product for start-ups at the beginning of 2014.

Several facilities of the *European Investment Fund* are available in Bulgaria: the *SME Guarantee Facility (CIP)*, *JEREMIE - Joint European Resources for Micro to Medium Enterprises (First Loss Portfolio Guarantee and Portfolio Risk Sharing Loan)*, *Risk Sharing Instrument for Innovation and Research oriented SMEs and Small mid-caps* and *European Progress Microfinance Facility*. JEREMIE guarantee schemes have shown the most usage.

Our survey suggests that removing the overly restrictive conditions, simplifying the bureaucratic procedures in the case of defaults, and a lowering the costs of guarantees could stimulate further use of guarantees (see Table A1.3).

Table A1.3: Key constraints of using credit guarantees in Bulgaria

Bank survey

What are the relevant factors that may limit the use and the proper functioning of the overall system of credit guarantees in your country?

(1-minor, 5- very relevant)

restrictive conditions for clients	4.33
excessive bureaucracy when guarantees are called	3.78
guarantees are too expensive	3.67
inadequate line of products	3.56
lack of credit demand	3.56

Croatia

About 60 percent of financial institutions have been using credit enhancement schemes for more than five years. The volume of guarantees in portfolios in 2013 amounted to 0.34 percent of GDP.

The main domestic financial institution providing credit guarantees is the publicly owned *Hrvatska Banka za Obnovu i Razvitak (Croatian Bank for Reconstruction and Development, HBOR)*, transformed in 1995 from Croatian Credit Bank for Reconstruction (Hrvatska kreditna banka za obnovu - HKBO). Its goals include supporting development of SMEs, financing the reconstruction of Croatian economy, infrastructure, promoting export and environmental protection as well as insuring it against non-marketable risks.

Another domestic agency providing guarantees is the *Croatian Agency for SMEs and Investments (Hamag Invest)*, a fully public non-profit development agency, which exists since 1994. It supports SMEs by extending the so-called *HAMAG-BICRO guarantees*, securing loans issued by commercial banks and *HBOR* in cooperation with *Business Innovation Croatia Agency (BICRO)*.

In addition, the *Istrian Development Agency (IDA)* supports the regional interests of the County of Istria. In 2005 it established the *Istria 21 Development Consortium*, a regional guarantee scheme.

Several facilities of the *European Investment Fund* are available in Croatia: the *SME Guarantee Facilities (SMEG CIP)*, the *Guarantee Facility under the Western Balkans Enterprise Development and Innovation Facility (WB EDIF)*, the *Risk Sharing Instrument for Innovation and Research oriented SMEs and Small mid-caps*, and the *European Progress Microfinance Facility*. The SMEG CIP guarantee schemes have been used the most.

The key obstacles preventing the more widespread use of the credit guarantees in Croatia include excessive bureaucratic procedures (both during the application process and when guarantees are called), the regulatory environment, the restrictive conditions of the products, the general lack of credit demand, and the lack of skills and loan applications with viable projects (see table A1.4).

Table A1.4: Key constraints of using credit guarantees in Croatia

Bank survey	CGS survey	
What are the relevant factors that may limit the use and the proper functioning of the overall system of credit guarantees in your country? (1-minor, 5- very relevant)	Are the following issues an impediment to the operations and development of your guarantee scheme? (1-minor, 4-very severe)	
regulatory treatment	4	Lack of internal skills (ex. credit analysts) 3.5
lack of credit demand	4	Low quality of loan applications 3
restrictive conditions for clients	3.8	Lack of strong legal enforcement for non-performing loans 3
cumbersome application processes	3.8	
excessive bureaucracy when guarantees are called	3.8	

Czech Republic

The system of credit guarantees is fairly developed in the Czech Republic. About two thirds of banks have used such products for more than five years, and the volume of outstanding guarantees amounted to 0.44 percent of GDP in 2013.

The key domestic guarantee provider is the *Czech-Moravian Guarantee and Development Bank (CMZRB)*, a fully public, state-owned entity jointly controlled by the Ministry of Industry and Trade, the Ministry of Regional Development and the Ministry of Finance. With over 20 years of experience, it supports the economic development of the country, financing SMEs, micro-enterprises and the self-employed.

Two other institutions provide bank guarantees with a focus on export. *Export Guarantee and Insurance Corporation (EGIC/EGAP)* is a joint-stock company fully owned by the state, which power is represented by 4 Ministries. EGAP got specialised in supporting large business transactions over CZK 1 billion, however, it also extends simplified version of bank guarantees for SMEs insuring against the risk of their calling (2 percent of new contracts in 2013).

The second institution is the *Czech Export Bank (CEB)*, which is partially owned by EGAP and the state. It offers EGAP bank guarantees issued in relation to an export contract for which funding is provided by a commercial bank.

Three facilities of the *European Investment Fund (EIF)* are available in Czech Republic: *SME Guarantee Facilities (SMEG CIP)*, *Risk Sharing Instrument for Innovation and Research oriented SMEs and Small mid-caps* and *European Progress Microfinance Facility*. SMEG CIP guarantee schemes have shown the most usage.

The most important constraints on a more widespread use of credit guarantees are the restrictive conditions of the guarantee products and the regulatory treatment of guarantees. Extensive bureaucratic procedures are also a factor that could deter the banks from using credit guarantees. The CGSs report that the lack of collateral from the borrowers' side is also a relevant issue (see Table A1.5).

Table A1.5: Key constraints of using credit guarantees in the Czech Republic

Bank survey	CGS survey
What are the relevant factors that may limit the use and the proper functioning of the overall system of credit guarantees in your country? (1-minor, 5- very relevant)	Are the following issues an impediment to the operations and development of your guarantee scheme? (1-minor, 4-very severe)
restrictive conditions for clients	4.67
regulatory treatment	4
high administrative cost for banks	3.33
cumbersome application processes	3.33
excessive bureaucracy when guarantees are called	3.33

Hungary

The system of credit guarantees in Hungary is one of the most developed in the CESEE region, with the highest ratio of outstanding guarantee volumes, amounting to 1.33 percent of GDP in 2013. Guarantee schemes are actively supported by the government. All financial institutions in our survey have been using credit guarantees for more than five years.

The largest portfolio, with a volume of almost a billion euro and 32 507 guarantee contracts in 2013, has been developed by *Garantiqa Hitelgarancia Zrt.*, a private-public limited company owned by various shareholders: the government (through the Hungarian Development Bank Group), commercial banks, co-operative savings associations and enterprise interest group associations. It maintains one of the highest leverage ratios in the region oscillating around 15.

The second most important guarantee institution in Hungary is the mutually owned *Rural Credit Guarantee Foundation (AVHGA)* with around 150 financial partners, recognized since 2011 as a financial service provider. It supports SMEs and micro-companies in the agricultural sector, food industry and rural development, not only by providing funds but also information consulting services for companies from rural regions.

The oldest entity on the market is *Hungarian Foundation for Enterprise Promotion (MVA)*. Among the main goals of MVA is facilitating the establishment of the new companies and supporting development of the enterprises through strengthening their finance, business, market position and knowledge.

Three facilities of the European Investment Fund are available in Hungary: *SME Guarantee Facilities (CIP)*, *Risk Sharing Instrument for Innovation and Research oriented SMEs and Small mid-caps* and *European Progress Microfinance Facility*. SMEG guarantee schemes have been used the most.

Besides the administrative burdens, the lack of credit demand, together with the general risk aversion of the financial institutions is certainly a key factor was constraining the growth of credit guarantee use in Hungary, at least it was at the time of our survey (see Table A1.6).

