



AECM Study Project

“The importance of Financial Intermediaries in SME financing and assessment of different economic effects especially of EU Financial Instruments in light of Direct Guarantees vs. Counter-guarantee contracts”

January 2017

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Executive Summary

The European Association of Guarantee Institutions (AECM) represents the political interest of Guarantee Institutions both towards European Institutions and other multilateral bodies. The core business of its 41 members is to provide and enhance Small and Medium-sized Enterprises (SMEs) access to financing, hence contributing to economic growth.

AECM has the crucial role of supporting its members in the understanding of policy and regulatory developments in the area, anticipating market trends, analysing the interdependences between them in a sound and clear manner, and eventually providing recommendations on how to tackle the compound effects of the two.

The market of guarantees for SMEs is now populated by more players and more instruments as compared to the past

In this respect, one of the most striking changes occurred in the last few decades has been the greater availability of European Funds to promote firms' access to credit. Indeed, the European Investment Bank Group - composed of the European Investment Bank (EIB) and the European Investment Fund (EIF) - reacted rapidly to the financial crisis with an anti-cyclical response (i.e. via securitisation, guarantees, risk-sharing loans and investments in venture and growth capital funds) in banking and capital markets, including those for SMEs. More recently, a clear tendency has been witnessed in making EU financing instruments available directly to commercial banks. This means that, on one hand, EU policies have been ensuring constant public support to SMEs, confirming the importance of guarantees as public goods. On the other hand, more players have been actively participating to the SMEs financing market, generating some confusion among the market players themselves. This confusion can be attributed to a perceived increase in competition within the guarantee market, as well as to the tendency to consider "guarantee sponsors" as market players rather than facilitators. In turn, this calls into question the ultimate rationale for the activities of Guarantee Institutions, that is to say, enhancing SMEs access to credit as public good.

More in detail, the EU (especially through the EIF - European Investment Fund) can now issue guarantee contracts directly to commercial banks (the so-called "Direct Guarantee"); or, alternatively, can issue guarantee contracts with a Guarantee Institution (the so-called "Counter-guarantee"). It follows that the market of guarantees for SMEs is now populated by more players and more instruments as compared to the past, and Guarantee Institutions have started to feel the impact of these changes.

In its representation role, AECM has therefore decided to undertake **this Study, whose aim is two-fold:**

- to provide **evidence on the impact** that Direct Guarantees are having (or will be likely to have in the near future) on the activity of Guarantee Institutions, the market, and, ultimately, on SMEs and the economic environment;
- to provide AECM members, and ultimately all other relevant stakeholders (including EU Institutions), with **policy recommendations** on how to face the challenges of the guarantee market.

SMEs access to credit: the key instrument to boost economic growth in Europe

The importance of ensuring SMEs access to credit is widely recognised as the key instrument to boost economic growth, especially in Europe, where SMEs represent the majority of businesses.

In Europe, the incidence of the guarantee stock on real GDP was equal to about 0.6% in 2014, with peaks in Portugal and Italy (1.8% and 1.2% respectively). According to the "impact" analysis presented in this Study, the combined effects of public and private guarantees on the "wider economy" are even greater, considering that, ultimately, guarantees enable to generate more private investments in physical infrastructures, human capital and innovation. In fact, we

estimated that the impact that an increase in investments generated by an increase in guarantees, calculated in line with historical market trends, might have on a country's GDP ranges between 0.18% to 0.43% of a country's GDP, which goes from 1.3 €/bn to 1.8 €/bn for the analysed Countries (it must be noted that the absolute value could vary depending on the different size of the Country's economy). It also generates an impact on the labour market, by reducing the number of unemployed people.

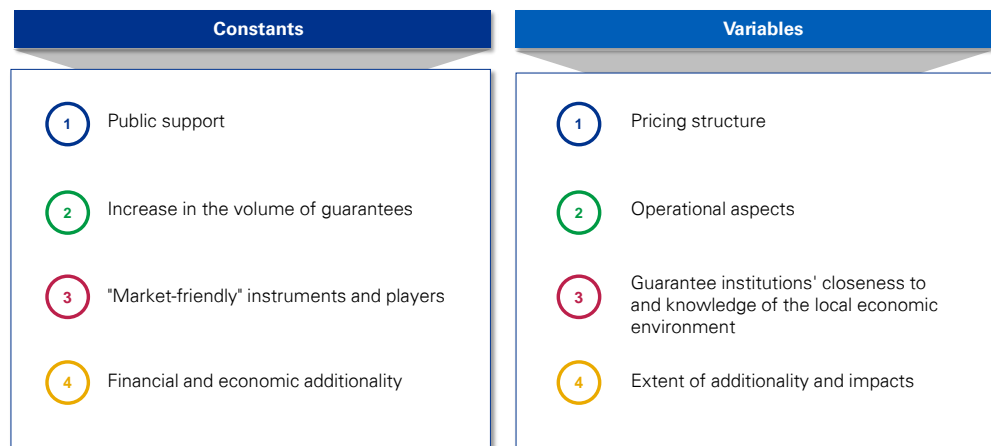
Access to credit is a "public good" and the guarantee system is supported by public authorities

In all major economies a guarantee system is in place. **Everywhere access to credit is a "public good" and the guarantee system is supported in different forms (directly and indirectly) by public authorities.** The financial crisis has contributed to widening the financing gap, thus generating a market failure, where the supply of credit (particularly for SMEs and entrepreneurs) has not been able to meet an increasing demand. Traditional financing channels, such as commercial banks, dealing with the effects of the crisis and its aftermath, have struggled to meet this demand, and money available for business loans is more limited than it appeared to be in the past. This tendency implies that the "shortlist" of businesses being able to obtain credit from banks is limited. Hence comes the role played by public interventions, which can boost and empower significantly the role that intermediaries, *in primis* Guarantee Institutions, play in correcting the market failure and filling the gap.

Guarantee schemes around the world are diverse, but a few "constants" and "variables"

The guarantee schemes adopted around the world are diverse, in terms of three distinguishing factors: the nature of the funding, the legal and regulatory framework underlying them, and their operational characteristics. However, models which are the reflection of simplicity and of synergy with the pursued economic policy appear to be the most successful ones. Indeed, the "success" of guarantee schemes needs to be interpreted mainly as the ability of the market players to create synergies with both public and private financing instruments, with the final aim of improving SMEs access to finance. By analysing the different Guarantee models adopted across Europe, **a few "constants" and "variables" can be isolated**, where constants represent common factors to most guarantee models, while variables are distinctive characteristics which define the peculiarities of different guarantee schemes and systems.

Figure 1: "Constants" and "variables" in guarantee schemes.



Source: KPMG elaboration.

Within the constants, widespread and constant public support (both at national and supranational level), an increase in the overall volume of guarantees thanks to the availability of Direct Guarantees, market-friendly mechanisms to distribute public funding and the generation of both financial additionality and economic additionality seem to characterise most of the guarantee models. By contrast, the "variables" are concerned with operational aspects, among which, the extent of economic and

The correlation between guarantee schemes and value creation, goes through financial and economic additionality

financial additionality generated, the pricing structure, and Guarantee Institutions' closeness and knowledge to the local economic environment. These are all aspects that can play a crucial role in affecting the guarantee market and potentially lead to market distortions. The operational aspects are mostly related to "go-to-market" strategies including the "distribution model", the players involved in the guarantee value chain, as well as regulatory constraints, legal forms and sources of funding for any entities issuing guarantees. The pricing structure is concerned with the different types and amount of fees requested by guarantors and the proportion of the loan they are able to guarantee. Finally, the extent to which Guarantee Institutions are embedded within the local economic environment is mainly related to their network activities (e.g. lobbying, training), their operational catchment (e.g. national, regional, municipal), as well as geographical and sectoral coverage.

To evaluate the correlation between the activity of guarantee schemes and the economic value generated, it is necessary to look at the so-called "**financial additionality**", according to which guarantee schemes are essential tools to allow credit access to SMEs which otherwise would not meet the requirements for obtaining loans from the banking system, thus creating positive effects on the economy as a whole, including well-being and other socio-economic aspects ("**economic additionality**").

Ultimately, the added value of a system devoted to improving SMEs access to credit relies on the ability of its players to generate both financial additionality and economic additionality.

Guarantee schemes facilitate access to credit for businesses which would otherwise be unable to obtain it, transforming the role of Guarantee Institutions from "risk mitigators", which reduce banking system's information asymmetries, to "risk underwriters". This change has been particularly evident in the aftermath of the financial crisis, which has emphasised the importance of guarantee schemes as ways to improve access to credit and offer credit leverage (or financial additionality).

However, **as compared to the immediate aftermath of the financial crisis** when Guarantee Institutions used to be almost the sole credit access tool for most SMEs, more recently, two major trends started to have an impact on their activities.

First, the **increasing role that EU Institutions play in providing Financial Institutions with public money** available for granting credit to SMEs, meaning more public funds are available to improve SMEs financing.

Second, a **greater openness of EU Institutions towards the signature of guarantee contracts directly in favour of more traditional financing channels**, such as commercial banks.

The compound effect of these two changes appear **to generate unintended consequences on the guarantee market, and, ultimately, on the activity of Guarantee Institutions**. The key point relies in fact on how public money are channelled to the final recipients, SMEs, and on clearly identifying the key players within the market by distinguishing them from the tools and instruments which are the "sponsors" providing the means for SMEs financing.

It is important to look at the added value of Guarantee Institutions

To do so, one has to first analyse the added value that Guarantee Institutions bring about and why they are believed to be the most suited institutions to provide SMEs with financing. Second, the potential distortionary effects that an increase in the number of Direct Guarantees might generate needs to be looked at, and understand the value chain that different players generate within the market. Starting with the added value generated by Guarantee Institutions to SMEs, it is necessary to point out that Guarantee Institutions have deep knowledge of the local market and are able to thoroughly assess SMEs needs for financing and their "ability" to re-pay the loan, and, in some cases, to support them through advisory services that increase

Guarantee Institutions deeply know the local market and are able to assess SMEs needs for financing

their “transparency” towards the banks. Informational asymmetries between lenders (e.g. banks, Guarantee Institutions) and SMEs borrowers has been exacerbated by the financial crisis. Micro and SMEs in many cases are not “financially-savvy” enough to convince banks they are able to repay the loan obtained or to fulfil the minimum requirements. Because of that, on one hand, banks tend not to finance SMEs who would really be in need of financing, either for survival or for making investments and grow their business. These SMEs will also tend to be those classified as “high-risk borrowers”. Additionally, banks see their relationship with Guarantee Institutions as key; indeed, in most cases, the banking system has the right incentives to recognise the role of Guarantee Institutions and create synergies with them; and not only because of their role as guarantors, but also because, thanks to their relationships and knowledge of the local market, they are able to bridge the information gap (and the trust gap) which characterises the relationship between banks and SMEs. It follows that, if Guarantee Institutions deny the request for guarantee, banks are very unlikely to issue the loan or they tend to impose stricter conditions, by means, for example, of higher interest rates or even requiring further guarantees. In this way, more credit should be available and at better conditions, a higher number of SMEs should be able to obtain credit, and adverse selection mechanisms (leading to the attraction of high risk borrowers) should be limited. It is important to highlight that Guarantee Institutions, thanks to a deeper knowledge of the local market (hence better selection skills) and the provision of additional services and products, are able to thoroughly assess SMEs needs for financing and to select projects with a higher quality, therefore creating significant economic additionality. Furthermore, Guarantee Institutions can reach out to all SMEs, whereas banks have a more limited portfolio of clients, condition that helps them make the distribution model more efficient.

There are many advantages brought by Guarantee Institutions to SMEs

In summary, there is wide agreement (both in empirical studies and in the literature) that the fundamental **advantages brought by Guarantee Institutions to SMEs** include, at least, the following:

- reducing informational asymmetries between parties;
- limiting “adverse selection” (for high-risk borrowers) and “moral hazard” (for existing borrowers) mechanisms, making more credit available and at better conditions
- offering a wider range of products, supporting SMEs properly, also through advisory services.
- higher reduction of the interest rates;
- continuity of the activities of Guarantee Institutions also in time of crisis,
- filling the financing gap, working as wealth-pooling mechanism.