Table A1.6: Key constraints of using credit guarantees in Hungary

Bank survey		CGS survey	
What are the relevant factors that may limit the use and the proper functioning of the overall system of credit guarantees in your country?		Are the following issues an impediment to the operations and development of your guarantee scheme?	
(1-minor, 5- very relevant)		(1-minor, 4-very severe)	
high administrative cost for banks	3.50	General lack of credit demand	3.33
excessive bureaucracy when guarantees are called	3.5	Risk aversion/ Lack of interest from lending institutions	3.33
lack of credit demand	3.33		

Kosovo

The credit guarantee market is still developing in Kosovo. Financial institutions have started to familiarise with such instruments only in the last five years. However, banks operating in Kosovo show strong interest in using guarantees in the future.

There are no local credit enhancement schemes in Kosovo. Two facilities of the European Investment Fund are available: the *First Loss Portfolio Guarantee Facility under the Western Balkans Enterprise Development and Innovation Facility (WB EDIF)* and the *Risk Sharing Instrument for Innovation and Research oriented SMEs and Small mid-caps*. WB EDIF has been used the most.

Several issues have to be addressed in Kosovo in order to enable further spread of the credit guarantee schemes. Besides a general lack of credit demand, the restrictive conditions of guarantee contracts, the high associated administrative costs and the lack of legal enforcement in case of non-performing loans are the key problems identified in our survey. In addition, the bank survey suggests that alternative funding sources seem to be more attractive to clients (see Table A1.7).

Table A1.7: Key constraints of using credit guarantees in Kosovo

Bank survey	
What are the relevant factors that may limit the use and the proper functioning of the overall system of credit guarantees in your country?	
(1-minor, 5- very relevant)	
lack of credit demand	4
crowding out by other funding sources	4
restrictive conditions for clients	3.5
high administrative cost for banks	3.5
lack of legal enforcement of NPLs	3.5

The Former Yugoslav Republic of Macedonia (FYROM)

Credit guarantees have only been introduced to FYR Macedonia in the last five years.

A domestic institution that provides credit guarantees for SME loans is the *Macedonian Bank for Development Promotion*. It aims at stimulating export through providing finance for investment as well as insuring claims resulting from trade activities against short-term commercial and political risks. MBDP also concentrates on micro, small and medium-sized companies, particularly those active in production, processing or export of agricultural and manufactured products, which do not possess sufficient collateral. Their *Special Credit Guarantee Scheme* covers up to 40 percent of SME loans.

Several facilities of the *European Investment Fund (EIF)* are available in FYR Macedonia: *SME Guarantee Facilities (CIP)*, *First Loss Portfolio Guarantee Facility under the Western Balkans Enterprise Development and Innovation Facility (WB EDIF)* and *Risk Sharing Instrument for Innovation and Research oriented SMEs and Small mid-caps*. SMEG CIP guarantee schemes been used the most.

Restrictive conditions for clients, high costs, lack of reliable credit information on the SMEs and bureaucratic burdens are factors that discourage the banks from using credit guarantee products in FYR Macedonia. From the side of the guarantee institutions, the lack of collateral and the lack of risk management experience and know-how are considered as important issues to be resolved (see Table A1.8).

Table A1.8: Key constraints of using credit guarantees in the FYROM

Bank survey	CGS survey	
What are the relevant factors that may limit the use and the proper functioning of the overall system of credit guarantees in your country? (1-minor, 5- very relevant)	Are the following issues an impediment to the operations and development of your guarantee scheme? (1-minor, 4-very severe)	
Restrictive conditions for clients	4.5	Lack of collateral on the borrowers' side 3
High administrative cost for banks	4.33	Lack of internal systems/risk management tools and know-how 3
Lack of credit information on clients	4.33	
Cumbersome application processes	4.33	
Guarantees are too expensive	4.25	

Poland

The interest in using CGSs on the fast-growing Polish credit guarantee market is high – all the banks asked in our survey reported that they are very interested in expanding their use of guarantees. The majority – about 75 percent – of banks started to use these products only in the last five years. The volume of outstanding guarantees in portfolio reached 0.4 percent of GDP in 2013, which represents a 300 percent (!) growth relative to the previous year. This increase results from the introduction of the so-called *de minimis* portfolio guarantee scheme by the *Bank Gospodarstwa Krajowego (BGK)* in May 2013 (see Box 2 for a more detailed description of the programme.)

The main financial institution involved in issuance of the credit guarantees on the Polish market is Bank Gospodarstwa Krajowego (BGK). This fully public development bank is the only bank in Poland fully owned by

the state. With a long history, reaching back to year 1924, it aims at providing finance through local, regional and national government as well as European development programs, related particularly to the SME sector and infrastructure industry. BGK cooperates currently with 21 associated regional guarantee funds, whose shares are owned by the bank.

Besides the BGK network, a large number of small credit guarantee funds exist in Poland, with a diverse range of products.

Three facilities of the *European Investment Fund (EIF)* are available in Poland: *SME Guarantee Facilities (CIP)*, the *Risk Sharing Instrument for Innovation and Research oriented SMEs and Small mid-caps* and *European Progress Microfinance Facility*. SMEG guarantee schemes have been used the most.

According to our survey of the commercial banks, the restrictive conditions on client eligibility, and the cost of the guarantees are the most important constraints on the further spread of guarantee use. The lack of credit demand, the high administrative costs and bureaucratic hurdles are also mentioned. In the CGS survey, the high level of interest rates was also mentioned as an issue (see Table A1.9).²⁴

Table A1.9: Key constraints of using credit guarantees in the Poland

Bank survey		CGS survey	
What are the relevant factors that may limit the use and the proper functioning of the overall system of credit guarantees in your country?		Are the following issues an impediment to the operations and development of your guarantee scheme?	
(1-minor, 5- very relevant)		(1-minor, 4-very severe)	
Restrictive conditions for clients	4	High levels of interest rate	3
Guarantees are too expensive	3.5		
Lack of credit demand	3.25		
High administrative cost for banks	3.25		
Excessive bureaucracy when guarantees are called	3		
Cumbersome application processes	3		

Romania

The system of credit guarantees in Romania is one of the most developed ones in the region. The ratio of outstanding guarantees to GDP stood at 1.14 percent in 2013 – the second highest level in the region after Hungary. About two-third of financial institutions have been using credit guarantee schemes for more than five years. The large majority of banks are interested in expanding the use of guarantees in the future.

The two largest institutions devoted to support SME financing are the *Romanian Rural Credit Guarantee Fund (FGCR)* and the *National Credit Guarantee Fund for SMEs (FNGCIMM)*. The former is a public-private company, chiefly owned by three commercial banks, and focusing on providing lending to farmers in rural areas and processing agricultural products. The latter is a public, state-owned company specialised in managing governmental guarantee programs for entrepreneurs.

²⁴ These replies must be taken with caution, as the survey was performed before the new *de minimis* guarantee scheme reached its highest use.

Additionally, since 2010 there is *Romanian Counter-guarantee Fund (Fondul Roman de Contragarantare S.A. - FRC S.C.)*, a public commercial company specialized in issuing counter-guarantees for products extended by the guarantee funds. A fully private profit-oriented *Romanian Loan Guarantee Fund (FRGC)* is also offering guarantee services on the Romanian market to all businesses in all sectors of their activity.

Several facilities of the *European Investment Fund (EIF)* are available in Romania: *SME Guarantee Facilities (CIP)*, the *JEREMIE - Joint European Resources for Micro to Medium Enterprises (First Loss Portfolio Guarantee and Portfolio Risk Sharing Loan)*, the *Risk Sharing Instrument for Innovation and Research oriented SMEs and Small mid-caps* and *European Progress Microfinance Facility*. JEREMIE guarantee schemes have been used the most.

The Romanian market faces the challenges similar to the ones in the rest of the region. The regulatory treatment of credit guarantees, the bureaucracy in case of defaults, the restrictive conditions to clients are the key reasons mentioned by the banks that limit their use of guarantees. The CGS survey mentions the general lack of credit supply as a constraint (see Table A1.10).

Table A1.10: Key constraints of using credit guarantees in the Romania

Bank survey		CGS survey	
What are the relevant factors that may limit the use and the proper functioning of the overall system of credit guarantees in your country?		Are the following issues an impediment to the operations and development of your guarantee scheme?	
(1-minor, 5- very relevant)		(1-minor, 4-very severe)	
Regulatory treatment	4.18	General lack of credit demand	3
Excessive bureaucracy when guarantees are called	4.09		
Restrictive conditions for clients	3.82		
Guarantees are too expensive	3.82		

Serbia

In Serbia, the framework of credit guarantees is in the process of development. Most banks are interested in exploring the possibility of using credit guarantees in the future.

Table A1.11: Key constraints of using credit guarantees in Serbia

Bank survey	
What are the relevant factors that may limit the use and the proper functioning of the overall system of credit guarantees in your country?	
(1-minor, 5- very relevant)	
Restrictive conditions for clients	3.78
Excessive bureaucracy when guarantees are called	3.75
Cumbersome application processes	3.67
Guarantees are too expensive	3.56
SMEs do not know about guarantees	3.5

A domestic provider of SME credit guarantee services on the Serbian market is the *Development Fund of the Republic of Serbia*, a state-owned entity. In addition to fostering the competitiveness of the domestic

economy, and supporting economic development of the country and the balanced growth of the regions, the Fund also aims at strengthening the Serbian capital markets and stimulating production in the handicraft and service industry in particular.

Three facilities of the *European Investment Fund (EIF)* are available in Serbia: *SME Guarantee Facilities (CIP)*, the *Guarantee Facility under the Western Balkans Enterprise Development and Innovation Facility (WB EDIF) - First Loss Portfolio Guarantee* and the *Risk Sharing Instrument for Innovation and Research oriented SMEs and Small mid-caps*. The use of these facilities has been low so far.

Many factors constrain the use of the credit guarantees in the Republic of Serbia. According to the banks, guarantee conditions are too restrictive for clients, the excessive bureaucracy is also a discouraging factor, and the pricing is often not attractive either. Furthermore, SME clients are often not informed about the possibility of using guarantees (see Table A1.11).

Slovakia

In Slovakia the use of credit guarantees is relatively small: the outstanding stock of guarantees amounted to 0.22 percent of GDP in 2013. 60 percent of banks have started to use credit enhancement schemes in the recent 5 years. According to our bank survey, Slovak financial institutions are moderately interested in further development of credit guarantee schemes.

There are two main credit guarantee providers in Slovakia: the *Slovak Guarantee and Development Bank (Slovenská záručná a rozvojová banka – SZRB)* and the *Slovak Business Agency (ex-National Agency for Development of SMEs)*. The former was created in 1991 as a fully state-owned financial institution, with the *Ministry of Finance of the Slovak Republic* as the only shareholder. It was transformed in 2002 to a joint stock company. It is focusing on the development of Slovak SMEs operating in the fields of infrastructure, environment, renewable energy sources and efficient energy. The latter is a non-profit organisation created in 1993 as a result of a joint initiative of the Slovak Government and EU to increase innovation, competitiveness, employment and long-term survival of Slovakian companies, as well as to stimulate entrepreneurship.

Several facilities of the *European Investment Fund (EIF)* are available in Slovakia: the *SME Guarantee Facilities (CIP)*, the *JEREMIE - Joint European Resources for Micro to Medium Enterprises (First Loss Portfolio Guarantee and Portfolio Risk Sharing Loan)*, the *Risk Sharing Instrument for Innovation and Research oriented SMEs and Small mid-caps* and the *European Progress Microfinance Facility*. JEREMIE schemes have been used the most.

Table A1.12: Key constraints of using credit guarantees in Slovakia

Bank survey

What are the relevant factors that may limit the use and the proper functioning of the overall system of credit guarantees in your country?

(1-minor, 5- very relevant)

Restrictive conditions for clients	3.8
Guarantees are too expensive	3.4
High administrative costs for banks	3.4
Excessive bureaucracy when guarantees are called	3.4
Cumbersome application processes	3.2

According to the banks, clients in Slovakia often face excessively restrictive conditions from guarantee providers. Moreover, the cost of using guarantees and the cumbersome administrative burden associated with the products are also important drawbacks (see Table A1.12).

Slovenia

CGSs have been present already for a long period on the Slovenian market; the banks in our survey reported that they have been using such products for longer than five years. Financial institutions are interested in further developing their use of guarantee instruments. The share of outstanding guarantee portfolio in Slovenia scaled by GDP amounted to 0.53 percent of GDP in 2013.

There are three main local agencies providing guarantee services. The largest of those is the *Slovene Enterprise Fund (SEF)*. This institution is fully publicly owned, and extends credit guarantees to micro, small and medium-sized enterprises along the lines set by the government of the Republic of Slovenia, aligned with the European Commission. It aims at supporting growth, development, innovation, and investment into human capital through issuance of both investment guarantees and micro-guarantees for working capital.

The second entity is *Slovenian Investment and Development Bank*, previously known as *Slovenian Export Corporation* founded in 1992. Its ambition is to become a central public financial institution offering comprehensive services supplementary to the financial market, such as guarantees dedicated for export projects.

The *Network of Slovene Regional Development Agencies (RRA-GIZ)* is an NGO representing various regional development agencies that provide guarantees to local entrepreneurs.

Several facilities of the *European Investment Fund (EIF)* are available in Slovenia: the *SME Guarantee Facilities (CIP)*, the *Risk Sharing Instrument for Innovation and Research oriented SMEs and Small mid-caps* and the *European Progress Microfinance Facility*. The SMEG CIP and EPMF guarantee schemes are the most widely used ones.

Given the structural problems of the banking system in Slovenia, and the high leverage observed in the corporate sector, it is not surprising that banks' low appetite for risk in general features as a key constraint of the further development of credit guarantee activity. Besides that, legal and bureaucratic hindrances are also mentioned in the survey as issues to be resolved (see Table A1.13).

Table A1.13: Key constraints of using credit guarantees in the Slovenia

Bank survey	CGS survey
What are the relevant factors that may limit the use and the proper functioning of the overall system of credit guarantees in your country? (1-minor, 5- very relevant)	Are the following issues an impediment to the operations and development of your guarantee scheme? (1-minor, 4-very severe)
Banks' low risk appetite	5 Risk aversion/ Lack of interest from lending institutions
Low quality of loan applications	3.5
Excessive bureaucracy when guarantees are called	3.5
Lack of legal enforcement of NPLs	3

Annex 2 – Short description of the three surveys

Bank survey

The survey was sent to 13 banking groups operating in 13 countries in CESEE. The questionnaires were forwarded by the headquarters to 74 different subsidiaries. The survey included 3 parts:

- Part A consisted of 19 general questions on credit guarantee activity.
- Part B consisted of 11 questions, asking about views on the individual guarantee providers operating in the specific country.
- Part C asked for numerical data on the bank's activity on the SME lending market and the share of the guarantee-covered part of the portfolio.

Altogether, answers in Part B provided opinions on 36 different domestic and EU-funded credit guarantee programmes. Only aggregate answers may be disclosed for confidentiality reasons.