The Counter-guarantees, which refer to Guarantee Institutions, create many advantages for both banks and Guarantee Institutions.

There are many advantages both for banks and Guarantee Institutions deriving from Counter-guarantees

With regard to **advantages to commercial banks**, it is important to highlight the following:

- an increase in the volume of credit issued benefitting from guarantee coverage;
- a selection and short-list of “more deserving” SMEs carried out directly by the Guarantee Institutions, lightening the operational burden for the bank and speeding up the process;
- a decrease in the number of non-performing loans;

- a reduction of capital adequacy needs (potentially to a greater extent than in Counter-guarantee, as shown in one of the case studies);
- the easing of overall operational activities (e.g. paperwork, application, issue of the guarantee).

As far as the **advantages to the Guarantee Institutions** are concerned, a few aspects can be considered, including the following:

- an increase in the capital of Guarantee Institutions which can be freed-up, hence increasing “issuable” guarantees;
- Guarantee Institutions serve all SMEs within a Region or a Country, whereas banks are able to reach out to a more limited clients portfolio;
- deeper knowledge of the market and SMEs, thanks to a larger customer base and the experience in the decision making process usually accumulated by Member of Guarantee Institutions as entrepreneurs or representatives of SMEs;
- targeted assistance and support to the SMEs;
- loss coverage.

Conversely, there are potential distortionary effects deriving from increased use of Direct Guarantee

Moving onto the **distortionary effects** that could break into the market and interrupt this virtuous and smooth incentives cycle, this Study identifies and collects relevant evidence on some key distortionary effects, presenting relevant case studies which help understand the key challenges, as well as suggest successful tools for market correction.

The distortionary effects mainly derive from the conditions of Direct Guarantee agreements which make them very attractive to banks. In detail, when EU Institutions (i.e. EIF) sign contracts directly with banks, guarantees are provided:

- at no fee for the banks or quasi-free (i.e. fees are very low);
- in a systematic and automatic way without processing delay;
- at AAA rating.

First, direct experience and interviews with key players and AECM members show that the first effect that EU Direct Guarantees might have onto the guarantee market is **a perception of uncertainty and misalignment of incentives** between the key players within the market (i.e. Guarantee Institutions and banks). Moreover, there is some widespread confusion between **who the key players are (or would need to be) and what sponsors and instruments are available**. Some of the interviewed members revealed that, rather than EU Direct Guarantees being perceived as sponsors, or in other words, as deploying public money through instruments that can re-distribute it, are currently treated as an additional player within the market, hence generating “unequal” competition. Although it is very difficult to test and to be evidenced in quantitative terms, this effect is important and needs to be investigated further in future research. It is perhaps too early to tell by means of reliable data, but it is AECM’s role to bring attention to this.

Second, one of the key impacts is the so-called **“deadweight effect”**, according to which particularly favourable conditions applied by the EU to commercial banks when issuing funding for Direct Guarantee (e.g. the cost of the guarantee itself) are providing an incentive for banks to use the guarantee even when unnecessary. When the guarantee is free (i.e. no fees are requested to the bank) or quasi-free (i.e. fees are very low), the deadweight effect can appear when the bank takes a guarantee on the loan which it could have accepted even without the guarantee,

The “deadweight effect” is a key impact appearing when the bank takes a guarantee on the loan which it could have accepted even without the guarantee

therefore with no additionality generated. Three main motives could lead to this deadweight effect:

- to reduce capital adequacy needs, or
- to replace available securities for commercial reasons, or
- operational reasons and advantages.

The deadweight effect has two important indirect effects, as shown by the case studies presented in the Study with regard to the experience of Austria, Bulgaria, Spain, Italy and Czech Republic:

- an **effect on the number and volume of guarantees** (up to 40% reduction in some cases analysed in the Study) issued in favour of the banks which have signed a Direct Guarantee directly with the EU;
- an **effect on the quality of credit**, meaning that the outstanding guarantees which continue to be issued to those commercial banks tend to belong to a higher risk rating class. For instance, in the Austrian case study, the average rating class of the guarantees provided by the Austrian Guarantee Institutions in favour of one Austrian bank, had been worse than the other comparable Austrian banks since the end of 2013, when that bank started to benefit from the Direct Guarantee provided by EIF through the “RSI guarantees” program. It can be implied that those commercial banks would be willing to collaborate with the guarantee institution only for riskier cases.

Clearly, the deadweight effect cancels out the “win-win” situation which, theoretically, should characterise the relationship between banks and Guarantee Institutions, providing them with the right incentives to issue Counter-guarantee, and also being able to free capital for other activities.

Related to the deadweight effect is SMEs’ “rich-get-richer and poor-get-poorer” behaviour

Third, and strictly related to the deadweight effect (and to the consequential limitations to the creation of financial additionality), is the assumption of a **“rich-get-richer and poor-get-poorer” behaviour** from a SME perspective. There is preliminary evidence coming from the guarantors’ experience that if the EU signs a contract directly with a commercial bank to issue guarantees, the commercial bank is likely to grant a large proportion of loans to firms already having a relationships with the bank, and which would have had anyway access to finance through the bank, taking advantage of other instruments. Empirical evidence is available (Spain case study) that commercial banks explicitly suggest their existing borrowers to ask for a guarantee directly issued to them from the EU in the form of Direct Guarantee, so that the bank is able to cover current risks through the guarantee with no need to increase their risk class. Therefore, there might be a distortionary selection, implying that “disadvantaged SMEs” (i.e. those struggling to obtain credit) are being left out. These SMEs tend to be micro enterprises or single entrepreneurs, start-ups or innovation companies.

Counter-guarantees generate a significant “external leverage effect”

Fourth, empirical evidence (as also shown by the Italian and the Spanish case studies) shows that the so-called “external leverage effect” generated by Counter-guarantees is particularly significant. The external leverage effect is an effect generated within the guarantee system, based on which Guarantee Institutions can grant more than they actually have, because they have to pay for the actual amount granted to SMEs if and only if SMEs do not pay their debts back to financing banks. Calculated as the ratio between the outstanding loans guaranteed to the underlying own funds of the guarantee scheme, the extent of the external leverage effect depends on whether credit is short-term or long-term, and it is certainly a favourable element if and only if it is managed properly.

The external leverage effect represents part of the “multiplier effect” generated in the economy. In detail, the multiplier effect for the European fund is the ratio between total investment and EFSI contribution, and it is the result of two combining effects:

- **internal leverage effect.** The initial investment of the EFSI provides partial risk protection (a 'first loss guarantee') to the EIB and EIF, which should enable them to finance three times the initial amount by issuing bonds;
- **external leverage effect.** The EIB investment should help improve investors' confidence and encourage private investors to invest five times that amount.

The internal leverage effect is the same across all Financial Instruments, whereas the external leverage effect could vary; therefore, in this Study, we focus on the latter. It is important to note that the estimates reported here are computed using a different method as compared to that adopted by the European Commission¹ and the EIF to estimate the multiplier effect generated by guarantees. Since two different methodologies are used, estimates are not directly comparable.

As explained in this Study, the value chain of Direct Guarantees is the result of the guarantee activity of one single player, namely the bank, taking advantage of a single guarantee instrument, namely the EU scheme. As such, SMEs guarantees can be a source of funding or regulatory capital relief, which in turn generates leverage into the economy, thanks to the investments that SMEs can make, generating economic value into the local and national economy.

However, the value chain of Counter-guarantees implies that an additional player, the Guarantee Institutions, takes a role in guaranteeing for the SMEs on the loan they take with the commercial bank, ensuring also a higher capital relief for banks². Indeed, the value chain of Counter-guarantees implies that both players can benefit from funding or capital relief: leverage is generated both from the bank and the guarantors; together with the “catalytic effect” born by SMEs investments into the economy, this can translate into a much higher economic additionality. For instance, a good example is given by the multiplier effect that can be observed in countries like Italy (X40 euros) and Spain (X37.5 euros).

It is straightforward to see that a combination of private and public schemes might thus be more efficient and beneficial to the economy than a private only or public only scheme, also because of the added value of boosting capital flows during downturns. In other words, synergies between public and private players generate both financial and economic additionality.

Fifth, and as a consequence of the impacts briefly described above, it might well be that **public funding** to enhance firms' global competitiveness and economic growth **is allocated inefficiently**. And in this way, policy responses and the foundation for Guarantee Institutions might fail the rationale behind their activities. Far from being straightforward to measure, the inefficient allocation of public money can only be challenged by measuring and monitoring the impact that public policies and investments can have on the local economy as a whole over the years. Since public programmes for SMEs should help catalyse and leverage the provision of private resources, especially in risky capital markets, a public scheme can be successful if and only if the design of public policy and programmes to enhance

Inefficient allocation of public money can be challenged by measuring and monitoring the impact of public policies on the local economy over the years

¹ Source: COM(2014) 903 final, "An investment Plan for Europe"

² For instance, in Italy the capital relief for banks is 56% higher in case of Counter-guarantees than in the case of Direct Guarantees

SMEs access to finance can ensure both financial and economic additionality by paying attention to the targeted SMEs population, eligibility criteria, credit risk management and fees structure. This means, on the one hand, in terms of financial additionality, that public support is able to reach viable enterprises which would not otherwise having accessed finance or would have accessed finance at tighter conditions, such as higher financing costs or shorter debt maturity; on the other hand, with reference to economic additionality, public intervention should prove capable to produce a net positive impact on the economy as a whole.

In light of the evidence gathered, a few recommendations to relevant stakeholders can be summarised as follows:

- 1) greater **complementarities and synergies between existing instruments and players**: synergies should be pursued at all levels, from regional to national and supranational, in order to align incentives and create “win-win” situations for all players along the guarantee value chain, including Guarantee Institutions, banks, national and supranational public institutions, and SMEs;
- 2) **Counter-guarantee schemes should be offered at more convenient conditions** as compared to Direct Guarantees: because Counter-guarantees typically feature, in relative terms, higher input/impact ratio, lower deadweight effect, higher additionality and generate greater added value in the economy (as a consequence of the involvement of Guarantee Institutions), they should be provided at conditions that reflect the positive policy impact/additionality which Guarantee Institutions deliver. Furthermore, Counter-guarantees, being issued by Guarantee Institutions, benefit all SMEs in a Region or Country; whereas Direct guarantee, being typically issued by banks, tend to benefit more certain clients portfolios only. In addition, well-priced and well-designed Counter-guarantee schemes can be leveraged in order to strengthen the ability of such schemes to substantially alleviate SMEs need for credit, thus contributing to close the financing gap. In addition, the circumstance that, when EU Institutions (i.e. EIF) sign contracts directly with banks, guarantees are provided at no fee for the banks, creates an unequal competition within the guarantee market, since Guarantee Institutions, by contrast, need to charge a fee for their guarantees. Therefore, it should be advisable that EU institutions ask banks a fee too (perhaps in line, if not slightly higher, with the average fees of Counter-guarantees) in order to prevent crowding out of Guarantee Institutions and allow Guarantee Institutions to keep generating added value to SMEs;
- 3) **increased efficiency in the use of public money**, achievable through a greater **deployment of public money channelled through Counter-guarantees**, generating greater leverage effect on the market and on the wider economy; especially when Guarantee Institutions are backed by partial/full public support, the positive macroeconomic impact of Counter-guarantee schemes (e.g. through the stimulating effect on employment) outweighs the cost for the tax payers due to default payments. It means that **Guarantee Institutions need to be included in the distribution chain whenever it is possible and priority should be given to their integration**; this includes also the channelling of the money foreseen in accordance with the investment plan (so called Juncker package);
- 4) increase in **data availability for systematic measurement of efficiency** in the deployment of public money, allowing for market performance and efficiency measurement. Counter-guarantee guarantee schemes at all levels (i.e. national and supranational) have room to improve in the field of data availability and measurement. Objectives and performance criteria should be established ex ante, the proper risk sharing should be ensured, additionality

Some
recommendations
to stakeholders
can be identified

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 pursued.

The main results of the Study, briefly described in this Executive Summary, are discussed in the following sections of this document. The first section starts with introducing the context within which Guarantee Institutions operate in Europe, explaining the rationale behind their activity, the main players involved, and the effect they may generate on the wider economy. To conclude this section, the latest data on market trends are briefly reported.

Then, the second section includes an overview of the different types of guarantee models adopted by different countries across Europe, presenting a few criteria useful for building a taxonomy of guarantee models. A few key characteristics an efficient guarantee models should have, in order to alleviating market failures in SMEs financing, and the key changes in the Guarantee System, are also discussed.

The third section reports results and insights which can be considered as the core of the Study, by looking at the different value chains built around Direct Guarantees and Counter-guarantees and at the value added generated by Guarantee Institutions for SMEs, followed by a discussion of the main distortionary effects caused by Direct Guarantees on the guarantee market: perceived competition, deadweight effect, self-selection effect, external leverage effect and inefficient allocation of public money.

The document concludes with policy recommendations representing the synthesis of the insights emerging from the analysis.

1 Context



1.1 The Study

The European Association of Guarantee Institutions (AECM) represents the political interest of Guarantee Institutions both towards European Institutions and other multilateral bodies. The core business of its 41 members is to provide and enhance Small and Medium-sized Enterprises (SMEs) access to financing, hence contributing to economic growth.

AECM has the crucial role of supporting its members in the understanding of policy and regulatory developments in the area, anticipating market trends, analysing the interlink between them in a sound and clear manner, and eventually providing recommendations on how to tackle the compound effects of the two.

In this respect, one of the most striking changes occurred in the last few decades has been the greater availability of European Funds promoting access to credit. Indeed, the European Investment Bank Group (composed of European Investment Bank (EIB) and the European Investment Fund (EIF)), responded rapidly to the financial crisis with an anti-cyclical response (i.e. via securitisation, guarantees, risk-sharing loans and investments in venture and growth capital funds) in banking and capital markets, including those for SMEs. More recently, a clear tendency has been witnessed in making EU financing instruments available directly to commercial banks. This means that, on one hand, EU policies have been ensuring constant public support to SMEs, confirming the importance of guarantees as public goods; on the other hand, more players have been actively participating to the SMEs financing market, generating some confusion among the market players themselves. This confusion is likely to be generated by a perceived increase in competition within the market itself and the tendency to consider “guarantee sponsors” as market players, rather than facilitators and advocates of the ultimate rationale for the activities of Guarantee Institutions, that is to say, enhancing SMEs access to credit as public good.

More in detail, the EU - especially through the European Investment Bank (EIB) Group - can now issue guarantee contracts directly to commercial banks (the so-called “Direct Guarantee”); or, alternatively, can issue guarantee contracts with a Guarantee Institution (the so-called “Counter-guarantee”). It follows that the market of guarantees for SMEs is now populated by more players and more instruments as compared to the past, and Guarantee Institutions started to feel the impact of these changes.

In its representation role, AECM has therefore decided to undertake **this Study, whose aim is two-fold**:

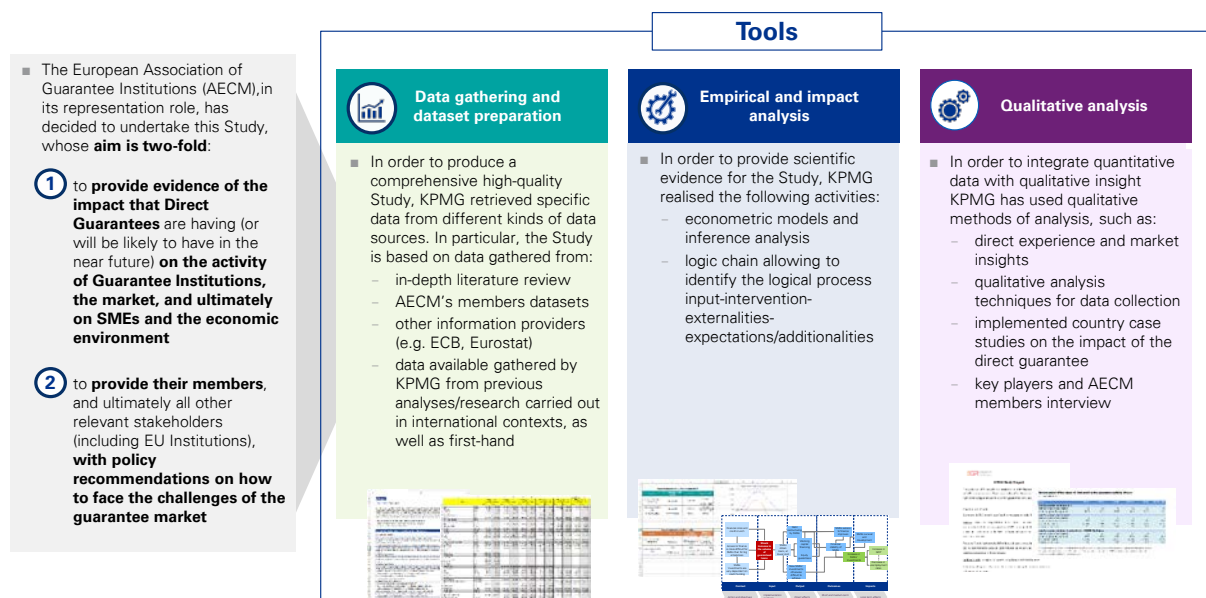
- to provide **evidence of the impact** that Direct Guarantees are having (or will be likely to have in the near future) on the activity of Guarantee Institutions, the market, and ultimately on SMEs and the economic environment;
- to provide their members, and ultimately all other relevant stakeholders (including EU Institutions), with **policy recommendations** on how to face the challenges of the guarantee market.

To carry out the Study, a multi-method and integrated approach has been undertaken, based on the following tools:

- **data gathering and dataset preparation.** In order to produce a comprehensive high-quality Study, KPMG has retrieved specific data from different data sources. In particular, the Study has been based on data gathered from:
 - in-depth literature review;
 - AECM’s members datasets;
 - other information providers (e.g. ECB, Eurostat);

- data available gathered by KPMG from previous analyses/research carried out in international contexts, as well as first-hand.
- **empirical and impact analysis.** In order to provide scientific evidence for the Study, KPMG has performed the following activities:
 - econometric models and inference analysis;
 - logic chain allowing to identify the logical process of input-intervention-externalities-expectations/additionalities.
- **qualitative analysis.** In order to integrate quantitative data with qualitative insight, KPMG has qualitative methods of analysis, such as:
 - direct experience and market insights;
 - qualitative analysis techniques for data collection;
 - implemented country case studies on the impact of the Direct Guarantee;
 - key players and AECM members interview.

Figure 2: Summary of the Study's objectives, structure and tools.



Source: KPMG elaboration.

1.2 The importance of SMEs financing

SMEs are the backbone of European Economy. Eurostat data reported in Figure 3 below for a selected panel of European countries show that on average in 2013 up to 90 out of every 100 businesses are SMEs. The Annual Report on European SMEs 2014/2015, published by the European Commission, reports comparable results even for 2014 in the EU28. Please note that the abbreviation "SMEs" used

throughout this report refers to the European Community definition of micro-enterprises and small and medium-sized enterprises (SMEs) adopted by the Commission³.

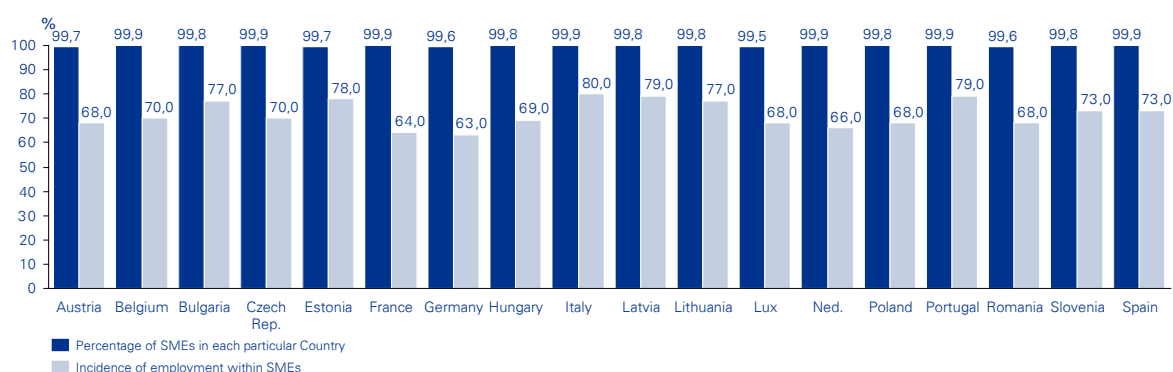
Table 1: Thresholds for SMEs definition established by the European Commission.

| EU Commission thresholds for SME definition | | | |
|---|-----------|------------|---------------------|
| Enterprise category | Headcount | Turnover | Balance sheet total |
| Medium-sized | < 250 | = 50 €/mIn | = 43 €/mIn |
| Small | < 50 | = 10 €/mIn | = 10 €/mIn |
| Micro | < 10 | = 2 €/mIn | = 2 €/mIn |

Source: Commission Recommendation 96/280/EC of 3 April 1996 (OJ L 107, 30.4.1996) replaced by Commission Recommendation 2003/361/EC of 6 May 2003 (OJ L 124, 20.5.2003).

Given the definition of SMEs cited above, official data from the European Commission shows how SMEs are the engine of the European economy, contributing significantly to job creation and economic growth. In particular, according to this official data, almost 93% of all SMEs in 2014 were micro enterprises employing less than 10 people. As a whole, in 2014 SMEs employed almost 90 million people, i.e. 67% of total workforce. In some countries, such as Portugal, Italy, Bulgaria, Estonia, Latvia and Lithuania, the ratio is even higher, accounting for up to 75% of the working population.

Figure 3: Percentage of SMEs across EU Member States and incidence of employment within SMEs⁴.



Source: KPMG elaboration on Eurostat data, 2013 (percentage of SMEs in Europe). KPMG elaboration on Eurostat data, 2015 (incidence of employment within SMEs).

Besides small differences among EU Member States, in the same year SMEs generated 58% of GDP (total value added)⁵. In terms of economic sectors, just five key sectors (i.e. manufacturing, construction, business service, accommodation and food, wholesale and retail trade) accounted for 78% of all SMEs, with the business service sector representing the “top” sector at the EU28 level in

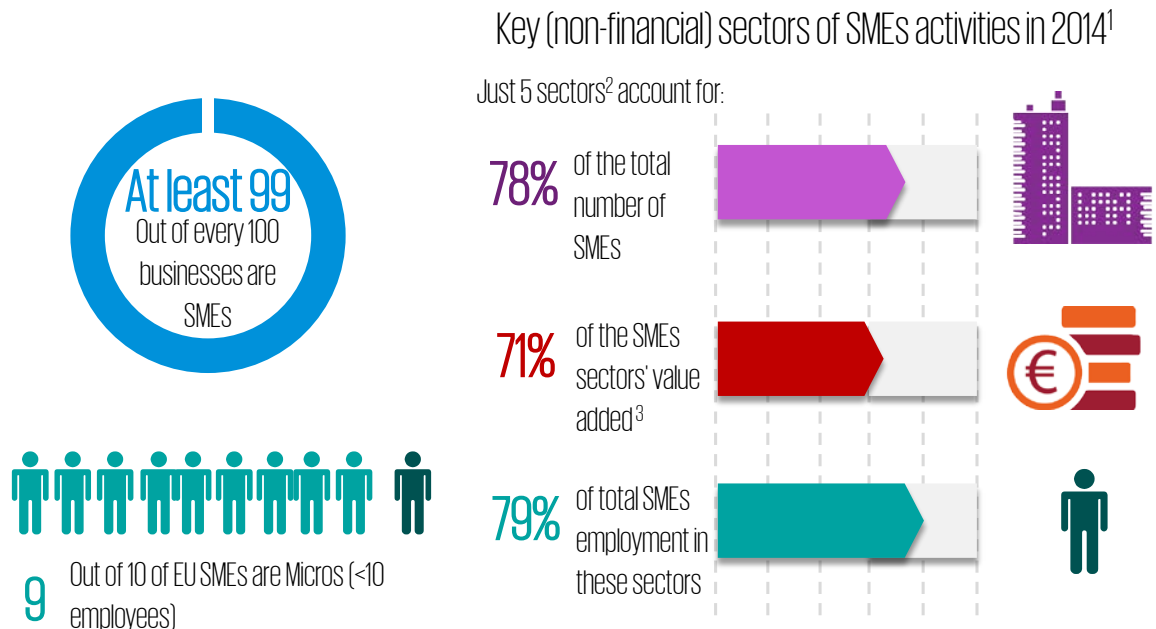
³ Commission Recommendation 96/280/EC of 3 April 1996 (OJ L 107, 30.4.1996) replaced by Commission Recommendation 2003/361/EC of 6 May 2003 (OJ L 124, 20.5.2003).