The CGS survey was coordinated by the EIB, with the active participation of the parent banking groups.

Table A2.1: Bank survey - coverage by country (%)

Slovakia	77.5
Hungary	76.1
Croatia	72.5
Romania	66.8
Albania	62.1
Bulgaria	59.8
Kosovo	57.1
Serbia	49.5
Bosnia and Herzegovina	47.5
Czech Republic	33.2
Macedonia	29.4
Poland	25.7
Slovenia	11.9

Note: the number represents the total assets of banks participating in the survey relative to the total assets of the banking system in the given country

CGS survey

A survey was addressed to CGSs operating in 14.²⁵ selected countries of the CESEE region. With a total of 19 respondents, the survey covers 76 percent of credit guarantee schemes in these countries.

²⁵ Montenegro and Serbia did not respond to the CGS survey.

The questionnaire (64 questions) was divided into the following 10 sections:

- General information
- Guarantee products and services
- Appraisal
- Coverage
- Pricing
- Claims
- Operational and Financial Performance
- Risk management
- Constraints
- Supervision and Regulation

A caveat is necessary for the sections related to Operational and Financial performance. While all schemes responded to at least one question, several schemes provided limited information which does not provide for comparability of answers across countries and over time. Only aggregate answers may be disclosed for confidentiality reasons.

The CGS survey was coordinated by the World Bank, with support from AECM.

Table A2.2: CGS survey - coverage by country

Bosnia and Herzegovina	1
Bulgaria	1
Croatia	2
Czech Republic	1
Estonia	1
Hungary	3
Latvia	1
Lithuania	1
Macedonia	1
Poland	1
Romania	5
Slovenia	1

Note: the number represents the number of national CGSs participating in the survey

Regulatory survey

Opinions of CESEE supervisors about the CGS were collected in a survey addressed to the authorities of eighteen countries from the region. The response rate was quite high, as 14 supervisory authorities (thirteen of them being as well regulatory authorities) responded to the questionnaire, however a substantial number of empty answers requires some reservation in interpretation of the results. Moreover, some of the answers seemed not to be consistent. Nevertheless, the results allow for making preliminary conclusions on the regulatory treatment of CGS. As the scale of usage of CGS across the region is very diversified, the opinions of the supervisors where the usage is low might be more based on presumptions than actual experience with the CGSs.

The regulatory survey was coordinated by the National Bank of Poland and the EIB.

Annex 3 – The measurement of economic additionality for the MAP SMEG facility

One of the objectives set forth by the Vienna Initiative 2 Working Group on Credit Guarantee Schemes is improving the knowledge and understanding of CGSS' contribution to SMEs' access to finance in CESEE countries, and thus better designing and calibrating future financial instruments of this type. This task is considered of high value in a recent study by the OECD (2013a), which states that “*there is a need for more in-depth evaluation [of CGSS performance, ed.], particularly on their financial sustainability and on their financial and economic additionality*”.

SME Guarantee (SMEG) Facilities originated in Council Decision 98/347/EC on measures of financial assistance for innovative and job-creating SMEs — Growth and Employment (G&E), and were continued as part of the subsequent Multi-Annual Programme for Enterprise and Entrepreneurship (MAP), established in 2001. The SMEG Facility remains an important financial instrument also under the Competitiveness and Innovation Framework Programme (CIP), established in 2007 under the Entrepreneurship and Innovation Programme (EIP).²⁶

The European Commission (DG ECFIN) and EIF have reviewed the data available under the three generations of SME guarantee facilities – SMEG 1998 (G&E), SMEG 2001 (MAP) and SMEG 2007 (CIP) – given the experience that both share in managing them, and have identified that the analysis of data on the MAP SMEG facility in CESEE countries is the most suitable for the purpose of impact evaluation.

The main findings of this exercise are summarised here.²⁷

Measuring the additionality of CGSS

In the context of the impact assessment of public intervention programmes, the *additionality* principle is crucial in determining the success of a specific policy. Additionality measures the *net* result of a given policy, taking into account the extent to which activities promoted by the programme would have otherwise *not* taken place or only partially taken place. Various concepts of additionality can be defined (Leone and Vento, 2012):

- *Financial additionality*, measuring the direct effect on the relationship between the bank and the firm. Financial additionality occurs if SMEs face more favourable conditions (*e.g.* increased loan sizes and/or extension of loan maturities, reduced collateral requirements) following the introduction of the programme.
- *Economic additionality*, measuring the impact on the overall economic environment due to the increased access to financing for SMEs. Economic additionality occurs if SMEs benefitting from a

²⁶ The two successor programmes of CIP for the 2014-2020 Financial Framework are the COSME Guarantee Facility (expected to support between 220,000 and 330,000 SMEs, with lending volumes of up to EUR 22 billion and an expected leverage of 20 to 30), and the H2020/InnovFin Guarantee Facility (expected to support EUR 9 billion loans to SMEs and Small MidCaps with an expected leverage, in terms of final investment, equal to 10).

²⁷ The methodological and technical details are developed in a forthcoming joint working paper by EIF and the European Commission (DG ECFIN).

guaranteed loan face an increase in their economic performance that *would have fully or partially not happened otherwise*. The economic additionality is the *indirect* effect of the policy, and is measured in terms of *e.g.* increased employment and/or wages for workers, increased profits for the company owner, and increased tax revenue for the Government.

- *Financial sustainability* is limited to assessing whether the CGS adheres to the principle of sound management while achieving its primary objectives set forth in the former two analyses.

This study focused exclusively on the *economic additionality* of the MAP SMEG Facility in CESEE countries, as made possible by the *granularity* of information contained in the SMEG Facility Database at the level of the final beneficiary.

Data collection

The database of SMEG Facilities is provided by EIF. The database contains information both at the level of the financial intermediary and of the single final beneficiary transaction. Some 845,000 single guaranteed transactions are covered under SMEG 1998 (G&E), SMEG 2001 (MAP) and SMEG 2007 (CIP). Although the programmes are ongoing, we can describe their main features as of 30th September 2014:

- The SMEG 1998 Facility (G&E) supported 159,240 loans with an outstanding volume of EUR 17,620 million, benefiting 136,860 SMEs and an estimated 593,400 employees. These results have been achieved through 22 agreements with 20 intermediaries based in 12 different EU countries. The SMEG 1998 Facility has reached the end of its cycle and the closure of all accounts is foreseen by the end of 2014.
- The SMEG 2001 Facility (MAP) supported 266,501 loans with an outstanding volume of EUR 28,162 million, benefiting 234,413 SMEs and an estimated 940,800 employees. These results have been achieved through 51 agreements with 47 intermediaries based in 28 different countries. Compared to SMEG 1998 (G&E), three new sub-windows were added to the Facility under MAP in order to expand the range of available guarantee instruments: micro-loans, equity investments and loans to cover IT equipment, software and training in the area of internet and e-commerce.
- The SMEG 2007 Facility (CIP) supported 417,749 loans with an outstanding volume of EUR 25,054 million, benefiting 346,783 SMEs and an estimated 1,225,600 employees. These results have been achieved through 70 agreements with 54 intermediaries based in 24 different EU countries. Compared to SMEG 2001 (MAP), a new securitisation window was added to the Facility under CIP, in order to support the launch of new products (*e.g.* loans amenable to securitisation) enabling banks to provide further SME financing. Moreover, mezzanine financing and working capital provision became eligible under SMEG 2007.

Data at the level of the financial intermediary provides information for each different window, where applicable (loan, micro-credit, quasi-equity and securitisation):

- Details of agreements: guarantee rate, guarantee cap, etc.
- Details of portfolio: number of SMEs, loans, amounts, etc.
- Portfolio relevant volumes: Maximum Portfolio Volume (MPV), Reference Loan Volume (RLV), etc.

Data at the level of the single final beneficiary transaction provides:

- Personal record of final beneficiaries on new transactions

- Financial data concerning loans (amount, purpose, conditions)
- Loan/lease repayments
- Characteristics of guarantee calls (amounts, date of occurrence)
- Characteristics of expired and cancelled transactions

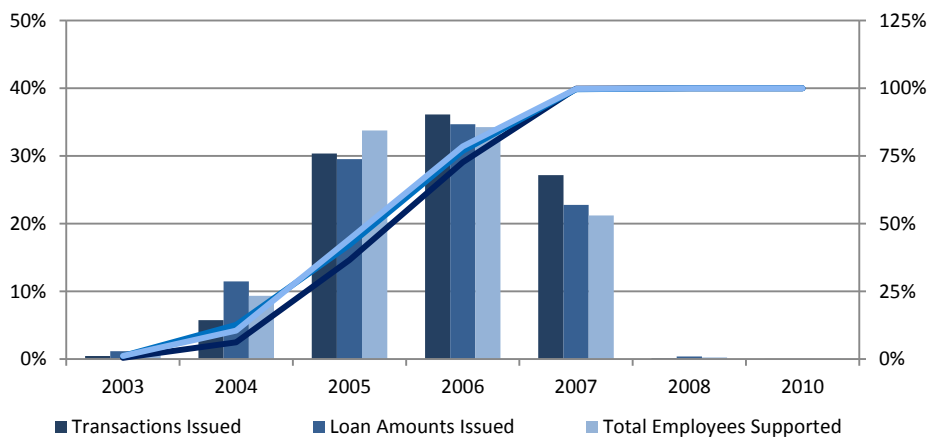
The SMEG database subset forming the MAP dataset contains information on 16,051 loans, managed by national financial institutions, and 14,400 individual beneficiary firms operating in CESEE.²⁸ Only transactions in the “loan window” (*i.e.* including only direct or indirect guarantees on loans to SMEs) have been considered.

Characteristics of the MAP SMEG Facility in CESEE

A first descriptive analysis was performed with the purpose of highlighting the main characteristics of the MAP SMEG Facility (henceforth “MAP Facility” or simply “MAP”). While the MAP started towards the end of 2001, the first loan issued under the programme in the CESEE region was disbursed in Bulgaria in September 2003. Figure A3.1 illustrates the overall deployment of the programme (2003-2010).

The data shows that the MAP deployment – in terms of either transactions, or loan amount or number of employees at issuance date – took up in 2003 and was mostly centred in the years 2005–2007, which represent approximately 94 percent of all transactions issued. Since these years are also the richest in terms of data availability, our impact evaluation will focus on this period.

Figure A3.1: Deployment of the MAP SMEG Facility in CESEE



Note: Lines represent the cumulative distribution (right-hand scale). Source: EIF, European Commission

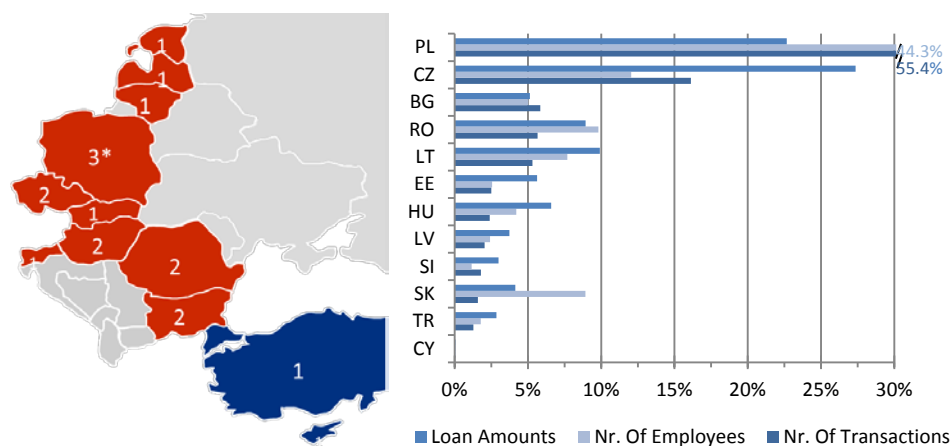
CESEE financial intermediaries applying for the MAP were 20 in total.²⁹ The country breakdown can be seen in Figure A3.2. The distribution of transactions – whether in terms of amounts of loans issued, number of employees supported or a simple count of transactions – is concentrated in four countries (BG, CZ, PL, RO), which alone make up two thirds of all the loans issued under MAP in the region.

²⁸ Firms are identified through their company name and an internal ID code collected by the EIF. As such, the actual number of enterprises may be lower due to multiple IDs associated to the same enterprise.

²⁹ A Polish intermediary merged with another financial entity, which then took over the existing portfolio and created a new one.

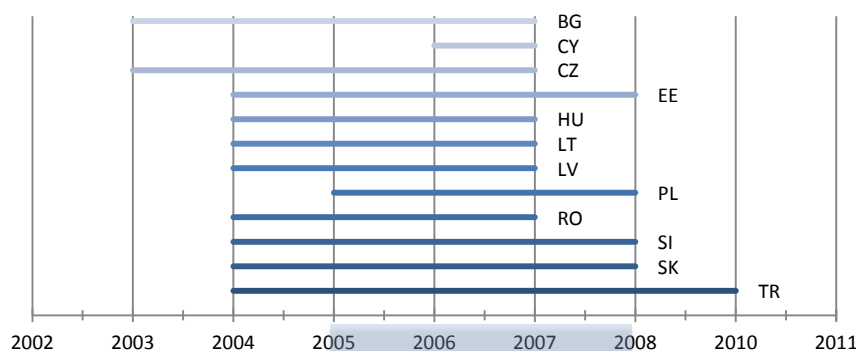
The time frame in which the different countries started providing loans under MAP (see Figure A3.3) shows that within the period of focus (2005-2007) all countries are fully represented.

Figure A3.2: Country coverage of the MAP SMEG Facility in the CESEE region



Note: Turkey and Cyprus (depicted in blue) had to be excluded from the impact assessment analysis as their final beneficiaries lacked a sufficient level of usable data. Source: EIF (2014), European Commission (2014)

Figure A3.3 Time frames of MAP loans issued per country



Note: The shaded area shows the time frame of the impact assessment. Source: EIF (2014), European Commission (2014)

The MAP SMEG Database: a purpose analysis

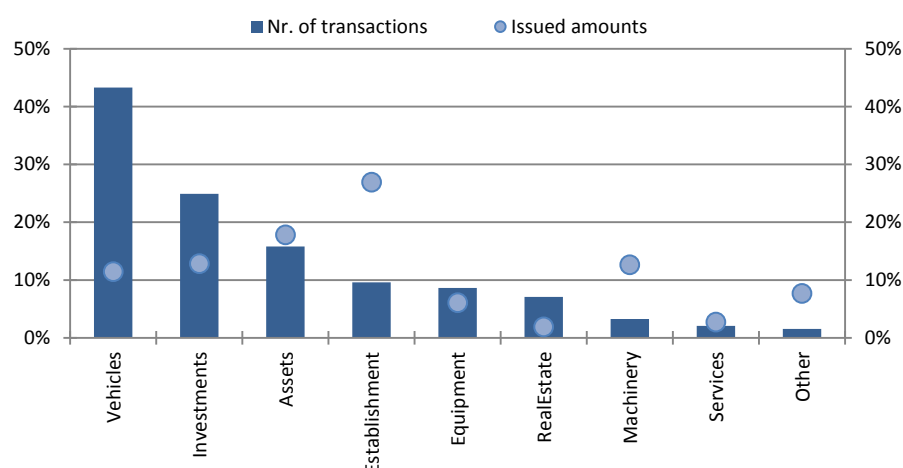
As a preliminary step, a thorough reclassification of the MAP database field "purpose" (containing more than 3,000 different justifications for a loan request) into 9 broad categories.³⁰ was performed, by means of a keyword-based semantic query. Then, analyses have been carried out both by purpose category (distribution