⁴ The chart does not represent Croatia, Greece, Slovakia, Russia, Bosnia and Turkey due to lack of data on SMEs employment level, and it does not represent Russia, Bosnia and Turkey due to lack of data on the number of SMEs.

⁵ Data retrieved from European Commission, Annual Report on European SMEs 2014/2015, Ref. Ares(2016) 1791252 - 15/04/2016.

terms of the three fundamental SMEs' performance indicators (i.e. increase in employment, value added, number of SMEs).

Figure 4: SMEs as the backbone of European Economy.



Source: KPMG elaboration on data European Commission, Annual Report on European SMEs 2014/2015, Ref. Ares(2016) 1791252 - 15/04/2016. Notes: (1) data are displayed at the latest available year (i.e. 2014); (2) the five key-sectors of SME's 2014 activity include manufacturing, construction, business services, accommodation and food, trade and repair; (3) value added is referred to the net contribution of each SME to the economy.

Notwithstanding their economic importance, SMEs typically face greater difficulties than larger firms with regard to several aspects, particularly when it comes to accessing credit. As it is already been demonstrated in a number of studies, the problems that SMEs experience most frequently include, but are not limited, to the following:

- a wider difference between the cost of internal and external finance⁶;
- higher reliance on local bank credit, with higher risk of exposure to local shocks, and more difficult diversification of sources⁷;
- credit rationing and penalising conditions applied even to financially viable SMEs, as recently shown by the European Commission with reference to the period 2009-2012, when up to

⁶ See Hubbard (1998), Lerner (1999), Carpenter and Petersen (2002).

⁷ See Hoffman and Sørensen (2015).

860,000 SMEs with solid financial conditions in the EU were unable to obtain bank loans, thus undergoing up to 112 €/bn of estimated financing gap⁸.

In short, as compared to larger firms, SMEs are typically disadvantaged in terms of credit access due to higher transaction costs, under-collateralisation, lower financial skills, higher interest rates and more rigid borrowing terms⁹. Economists broadly attribute the difficulties experience by SMEs in accessing finance to the market failure due to asymmetric information, which in turn leads to adverse selection and moral hazard¹⁰, eventually resulting in a financing gap that limits the potential of all SMEs, including innovative and growth-oriented firms.

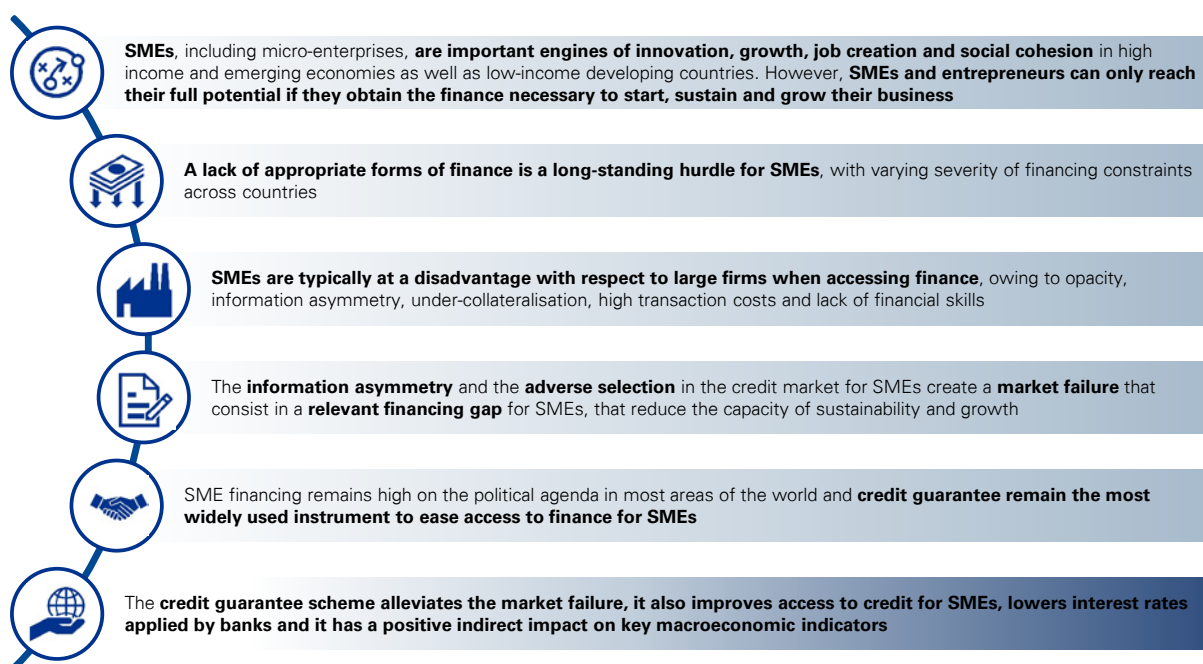
However, in order for SMEs to be engines of innovation, growth, job creation, and social cohesion across European countries, the lack of appropriate credit is a severe hurdle, which makes the economic and social impacts of economic crises more negative and persistent. Moreover, such a problem of finance shortage for SMEs is not only limited to bank credit access, but also extends to obtaining non-bank financing, which is even more restricted to a smaller group of SMEs operating in economies where private capital markets are well-developed and SMEs themselves have the skills and knowledge needed to exploit alternative sources of finance. In this context, the use of credit guarantee schemes can play an important role, as a tool to alleviate SMEs' financial distress. For example, in 2007-2013, around 200 €/bn were provided to SMEs through Public Credit Guarantee Schemes, capable of generating a tenfold amount of financing.

The problem of SMEs financing thus stays on top of political agenda in many European Countries, with credit guarantees remaining the most widely used instrument to ease access to finance for SMEs. In particular, credit guarantee schemes have been shown to improve financial conditions for the beneficiary firms by decreasing bank interest rates and overall reducing SMEs vulnerability to changes in credit market conditions and strengthening their capital structure. This, in turn, helps the resilience of the financial sector and has an indirect positive impact on key macroeconomic indicators.

⁸ See European Commission (2013).

⁹ See G20/OECD, High-Level Principles on SME Financing, November 2015.

Figure 5: Overview of the factors underlying the importance of SMEs financing.



Source: KPMG elaboration on publicly available literature.

1.3 Guarantee schemes in Europe

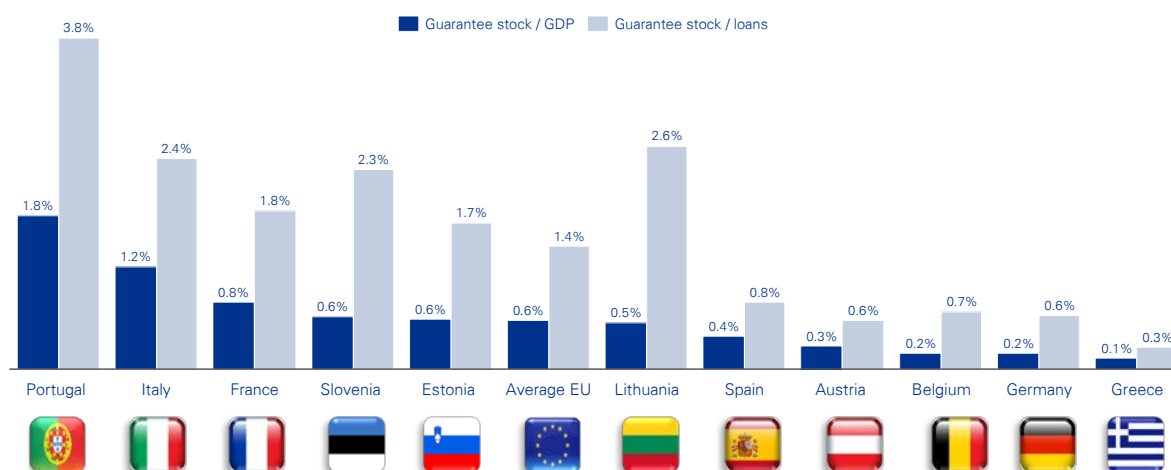
Everywhere access to credit is a “public good” and the importance of ensuring SMEs access to credit is widely recognised as the key instrument to boost economic growth, especially in Europe, where SMEs represent the majority of businesses.

As introduced in the previous paragraph, the financial crisis contributed to widening the financing gap, exacerbating the market failure, where supply of credit (particularly for SMEs and entrepreneurs) has not been able to meet an increasing demand. On one hand, traditional financing channels, such as commercial banks, dealing with the effects of the crisis and its aftermath, struggle to meet this demand, and money available for business loans is more limited than it appeared to be in the past. This tendency implies that the “shortlist” of businesses being able to obtain credit from banks is limited. And here comes the role played by public interventions, which can boost and empower significantly the role of the guarantee system.

In this context, credit guarantee schemes remain the most widely used instrument to ease access to finance for SMEs; and **in all major economies, there is a guarantee system**, which is, in different forms (directly and indirectly), supported by public authorities. The aim of the guarantee systems is to alleviate the market failure in the credit market for the SMEs, improving the ability to access to credit and lowering interest rates and collaterals requested by banks. For these “socio-economic” reasons, guarantee systems are also supported by public authorities, up to different extents depending on the different EU Countries.

Indeed, in all major economies in Europe there is a guarantee system, with an average **incidence of the guarantee stock on real GDP equal to about 0.6% in 2015**, with peaks in Portugal and Italy (1.8% and 1.2% respectively), as shown in Figure 6.

Figure 6: Percentage incidence of guarantee stocks/GDP and guarantee stocks/loans for the analysed panel of European countries.



Source: KPMG elaboration on AECM and Eurostat data 2015. Data for Italy was provided directly by Assoconfidi.

More in detail, within Europe, both the incidence of guarantee stocks on GDP and on loans are higher for Portugal, Italy and Lithuania than for the other European Countries considered.

However, extending the analysis to include Asia, to compare, as a matter of example, the EU with other contexts, it can be observed that Asia has a ratio of 2.5% of guarantee stocks/GDP, showing greater penetration of the guarantee system than any of the considered European Countries.

1.3.1 The main players

Many parties are involved in the guarantee market, making it necessary to distinguish **between sponsors and players**, by recognising banks, Guarantee Institutions and SMEs as main players, supported by EU and national institutions as main sponsors, according to the rationale behind guarantees to increase SMEs access to credit as public good.

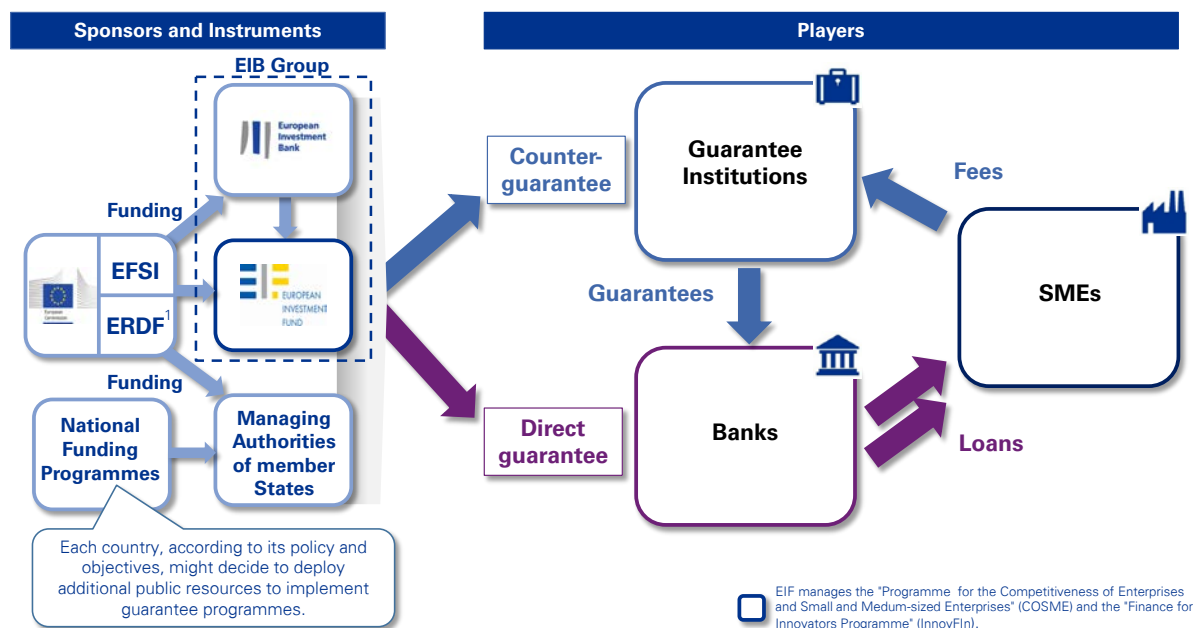
As mentioned above, the changes in the guarantee market are actually exacerbating the key differences between players and sponsor, as the EIB Group increasingly issuing guarantee contracts directly to commercial banks (Direct Guarantee) is taking up the role of the player rather than the sponsor within the guarantee market.

A Counter-guarantee system comprises at least three players (note that often Guarantee Institutions receive a national Counter-guarantee and/or grant a Counter-guarantee to a guarantee institution that grants a guarantee so that in many cases even more entities are involved), whereas a purely Direct Guarantee system covers two parties only, since are not involved Guarantee Institutions (as shown in Figure 7).

In Europe, the main sponsors (and instruments) operating within the guarantee system are European funding programmes, channelled through the EIB Group, which can be integrated in each country through specific National Funding Programmes. In detail, each country, according to its policy and objectives, might decide to deploy additional public resources to implement guarantee programmes.

The funding for European guarantee programmes are mostly coming from European Investment Bank, the European Investment Fund and the European Commission, and are managed primarily by the European Investment Fund¹¹.

Figure 7: Guarantee system: main players and sponsors.



Source: KPMG elaboration.

1.3.2 Overview of key EU financial instruments

As already pointed out, SMEs represent over 90% of all businesses in the EU28, so it is crucial to support their growth and innovation. However, one of the most important issues facing SMEs is limited access to finance. Therefore, the European Commission, overtime, has been setting up a number of tools to improve the financing environment for small businesses in Europe.

The Commission works with financial institutions to improve the funding available to SMEs by stimulating the provision of loans and venture capital through financial instruments. Aid is channelled through local, regional, or national authorities, or through financial intermediaries that provide funding through financial instruments.

Among the EU direct and Counter-guarantee instruments, the most used EU instruments by AECM members are “InnovFin SME”, “Cosme Loan Guarantee Facility” and “SME initiative”. A brief description of these instruments is provided below.

InnovFin, the “EU Finance for Innovators”

¹¹ Some of the most important European programmes – worth mentioning for the sake of completeness, and besides those primarily used by AECM members (described in the following paragraphs), and guarantee institutions more generally, are the European Fund for Strategic Investments (EFSI) and the European Regional Development Fund (ERDF).

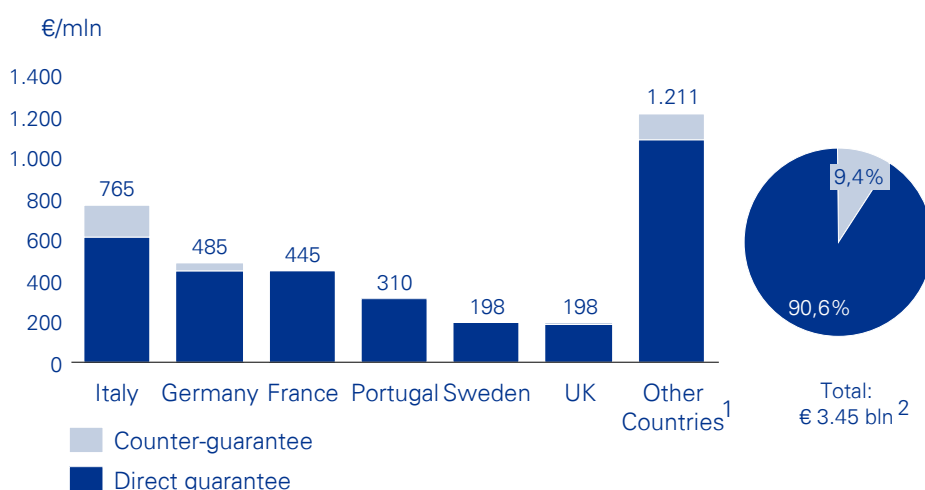
InnovFin, the "EU Finance for Innovators" programme, is a joint European Investment Bank (EIB) Group and European Commission (EC) initiative under "Horizon 2020", the new funding programme for 2014-2020 aimed also at boosting the innovation capacity of SMEs¹².

InnovFin SME Guarantee is a guarantee or Counter-guarantee on debt financing between 25 k€ and 7.5 €/mIn, that the European Investment Fund (EIF) provides to financial intermediaries in order to improve access to finance for innovative Small and Medium-sized Enterprises (SMEs) and Small Mid-caps (enterprises with up to 499 employees). It is a flexible product which grants the financial intermediary a great degree of autonomy, e.g. the intermediary has full delegation on the origination, credit decisions, servicing, etc.

The InnovFin SME Guarantee targets financial intermediaries operating in the EU-28 Member States as well as the Horizon 2020 Associated Countries. Eligible local banks, leasing companies, Guarantee Institutions, etc. are selected after a due diligence process following the launch of a Call for Expression of Interest.

The guarantee covers up to 50% of the loss on each new eligible loan, bond or lease that is originated typically during a two-year period. The guarantee amount is up to € 200 million per intermediary and up to € 500 million for an intermediary group. With a 50% guarantee rate, this means a maximum portfolio volume of up to € 400 million of financing per intermediary, and up to € 1 billion for an intermediary group.

Figure 8: Direct and Counter-guarantees in the countries participating to InnovFin SMEs Guarantees - 31/07/2016.



Source: KPMG elaboration on ECB data, InnovFin Guarantee Signatures as of 31.07.2016.

Notes: (1) the amount of direct and Counter-guarantees in each of the 22 States in "Other Countries" is significant; (2) the amount of issued guarantees as July 2016 is higher than the total budget for the 2014-2020 period due to the leverage effect.

The programme has a total budget of 1,060 €/mIn in the 2014-2020 period. The Figure 8 shows the signatures as of 31 July 2016. The amount of Direct Guarantees account for 90.6% of the total, i.e.

¹²For further details about "InnovFin initiative", see

http://www.eif.org/what_we_do/guarantees/single_eu_debt_instrument/innovfin-guarantee-facility/index.htm and, for "Horizon 2020", see <https://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020>.

3.45 €/bn², which is higher than the total budget for the 2014-2020 period due to the leverage effect, based on which in form of the guarantee the programme can grant more than it actually have. Looking at the distribution among Countries, the highest amount of Direct Guarantees is provided in Italy (615 €/mIn), whereas in Sweden and in the UK the amount issued equals to 198 €/mIn. Italy is also the country where the amount of Counter-guarantees is also the highest, nonetheless accounting for a smaller part (20% of total guarantees issued).

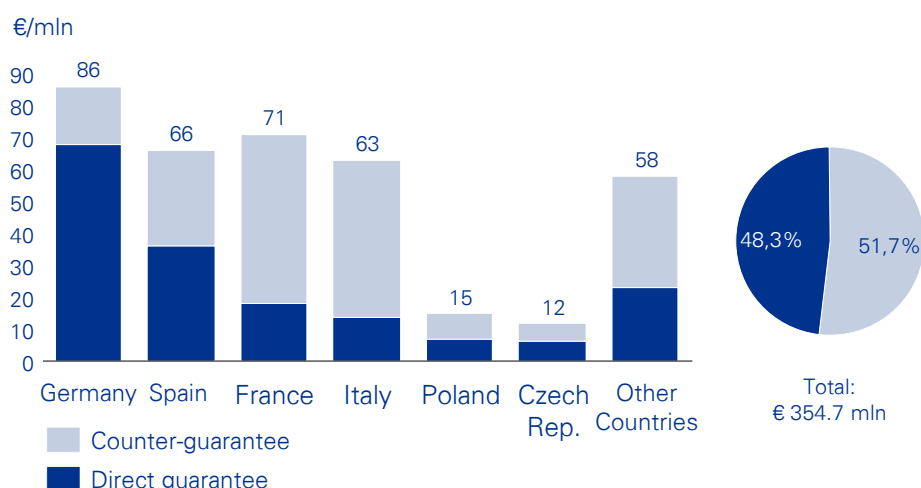
COSME Loan Guarantee Facility

COSME is the programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME), which supports European enterprises' growth and research and innovation (R&I).

The programme includes the Loan Guarantee Facility (LGF). Through COSME LGF, EIF offers guarantees and Counter-guarantees, including securitisation of SMEs debt finance portfolios, to selected financial intermediaries (e.g. Guarantee Institutions, banks, leasing companies, etc.) to help them to provide SMEs with more loans and leases.

Eligible applicants are the financial or credit institutions or loan (debt) funds duly authorised to carry out lending or leasing activities, or, in the case of Counter-guarantees: guarantee schemes, Guarantee Institutions or other credit or financial institutions duly authorised to issue guarantees.

Figure 9: Direct and Counter-guarantees in the countries participating to COSME LGF – 31/07/2016



Source: KPMG elaboration on ECB data, COSME-LGF Signatures as of 31.07.2016.

These guarantees aim at helping SMEs which might otherwise not be able to obtain funding due to their perceived higher risk or a lack of sufficient collateral.

COSME LGF has a budget of 660 €/mIn for the 2014-2020 period. Differently from InnovFin SME Guarantee, the amount of Direct Guarantees provided in the first seven months in 2016 represents only 51.7% of the total (357.7 €/mIn), which is lower than what has so far been provided by InnovFin. COSME LGF guarantees account for the majority of guarantees in many EU Countries.

SME Initiative

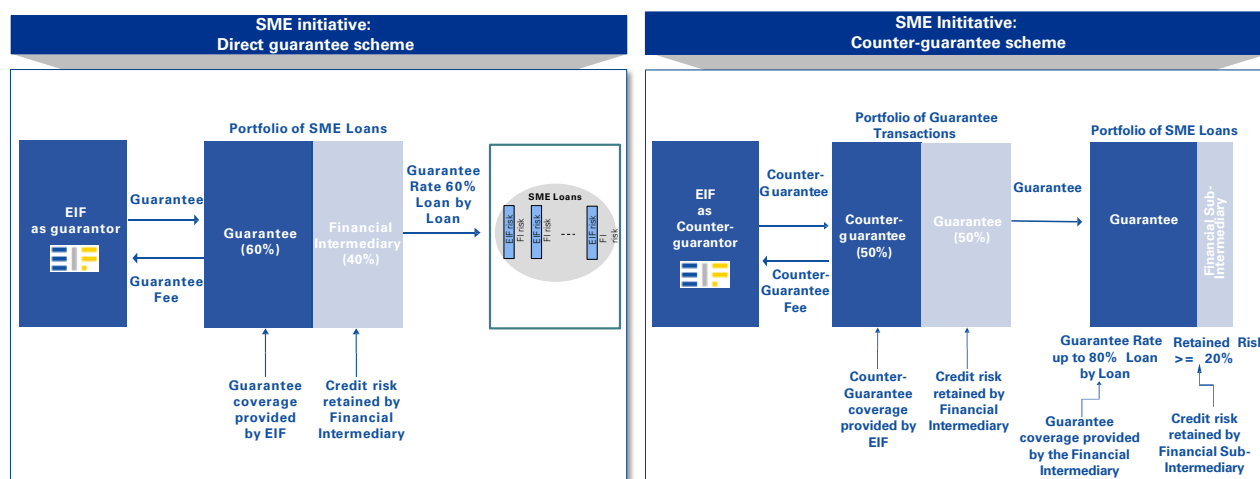
The SME Initiative is a joint financial instrument of the European Commission (EU) and the EIB Group (the European Investment Bank and European Investment Fund) which aims to stimulate SME financing by providing partial risk cover for SME loan portfolios of originating financial institutions¹³.