³⁰ More than 450 unique keywords have been employed to identify the following categories: *Assets* (acquisition of assets and/or capital); *Equipment* (purchase of equipments, e.g. IT equipment); *Establishments* (acquisition or construction of establishments); *Investments* (investments in the upgrading, modernisation, etc. of existing assets); *Machinery* (purchase of machines, e.g. excavator); *Real estate* (acquisition of land); *Services* (purchase of services, e.g. electricity); *Vehicles* (purchase of vehicles, e.g. trucks). A final category, *Other*, groups all remaining purposes.

by country, internal composition, loan-investment correlation) and by country (distribution by purpose category, loan-investment correlation for each category).³¹

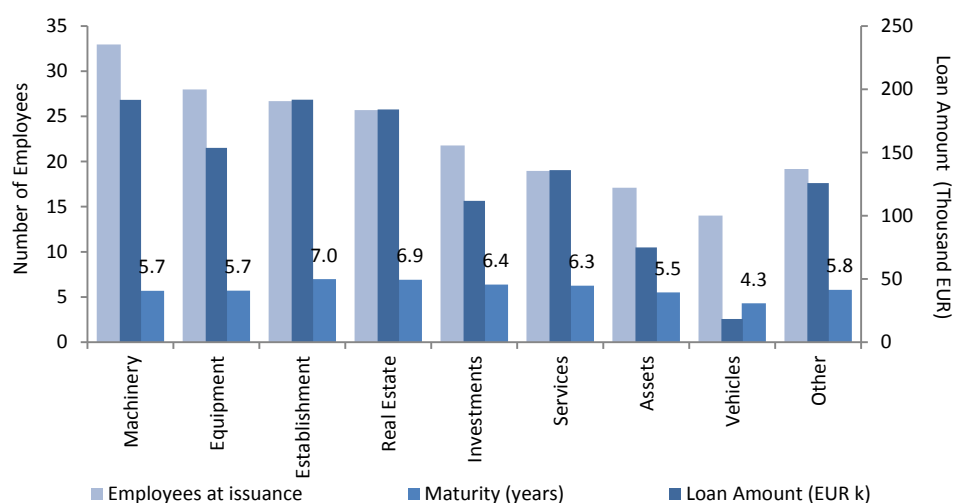
The relative composition of the overall investment expenditure can by itself be informative, as shown in Figure A3.4. The high share of vehicles – 43 percent comes from Polish firms’ purchases. In several countries, the large number of keywords identifying a similar investment or establishment purpose testifies to improper and/or heterogeneous descriptions of the financing purpose. A more standardized and accurate categorisation of the purpose of the loan (equipment, machinery, vehicles, real estate etc.) might be relevant for monitoring purposes and to facilitate statistical analyses.

Figure A3.4: Distribution of loan purposes



Note: relative frequencies do not add up to 1 as approximately 13 percent of all transactions’ purposes have been associated to more than one category.

Figure A3.5: Average values per transaction by purpose of financing



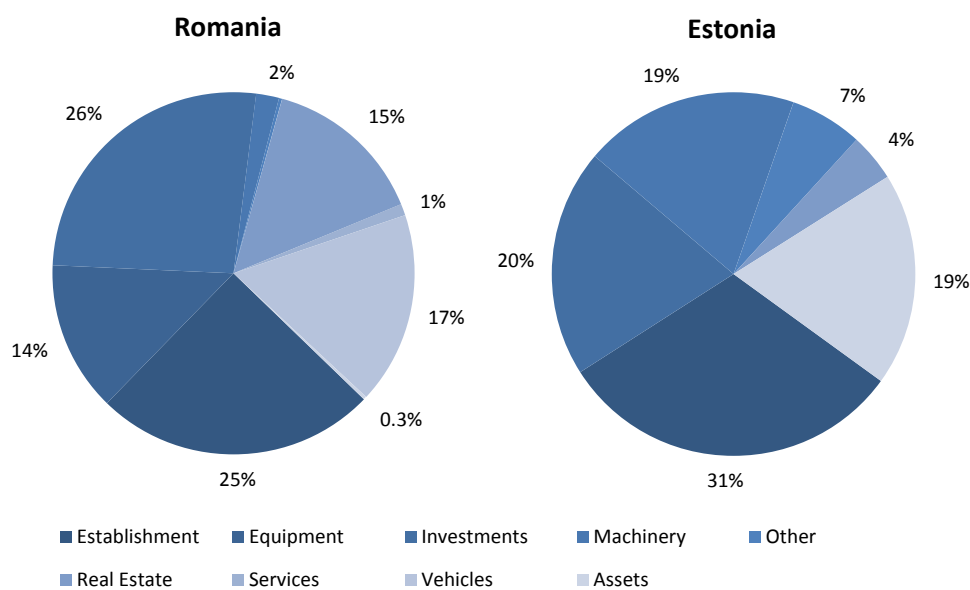
Source: EIF (2014), European Commission (2014)

³¹ Expenditures on working capital were not eligible for the MAP guarantee.

The distribution of purposes within countries brings out each country's specific investment needs, suggesting that requiring from financial intermediaries a minimum fixed percentage of transactions within each category may actually hinder the attainment of greater economic additionality. Moreover, such breakdown further contributes to highlighting the characteristics of MAP transactions (Figure A3.5).

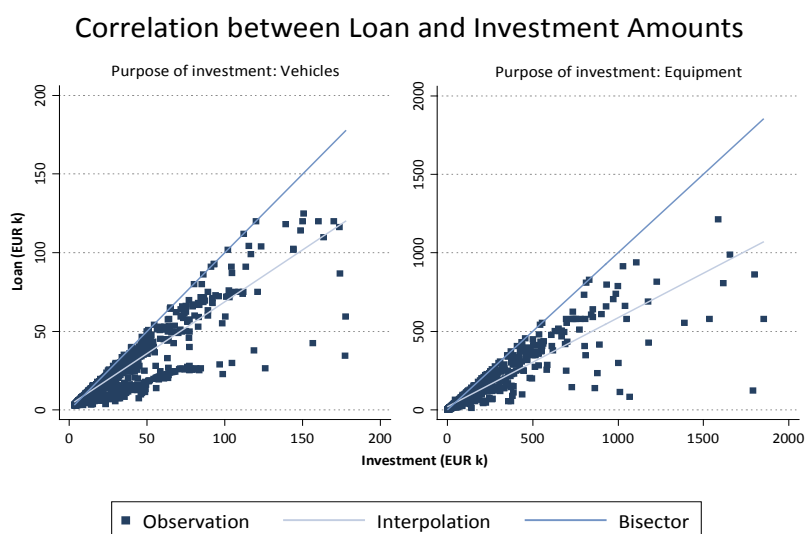
Overall, similar patterns emerge across countries. For instance, in 5 out of 12 countries the typical purpose of financing is represented by *investments*, i.e. the renewal, maintenance and/or reparation of firm's owned assets. 4 out of 12 countries instead report the purchase of an *establishment* as the typical reason for a loan request. However, different specific "mixes" of financing purposes are still likely to arise among countries, as it is in the case of Romania and Estonia (Figure A3.6).