The SME Initiative is co-funded by the European Union through COSME and/or Horizon 2020 resources as well as through EIB Group resources.

The initiative contemplates the implementation of up to two products: an uncapped portfolio guarantee instrument and a securitisation instrument. With regard to the types of guarantees, the programme offers both direct and Counter-guarantees. Via the SME Initiative, the EIF offers selected financial intermediaries (e.g. banks, leasing companies, Guarantee Institutions, debt funds) loss protection and potential capital relief at an advantageous cost. In return for the risk-sharing, the financial intermediaries provide SME loans, leasing and/or guarantees at favourable terms (for example, through reduced interest rates and collateral requirements for the final recipients).

Figure 10 explains in details how the SME initiative works in the case of direct and Counter-guarantee schemes. Briefly, for Direct Guarantees, the EIF directly guarantees 60% of the portfolio of SMEs loans, whereas for Counter-guarantee schemes, the Guarantee Institutions provides coverage up to 80% of the portfolio of SME loans and the EIF provides the Guarantee Institutions with a Counter-guarantees which equals 50% of the total amount guaranteed by the Guarantee Institutions themselves.

Figure 10: SME Initiative schemes.



Source: KPMG elaboration.

By looking at these key financing instruments at the EU-level, it is straightforward to see how they can represent a great opportunity for Guarantee Institutions, and, eventually, for SMEs benefitting from greater access to finance. However, the key point to be considered at this stage of analysis is whether the balance between direct and Counter-guarantees provided thanks to these EU (public) funding is the right one; especially with regard to an efficient use of public money and the ability to generate economic and financial additionality.

¹³ For further details, see http://www.eif.org/what_we_do/guarantees/single_eu_debt_instrument/cosme-loan-facility-growth/index.htm and https://ec.europa.eu/growth/smes/cosme_en

1.4 Financial and economic additionality and wider impacts

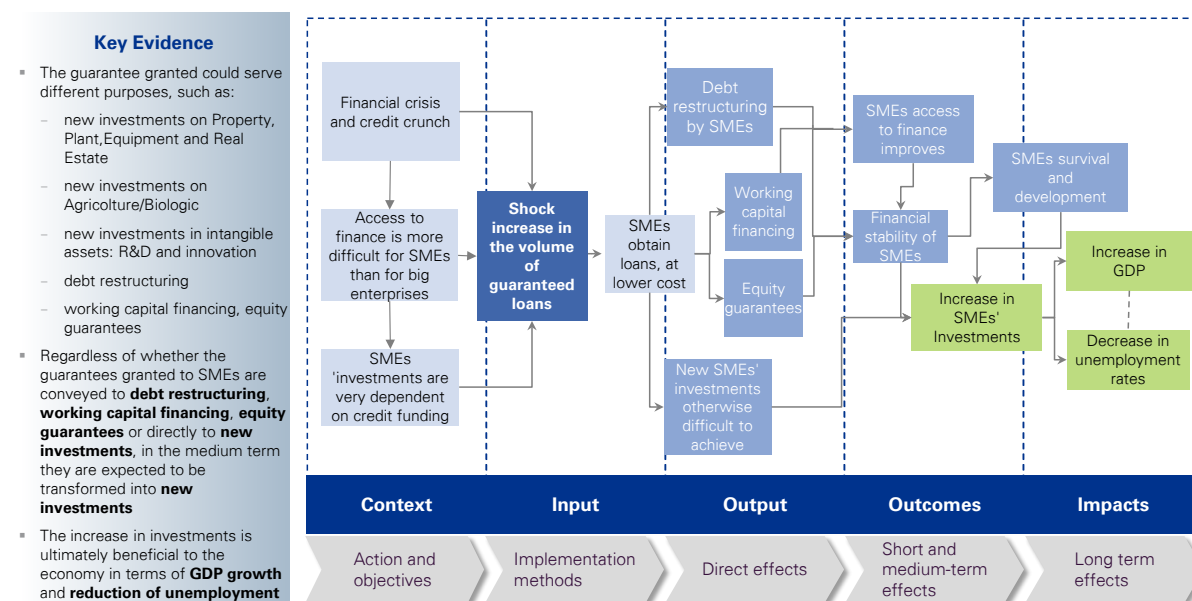
Guarantee schemes for SMEs are likely to impact on both firm access to finance (so called “**financial additionality**”) by allowing credit access to SMEs which otherwise would not meet the requirements for obtaining loans from the banking system, and on the economy as a whole, including well-being and other socio-economic aspects (“**economic additionality**”). Economic and financial additionality are two faces of the same coin. Indeed, if one thinks that the ultimate goal of a guarantee scheme is to support lending to SMEs, mainly because SMEs are the engine for economic growth, one can easily understand that the achievement of better results at the “macro” level (in terms e.g. of employment rates and higher output) are highly dependent on the availability of financial channels, as shown by recent studies¹⁴. The combined effect of economic and financial additionality eventually translates into positive impacts at the macro-economic level, as expressed by increases in GDP and in the number of employees, accompanied by a fall in the number of unemployed.

More in details, an ideal “logic chain” can be identified, linking guarantees to their “wider impacts” on the economy as a whole. In fact, the guarantee granted to SMEs could serve different purposes, such as:

- new investments (e.g. on Property, Plant, Equipment, Real Estate, Agriculture/Biologic and on intangible assets: R&D and innovation);
- debt restructuring;
- working capital financing, equity guarantees.

However, regardless of whether the guarantees granted to SMEs are conveyed to debt restructuring, working capital financing, equity guarantees or directly to new investments, in the medium term they are expected to be transformed into new investments. The increase in investments is ultimately beneficial to the overall economy in terms of GDP growth and reduction of unemployment.

Figure 11: Economic additionality and wider impacts: logic chain.



¹⁴ See Schmidt and van Elkan (2010).

In fact, it is estimated that the impact that an increase in investments generated by an increase in guarantees, calculated in line with historical market trends, might have on a country's GDP, ranges between 0.18% to 0.43% of a country's GDP, which goes from 1.3 €/bn to 1.8 €/bn for the Countries¹⁵ taken into account (it must be noted that the absolute value could vary depending on the different size of the Country's economy). It also generates an impact on the labour market, by reducing the number of unemployed (with a reduction by as much as 33,000 units in economies such as the Italian economy).

Figure 12. Impacts of guarantees on GDP and labour market.



Source: KPMG elaboration.

The impacts on a country's GDP is based on an econometric estimation of the effect of a shock on national accounts variables (consumption, exports, imports, private investments and public spending) on GDP. The underlying assumption is that the increase of guarantees involves an increase in private investments within the national economy. Moreover, the impacts on the labour market are based on an econometric estimation of the effect of a shock in national accounts variables (GDP, Investments, Consumption) on employment and unemployment levels. The underlying assumption is that the granted guarantees have a significant effect on private investments (coherently with the assumptions for the GDP model), which, in turn, affect employment and unemployment levels.

1.5 The rationale for Guarantee Institutions and their role

It must be stressed, once again, that guarantee schemes provide guarantees on loans to borrowers by covering a share of the default risk of the loan¹⁶. The underlying rationale lies in the market failure characterising SME's access to finance and in the inefficiencies created by information asymmetries and adverse selection. In this regard, credit guarantees granted by Guarantee Institutions aim at alleviating the constraints facing SMEs in accessing finance. This is a crucial point; as it will be explained later in this Study (see Section 3.2.), the main advantages brought by Guarantee Institutions to SMEs, include but are not limited to, the following:

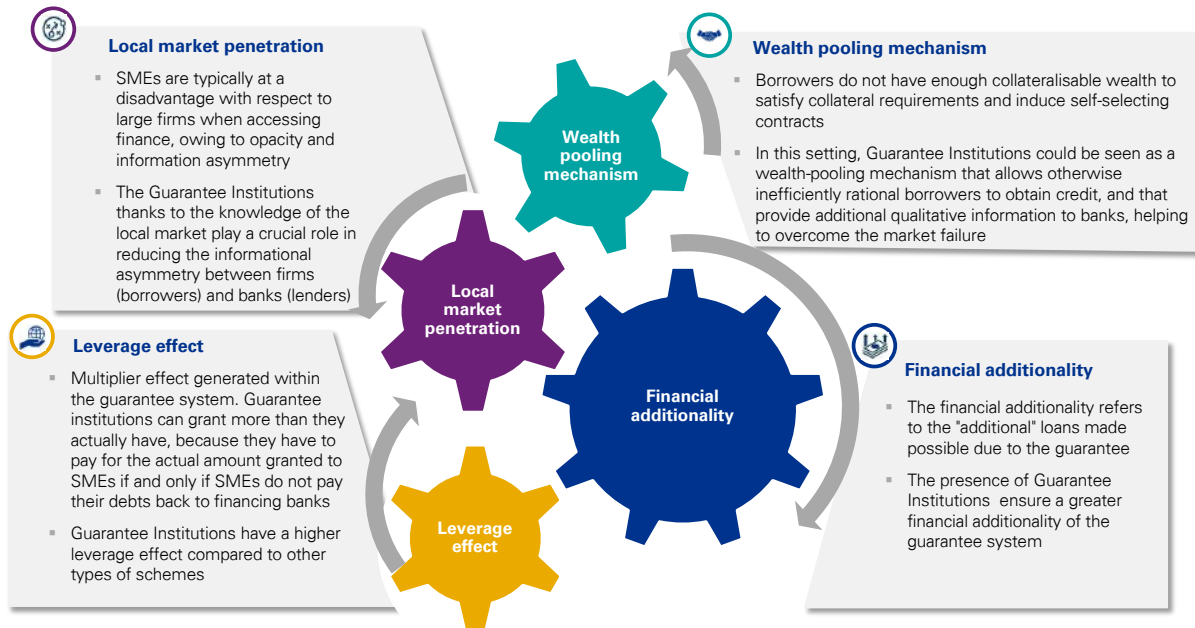
- reduction of informational asymmetries between agents;
- limitation of "adverse selection" (for high-risk borrowers) and "moral hazard" (for existing borrowers) mechanisms;
- full coverage of the whole market, i.e. no market distortion between banks;
- offering of a wider range of products, supporting properly the SMEs also through advisory services;
- higher reduction of the interest rates for SMEs;
- continuous support to SMEs, in time of crisis when Guarantee Institutions are even more needed;

¹⁵ The sample of Countries taken into account are representative of different guarantee systems, and are those Countries where all data needed to generate the estimates were made available (i.e. Italy, Germany and Austria).

¹⁶ This definition of credit guarantee schemes is borrowed from Asdrubali and Signore (2015), p. 15.

- contribution in filling the financing gap by working as wealth-pooling mechanism.

Figure 13: Overview of the rationales for Guarantee Institutions.



Source: KPMG elaboration.

1.6 Market trends

In order to gain a deeper insight into European guarantee systems, the figures and tables below show the most relevant key market trends for the period 2009-2015. The evidence refers to data provided directly by AECM, so it is limited to Counter-guarantee schemes. For matters of data homogeneity and due to the lack of observations for each of the years considered, the original sample was restricted to only 11 countries: Austria, Belgium, Estonia, France, Germany, Greece, Italy, Lithuania, Portugal, Slovenia and Spain.