Figure A3.6: Different "mixes" of financing purposes



Source: EIF (2014), European Commission (2014)

Figure A3.7: Percentage of investments financed by a MAP loan



Source: EIF (2014), European Commission (2014)

Correlation charts between the investment expenditure, and the loan amount show the percentage of the investment financed by a MAP loan (Figure A3.7), separately for the purchase of *vehicles* (left panel) and *equipment* (right panel). The yellow line is a 45° line indicating a 100% financing by the financial intermediary, whereas the grey line represents the average coverage over all levels of investment.

Figure A3.7 shows that *vehicles* tend to be financed by a greater percentage than *equipment*. This finding indicates that the heterogeneities discussed earlier (e.g., loan amounts across countries) might be explained by differences in investment purposes.

The figure may also have a normative bearing, as it suggests that within certain categories, financial intermediaries or countries might be offered a larger support and/or preferential conditions, while the others might be incentivised to increase, when risk considerations permit, the intensity of their financing schemes.

Key characteristics of the MAP Facility have been “dissected” with respect to the distribution of transactions among countries, signature dates, and purposes of financing, both from a static and a dynamic perspective. Altogether, this analysis has provided an all-encompassing picture of the way the MAP Facility has operated in the CESEE region.

The MAP database cannot be used for a full-fledged impact assessment, as it does not contain data on the economic performance of MAP beneficiaries after obtaining the guaranteed loan. In this respect, the following section combines information on MAP transactions with firm-level data on balance sheets and profit and loss accounts to significantly enhance the analysis.

Designing the impact assessment of the MAP SMEG Facility

In order to estimate the economic additionality of the MAP Facility, it is necessary to compare the beneficiaries' performance before and after the issuance of the loan. For this reason, longitudinal data at final beneficiary level and EIF data on MAP beneficiaries were merged with data on their balance sheets and profit/loss accounts, obtained from Bureau Van Dijk's Orbis database. The resulting set of MAP beneficiaries is the *treatment group*.

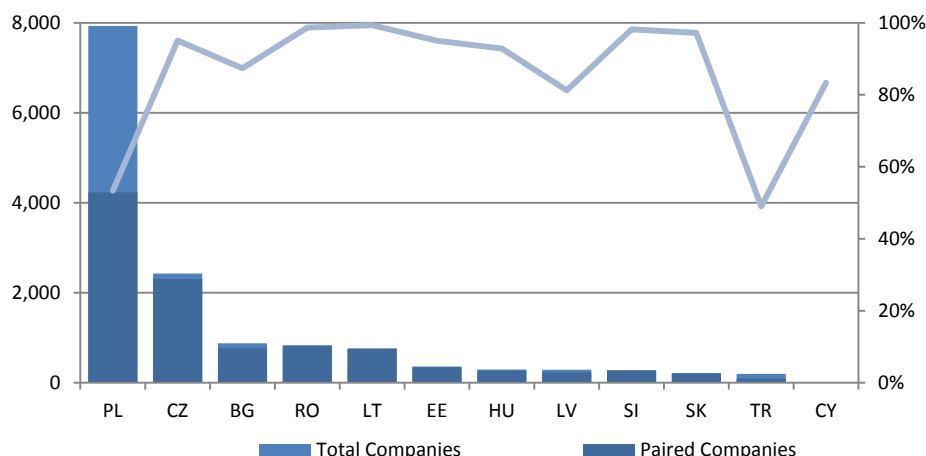
The "merging exercise" of MAP SMEG beneficiaries in CESEE countries was concluded with coverage of 71.3 percent of the overall database. An analysis of the merged subset shows that SMEs left unmatched tend to be smaller in size than the average (both in terms of number of employees and amount of loan received), and that the majority of unmatched enterprises are located in Poland (see Figure A3.8). This creates some differences between the characteristics observable in the merged subset with respect to the overall MAP beneficiaries, further amplified by the removal of missing values and the thorough cleaning of the dataset..³²

In order to address this bias, the analysis exploited the characteristics available in the MAP database to recalibrate the available information on final beneficiaries (Figure A3.9)..³³ The underlying assumption of this exercise is that, by controlling for three key characteristics (country, number of employees and loan amount), the recalibration may lead to the removal of distributional differences in terms of unobservable characteristics.

³² Two countries in particular (TR, CY) had to be excluded from the impact assessment analysis because of a lack of usable data.

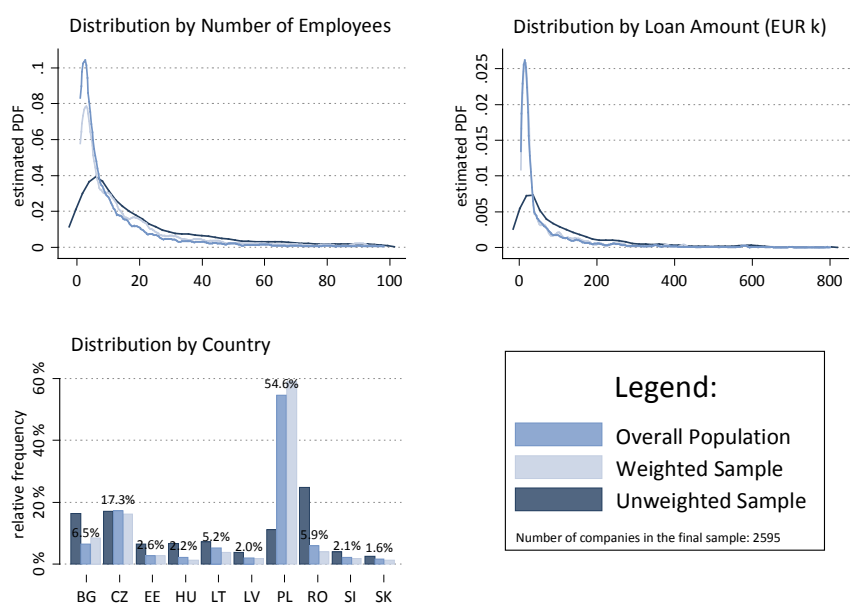
³³ A thorough description of the recalibration process and methodology will be included in a forthcoming joint Working Paper by EIF and the European Commission (DG ECFIN).

Figure A3.8: Merging performance by country



Source: EIF (2014), European Commission (2014)

Figure A3.9: Distributions of treatment sample after reweighting

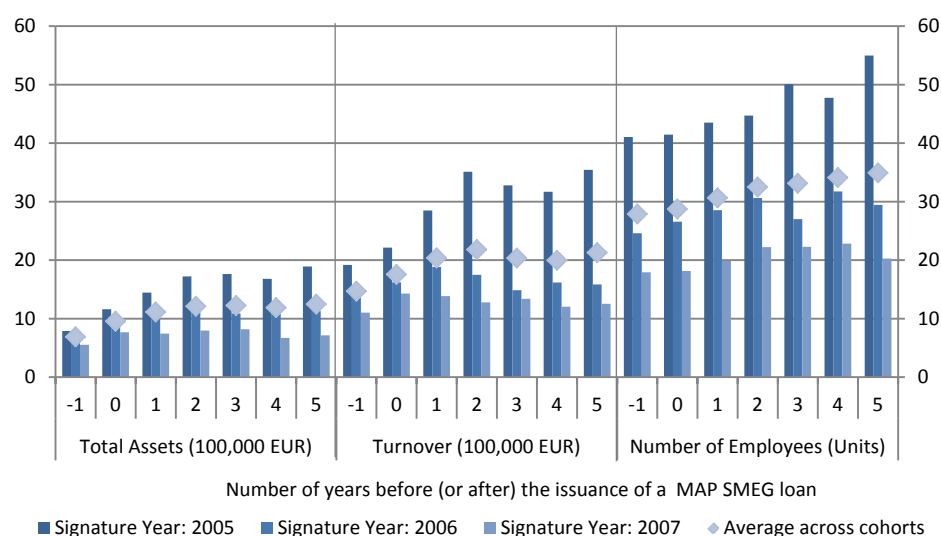


Source: EIF (2014), European Commission (2014)

Standard measures of firm performance – total assets, turnover, number of employees – exhibited, on average, an increasing trend after the signature of the loan (Figure A3.10), although the advent of the economic crisis (noticeable in the 3rd and 4th year after the issuance of the loan) significantly hampered the observed growth trends.