Figure 14: Key trends: guarantees and the economy.



Source: KPMG elaboration on AECM data on guarantee stocks, Eurostat for GDP, ECB for the total amount of loans.

Figure 14 above shows the incidence of guarantee stocks on GDP and on total loans for the selected sample. During the period 2009-2015, both ratios report a stable trend, around an average 0.6% for the incidence of guarantee stock, and an average of 1.4% for the ratio of guarantee stock to total loans.

Some differences across countries can be noticed. In particular, in 2015, the incidence of guarantee stock on GDP was higher for Portugal and Italy than for the other European countries whereas. The lowest is recorded for Greece (i.e. 0.1% guarantee stock/GDP).

The table below illustrates the key trends for each country during the reference period, showing that the pattern of the different Countries is heterogeneous.

Table 2: Incidence of guarantee stock on GDP.

| Stock/GDP % | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Austria | 0,2% | 0,2% | 0,1% | 0,1% | 0,1% | 0,3% | 0,3% |
| Belgium | 0,1% | 0,2% | 0,2% | 0,2% | 0,2% | 0,2% | 0,2% |
| Estonia | 0,5% | 0,7% | 0,6% | 0,6% | 0,5% | 0,6% | 0,6% |
| France | 0,7% | 0,8% | 0,8% | 0,8% | 0,8% | 0,8% | 0,8% |
| Germany | 0,2% | 0,2% | 0,2% | 0,2% | 0,2% | 0,2% | 0,2% |
| Greece | 1,5% | 1,1% | 0,6% | 0,3% | 0,2% | 0,1% | 0,1% |
| Italy | 1,4% | 1,6% | 1,5% | 1,4% | 1,4% | 1,3% | 1,2% |
| Lithuania | 0,8% | 0,8% | 0,7% | 0,5% | 0,3% | 0,6% | 0,5% |
| Portugal | 1,6% | 2,1% | 1,8% | 1,8% | 1,8% | 1,7% | 1,8% |
| Spain | 0,6% | 0,6% | 0,6% | 0,5% | 0,5% | 0,4% | 0,4% |
| Slovenia | 0,3% | 0,4% | 0,6% | 0,5% | 0,5% | 0,6% | 0,6% |
| Average | 0,7% | 0,7% | 0,7% | 0,6% | 0,6% | 0,6% | 0,6% |

Source: KPMG elaboration on AECM data on Eurostat data for GDP.

Our descriptive analysis of market trends also takes guarantee flows into consideration. In this case, data were not available for 2015, so the sample was further restricted up to 2014. Table 3 below,

representing the annual guarantee flow growth over the period 2010-2014, shows that the pattern of the different Countries is heterogeneous.

Table 3: Growth rates of guarantees flows by country.

| Growth rates of guarantees flows | | | | | |
|----------------------------------|--------------|---------------|--------------|--------------|--------------|
| % | 2010 | 2011 | 2012 | 2013 | 2014 |
| Austria | 1,5% | -33,2% | 5,2% | 6,8% | -13,8% |
| Belgium | -3,7% | -0,4% | -9,1% | 15,4% | -16,3% |
| Estonia | 31,1% | -22,7% | 10,6% | -9,1% | 30,3% |
| France | 1,8% | -12,3% | -4,2% | 0,7% | 7,2% |
| Germany | 3,1% | -11,6% | -5,1% | 2,3% | -5,0% |
| Greece | -95,1% | -84,6% | -84,1% | -34,4% | 25,2% |
| Italy | 45,8% | -12,1% | -10,4% | -9,2% | -14,9% |
| Lithuania | -11,5% | 6,7% | -30,2% | -19,7% | 14,2% |
| Portugal | -21,1% | -59,4% | 19,0% | 33,2% | -13,3% |
| Spain | -29,8% | -27,4% | -24,6% | -13,4% | 7,7% |
| Sovenia | 16,3% | -12,4% | -34,9% | 3,6% | 62,9% |
| Average | -5,5% | -17,4% | -8,2% | -3,2% | -5,3% |

Source: KPMG elaboration on AECM data.

2 Comparison of the efficiency of different types of guarantee models



2.1 Guarantee models across Europe

The Guarantee models adopted across Europe are diverse. This heterogeneity across countries reflects different policy priorities and the economic environment.

Additionally, this heterogeneity refers back to three key elements: the nature of the funding, the legal and regulatory framework underlying guarantee schemes, and their operational characteristics¹⁷.

- **Nature of the funding:** Guarantee Institutions can obtain their own resources from private, public or mixed sources where both public and private funds are pulled together.

Everywhere access to credit is a “public good” and the importance of ensuring SMEs access to credit is widely recognised as the key instrument to boost economic growth, so in most cases the guarantee systems are, in different forms (directly and indirectly), supported by public authorities. In particular, public contributions may take different forms: (i) tax exemptions and other fiscal charges; (ii) public contributions to permanent resources in the form of social capital or stand-alone net resources; (iii) public contributions for expected losses; (iv) Counter-guarantee programmes, at national or international level; (v) subsidies for SMEs to guarantee service costs. In addition, guarantee schemes can be also funded by supra-national Institutions such as the European Investment Fund, or, especially in developing countries, Non-Governmental Organisations¹⁸. The guarantee system otherwise can be directly funded by the private sector or receive funds from both, public and private sectors.

- **Legal and regulatory framework:** Guarantee systems are subject to specific regulatory design with regard to several aspects that influence legal and operational characteristics. Guarantee systems are typically not-for-profit organisations to which specific regulatory systems apply. In some countries, profit oriented public or private-public schemes exist, which distribute returns only to their public shareholders. In general, the legal and regulatory framework recognise that Guarantee Institutions provide support to SMEs by facilitating their access to finance, generate information that is useful to the banking system, and channel public funds.

As financial intermediaries, the Guarantee Institutions are subject to the control of the prudential supervisory authority, depending on whether they are qualified as supervised financial intermediaries or not. If this is the case, these norms directly influence their modus operandi. If, on the other hand, the guarantee institution is not recognised as a supervised financial intermediary, the influence of the norms is indirect, as they affect the technical characteristics of the guarantees issued by the scheme. However within the prudential supervisory, the Guarantee Institutions are subject to specific regulatory design with regard to minimum capital requirements, solvency ratio and transparency criteria, reflecting both international and national standards¹⁹.

- **Operational characteristics:** The first aspect of the operational characteristic relates to the types of services provided. Guarantee Institutions often combine their main service with complementary services to SMEs such as assistance in the preparation of accounting statements and information on financial market. The objective is to help improve SMEs’ capacity to interact with the financial system. They can also offer consultancy-type services, intended to assist SMEs in improving their competitiveness and productivity. These services include training programmes and assistance in the development of business plans. Moreover, guarantee systems can also differ according to the firms that are eligible for guarantees. In most cases, guarantees are issued only to firms below a given size threshold, as defined in terms of either sales or number of employees, although this threshold may then vary by sector and on whether the firms are active in international markets. In some cases, Guarantee Institutions combine their main guarantee services with a range of other

¹⁷ KPMG, (2011) and Pombo et al, (2015).

¹⁸ KPMG, (2011) and Pombo et al, (2015).

¹⁹ OECD, (2013).

financing support instruments, including risk capital, mezzanine capital, and support for internationalisation²⁰.

Another element distinguishing the operating aspects of Guarantee Institutions is how risk is managed. Risk management is extremely important for the sustainability, performance and impact of the different schemes, since it affects the incentives of borrowers and lenders and determines the incidence of moral hazard type behaviour. Key levers for guarantee risk management are the coverage ratio, the term of the guarantee (i.e. length) and pricing.

Indeed the pricing structure is crucial in this regard, as Guarantee Institutions generate revenue by charging fees for the provision of a loan guarantee, which also has an impact borrowers' incentives. Two common types of fees include up-front fees and annual fees, which often coexist. The former have the advantage of discouraging unqualified borrowers and ensuring that early defaulting borrowers contribute to the scheme. At the same time, up-front fees imply a higher financial burden for the user in the very first place²¹.

Figure 15: Key distinctive elements of different types of guarantee models.

| | | Examples |
|---------------------------------------|---|--|
| Funding | <ul style="list-style-type: none"> Guarantee systems can be directly funded by public authorities, by the private sector or receive funds from both sources Other sources include supra-national institutions such as the European Investment Fund, or, especially in developing countries, Non Governmental Organisations | <p style="text-align: center;">Poland </p> <p style="text-align: center;"><i>Funding comes both from the government and the European Institutions through development programmes like the SME Guarantee Facility</i></p> |
| Legal and regulatory framework | <ul style="list-style-type: none"> Guarantee systems are typically not-for-profit organisations to which specific regulatory systems apply. In some countries, profit oriented public or private-public schemes exist, which distribute returns only to their public shareholders Guarantee Institutions are subject to the control of the prudential supervisory authority depending on whether they are qualified as supervised financial intermediaries or not | <p style="text-align: center;">France </p> <p style="text-align: center;"><i>Different regulations apply to CGSs, depending on whether these are classified as "financial institutions" or "specialised financial institutions"</i></p> |
| Operational characteristics | <ul style="list-style-type: none"> Guarantee Institutions often combine their main services with complementary services to SMEs, such as assistance in the preparation of accounting statements and information about financial markets. Some CGS provide services to help improve SMEs' capacity to interact with the financial system Guarantee Institutions can request different types and amount of fees | <p style="text-align: center;">Austria </p> <p style="text-align: center;"><i>Austria Wirtschaftsservice (AWS) provides support to SMEs in the form of information, advisory and other services like the "Business Angel Network"</i></p> |

Source: KPMG elaboration.

2.1.1 A taxonomy

In light of the characteristics described in the previous paragraph, a taxonomy can be built by grouping guarantee schemes into three macro-categories²²:

- Public Guarantee models:** Public Guarantee models are created upon government initiative as a direct policy tool to alleviate financial distress by SMEs. These public models are widely adopted in relatively low-income economies. Guarantee Institutions are generally managed by government-related agencies, but guarantee services may also be provided in a decentralised manner, through the financial system, with little government intervention in terms of how the guarantee scheme is run. In other cases, public guarantee services are delivered through private legal entities which are

²⁰ KPMG, (2015) and OECD, (2013).

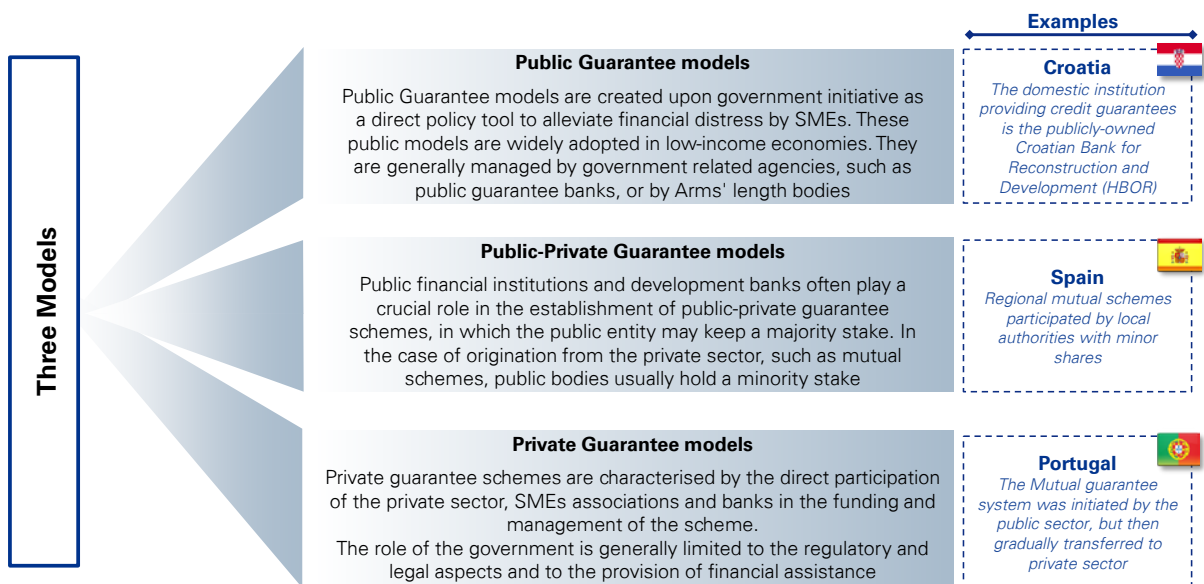
²¹ OECD, (2013).