However, the descriptive analysis cannot lead to the conclusion that the MAP SMEG guarantee brought positive effects to its beneficiaries. For this, a comparison of the performance of the MAP beneficiary firms with similar enterprises which did not benefit from the MAP loan would be needed. In order to do so, we rely on the *potential outcome framework*, first introduced by Rubin (1974).

Figure A3.10: Average performance of MAP loans beneficiaries before and after obtaining the loan



Note: Amounts in EUR have been adjusted for inflation (Eurostat HICP, baseline year: 2005). Source: EIF (2014), European Commission (2014)

Drawing from state-of-the-art econometric techniques, the methodology adopted for the impact evaluation analysis consists in the random extraction of a control group of firms, which are then matched to the closest firm in the treatment group in terms of observable characteristics (*e.g.* turnover, assets, profitability, sector, *etc.*). In order to improve the success rate of this *matching* process, a three-step procedure is adopted: 1) control firms are first identified within a specified *cluster* of characteristics (country, age and firm size), 2) firms are subsequently extracted randomly from such clusters, and 3) the final control group is then selected on the basis of a Propensity Score Matching (PSM) technique.³⁴

As the PSM is able to control only for firms' characteristics that are observable (both in a static and a dynamic perspective), the estimation of the economic additionality of the MAP Facility follows Blundell and Costa Dias (2000) in associating PSM with a *difference-in-difference* (DID) estimation, which can remove potential bias caused by static *unobservable* characteristics (*e.g.* management or organisational practices). The DID framework can thus be used to estimate the "pure" (average) treatment effect of a MAP guarantee.

Impact assessment - results

Before showing the final results of this exercise, it is important to correctly frame the interpretation of the findings. In this study, we have selected counterfactuals based on observable financial characteristics, as well as sectorial and geographical attributes. The aim was to create two groups of firms that, before obtaining a MAP-guaranteed loan, shared very similar characteristics, and then analyse potential differences in the paths that they followed thereafter.

However, it was not possible to check whether control firms received *any other form* of public support during the analysed period (*e.g.* credit guarantees or subsidies provided by national CGSs). As such, the effect of the MAP Facility needs to be interpreted in its strictest form, *i.e.* MAP-guaranteed loans versus any possible

³⁴ A more detailed description of the methodology will be included in a forthcoming joint Working Paper by EIF and the European Commission (DG ECFIN).

alternative scenario (*e.g.* loans guaranteed by national CGS, loans not guaranteed, loans refused or partially granted, *etc.*), except the MAP guarantee itself.

The study found the followings:

- Overall the MAP Facility in the CESEE region had, on average, a significant positive effect on firms' employment, as measured by the number of employees. Compared to their associated control firms, MAP beneficiaries were able to increase (or preserve) their workforce up to 15 percent, during the 5 years after the issuance of the guaranteed loan. However, the results vary considerably across countries and signature years, and in particular guaranteed loans signed in 2007 do not show any significant positive (or negative) effect, a hint to the fact that the advent of the economic crisis might have inhibited the mechanism channelling such outcome.
- A smaller, but still significant increase can be shown for the total factor productivity of the recipient companies. Following Levinsohn and Petrin (2003), this study also estimated the total factor productivity (TFP) of MAP beneficiaries and their control firms, which is a measure commonly used in the literature to define the degree to which firms are improving or worsening the efficiency of their production process. By using the estimated TFP as the dependent variable in the DID framework, the study finds that MAP beneficiaries experience, on average, a 5 percent boost in TFP in the first two years after issuance, compared to their control group. Also in this case, differences arise across cohorts and countries. Guaranteed loans signed in 2005 generated the highest returns in terms of TFP, while transactions issued in 2007 show no significant difference with respect to the control group. Loans issued within the "establishments" category show a more immediate effect (affecting firm performance up to the 4th year), whereas loans issued for "investments" only show a strong positive effect in the medium term (4th and 5th year after loan issuance).
- No significant difference arises between MAP beneficiaries and the control group with respect to the direct measurements of financial performance of MAP beneficiaries. However, we noted a positive medium-term impact on firms' return on assets (ROA), driven by transactions issued within the categories "establishment" and "investments".

The comparison of MAP beneficiaries to their natural control group indicates no remarkable underperformance in terms of the most widely used financial indicators. The MAP facility appears to have brought significant positive effects, generating in most cases an increase in the net employment of beneficiary firms. Moreover, the programme also had a positive impact on the short-term productivity of final beneficiaries.

Besides these positive results for final beneficiaries, another main achievement of this exercise can arguably be the illustration that even databases built for administrative purposes, if used correctly properly adapted, can provide very useful insights on the performance of CGSs (and presumably of other financial instruments). Therefore, it is strongly advocated to build on the achievements and challenges of this exercise in order to feed into the data collection process for future programmes supported by CGSs.

Annex 4 – List of the working group participants

HUMBERT, Jörg VON KEMPIS, Benedikt	Erste Group
MERTIN, Iwona	EuroChambres
FIGUEIREDO José Fernando HAAG, Friederike JEHIN Bernard	European Association of Mutual Guarantee Societies (AECM)
KASTERLIEVA, Anelia SAAL, Matthew SAVELIEV, Alexander	European Bank for Reconstruction and Development (EBRD)
CERNOV, Marina	European Banking Authority (EBA)
ASDRUBALI, Pierfederico HAVENITH, Roger	European Commission
ALLEN, Mark BERNDT, Markus GEREBEN, Áron LAZZAROLI, Luca MASSE, Jean-Marie MUNINI, Paolo REVOLTELLA, Debora	European Investment Bank (EIB)
BATTAZZI, Francesco BOTTANI, Stefano COTTOGNI, Hubert GALIZIA, Federico KRAEMER-EIS, Helmut SIGNORE, Simone TAPPI, Alessandro	European Investment Fund (EIF)
BARKBU, Bergljot KIM, Daehaeng	International Monetary Fund (IMF)
BANCHINI, Massimiliano PIAI, Cristina	Intesa Sanpaolo Group
VAN ROOSBROECK, Wim VELITCHKOV, Kiril	KBC Group
BRZOZOWSKI, Maciej GASIOROWSKI, Pawel STOPCZYŃSKI, Andrzej	National Bank of Poland (NBP)
ALUPOAIEI, Alexie MUNTEAN, Radu	National Bank of Romania (BNRO)
ROBANO, Virginia KORENEV, Dimitri ROUSSEL, Martin TSONEVA, Daniela	Organisation for Economic Co-operation and Development (OECD)
CAPPON, Andre	The CBM Group
FERRAZZI, Matteo GIORGIO-MARRANO, Mauro	Unicredit Group
FERRARI, Aurora NDIAYE, Aminata SKAMNELOS, Ilias	World Bank