²² KPMG, (2015).

set up by public initiative and are controlled by public entities (with majority stakes). Public institutions are less inclined to provide additional services and are supervised by public bodies.

- **Public-private Guarantee models:** in addition to central governments, public financial institutions, development banks or SME agencies often play a crucial role in the establishment of public-private guarantee schemes, in which the public entity may keep a majority stake. In the case of origination from the private sector, such as mutual schemes, public bodies usually hold a minority stake. As with the public scheme, the provision of complementary services is uncommon and public bodies supervise the guarantee institution.
- **Private Guarantee models:** private guarantee schemes are characterised by the direct participation of the private sector, SME organisations and banks in the funding and management of the scheme. The role of the government is generally limited to the regulatory and legal aspects and to the provision of financial assistance²³. In the private scheme, the activity of Guarantee Institutions is often directly monitored by the country's central bank and they offer a wide range of services in addition to guarantees.

Figure 16: Taxonomy of guarantee schemes.



Source: KPMG elaboration.

2.2 Constants vs variables

By analysing the different Guarantee models adopted across Europe **a few “constants” and “variables” can be isolated**, where constants represent common factors to most guarantee models, whereas variables are distinctive characteristics which define the peculiarities of different guarantee schemes and systems.

²³ OECD, (2013).

Figure 17: “Constants” and “variables” of guarantee schemes.



Source: KPMG elaboration.

Within the constants, widespread and constant public support (both at national and supranational level), an increase in the overall volume of guarantees thanks to the availability of Direct Guarantees, market-friendly mechanisms to distribute public funding, and the generation of financial additionality and economic additionality seem to characterise most of the guarantee models. In particular, in terms of extent and diffusion of public support, it can be noted that guarantee schemes expanded especially in the aftermath of the financial crisis, as a government policy response. In addition, concerning additionality matters, the positive effect in terms of economic additionality of guarantee programmes on the beneficiary firms can not only be observed but has also been demonstrated empirically²⁴.

By contrast, the “variables” are concerned with operational aspects, among which, the extent of economic and financial additionality generated, the pricing structure, and Guarantee Institutions’ closeness to and knowledge of the local economic environment. These are all aspects that can play a crucial role in affecting the guarantee market and potentially leading to market distortions. The operational aspects are mostly related to “go-to-market” strategies including the “distribution model”, the players involved in the guarantee chain, as well as regulatory constraints, legal forms and sources of funding for any entities issuing guarantees. The pricing structure is concerned with the different types and amount of fees requested by guarantors and the proportion of the loan they are able to guarantee. Finally, the extent to which Guarantee Institutions are embedded within the local economic environment is mainly related to their network activities (e.g. lobbying, training), their operational catchment (e.g. national, regional, municipal), as well as geographical and sectoral coverage.

2.3 How does an efficient guarantee models look like?

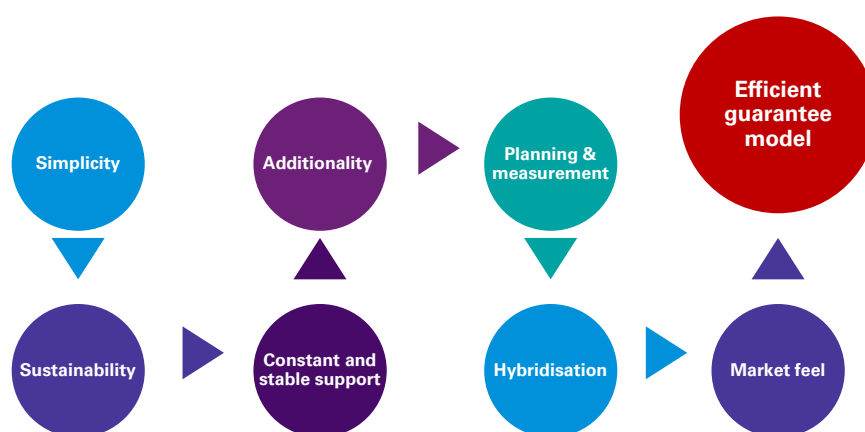
Pulling all information presented so far together, we can now look at the key characteristics of the ideal guarantee model.

²⁴ See in particular Asdrubali and Signore (2015) for more detail.

Indeed, it is important to look at “how” Guarantee Institutions’ support to SMEs is provided: guarantee models have to be designed in a way that they catalyse other sources of finance to the benefit of SMEs. Under a more fine-grained perspective, a number of essential “ingredients” can be identified, including:

- **simplicity**, which calls for well-defined roles among the players with few overlaps and clear separation of roles between players and sponsors;
- **sustainability**, meaning prevalence of simple and sustainable schemes that avoid duplication and financial support overlapping. In addition, the optimal size should be the closest to the one of the public body supporting the guarantor;
- **constant and stable support**. In such respect, the capitalisation mechanisms should focus on regular interventions. Without strong intervention on the capital structure, it is very difficult to generate and maintain growth;
- **additionality**, implying both financial additionality, relating directly to the rationale for developing or supporting guarantee schemes, and economic additionality, describing the effect of increased access to finance on the economy as a whole. Additionality as a fundamental feature of the model also implies a multiplier effect coming from the compound effect of public and private schemes;
- **planning and measurement**. The economic policy goals and investment priorities (e.g. innovation, research, IT, export) are selected and set at national level. An efficient guarantee model meets the need for constant and reliable assessment and monitoring of the economic and “wider” socio-economic impacts generated by the guarantee (e.g. Germany, Inmit Model 2009-2015²⁵);
- **hybridisation**: ongoing hybridisation of guarantee products towards patrimonialisation (e.g. equity and micro equity) and small financing (e.g. microcredit);
- **market feel**, meaning that players are oriented towards the creation of synergies in coordination with the sponsors and the other active stakeholders on the market.

Figure 18: Essential “ingredients” of the efficient guarantee model.



Source: KPMG elaboration.

²⁵ Schmidt, A.G., van Elkan, M., (2010). The Macroeconomic Benefits of German Guarantee Banks. Institut für Mittelstandswirtschaft an der Universität Trier (inmit).

Models which are the reflection of simplicity and of synergy with the pursued economic policy appear to be the most successful ones. Indeed, the “success” of guarantee schemes needs to be interpreted mainly as the ability of the market players to create synergies with both public and private financing instruments, with the final aim at improving SMEs access to finance.

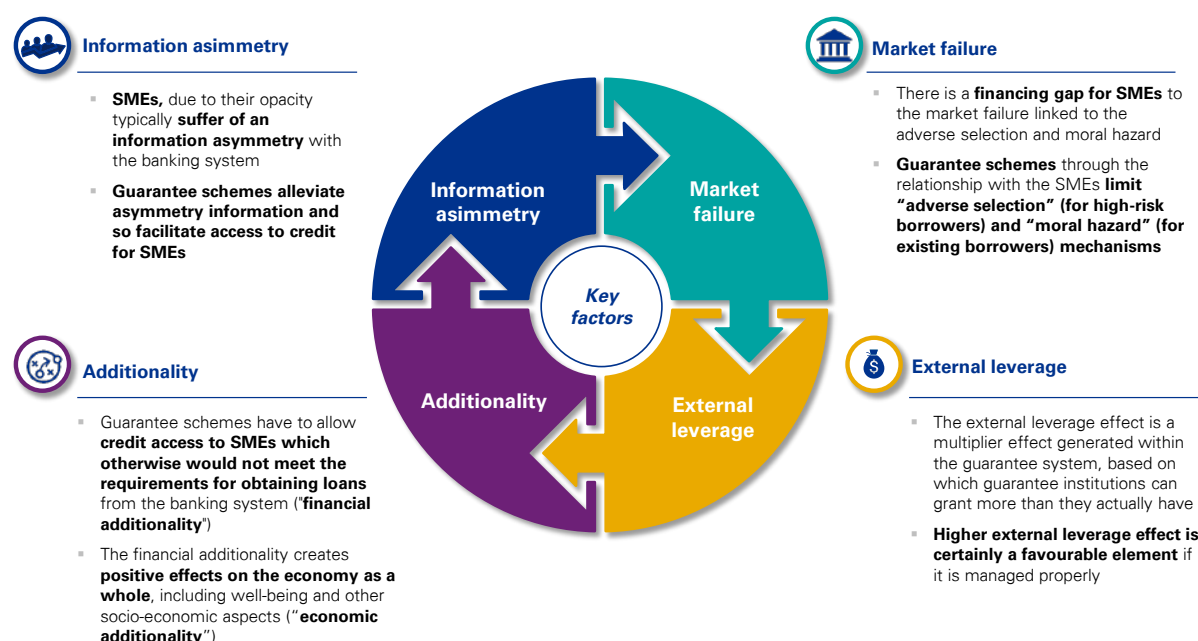
2.4 How can an efficient model fill the SMEs financing gap?

To evaluate how an efficient guarantee model can help fill the SMEs financing gap one needs to consider the combined effects of such model on a number of key issues:

- **Market failure:** As noted earlier (see section 1.2), in the area of access to finance for SMEs, a market imperfection/failure is observed not only during a deep recession or a financial crisis, but also on an on-going basis as a fundamental structural issue. This is due to several reasons, mainly relating to the disproportionality between the cost to assess the application for finance for a relatively small firm (which is independent of the size of the finance requested) and the potential revenue, which conversely, among other things, depends on the amount of the loan. Guarantee schemes are a commonly used response to such market failures experienced by SMEs, as guarantees reduce the risk of lenders and favour the provision of financing. Credit guarantee schemes” are used widely across economies as important tools to ease financial constraints for SMEs and start-ups” (OECD, 2013).
- **Information asymmetry:** Market failure is even reinforced in the presence of asymmetric information. Asymmetric information appears due to the information gap between lender and borrower; and the availability (and quality) of information about SMEs, combined with uncertainty, causes agency problems that affect lenders’ behaviour²⁶, eventually resulting into insufficient supply of credit. Information asymmetries may be mitigated when a strong relationship exists between lender and borrower. A close relationship with a lender makes the borrower well aware of what information needs to be provided, including the extent of collaterals required. In addition, it enables the lender to perform a sort of due diligence screening of the borrower’s credit worthiness. Concerning this, information asymmetries can even be reduced further when the borrower provides an institutional assessment or rating by an independent agency and the provision of collaterals, also in the form of a guarantee. At the same time, it can be understood that SMEs with a lack of collaterals and, by definition, without a track record, are the ones with the greatest degree of difficulty in accessing finance. Guarantee schemes are able to alleviate information asymmetry and thus facilitate SMEs access to credit.
- **Additionality:** to evaluate the correlation between the activity of Guarantee schemes and the economic value generated, it is essential to look at the so-called “financial additionality”, according to which Guarantee schemes are essential tools to allow credit access to SMEs which otherwise would not meet the requirements for obtaining loans from the banking system, thus creating positive effects on the economy as a whole, including well-being and other socio-economic aspects (“economic additionality”). Ultimately, the added value of a system devoted to improving SMEs access to credit relies on the ability of its players to generate both financial additionality and economic additionality (see section 1.4).
- **External leverage:** The external leverage effect is a multiplier effect generated within the guarantee system, based on which Guarantee Institutions can grant more than they actually have. If managed properly, higher external leverage effect is certainly a plus of guarantee schemes (see section 3.3).

²⁶ See Akerlof (1970); Jaffee and Russell (1976); Stiglitz and Weiss (1981); Arrow (1985); Kraemer-Eis et al. (2015).

Figure 19: Key elements of how an efficient model can fill the SMEs financing gap.



Source: KPMG elaboration on ECB data.

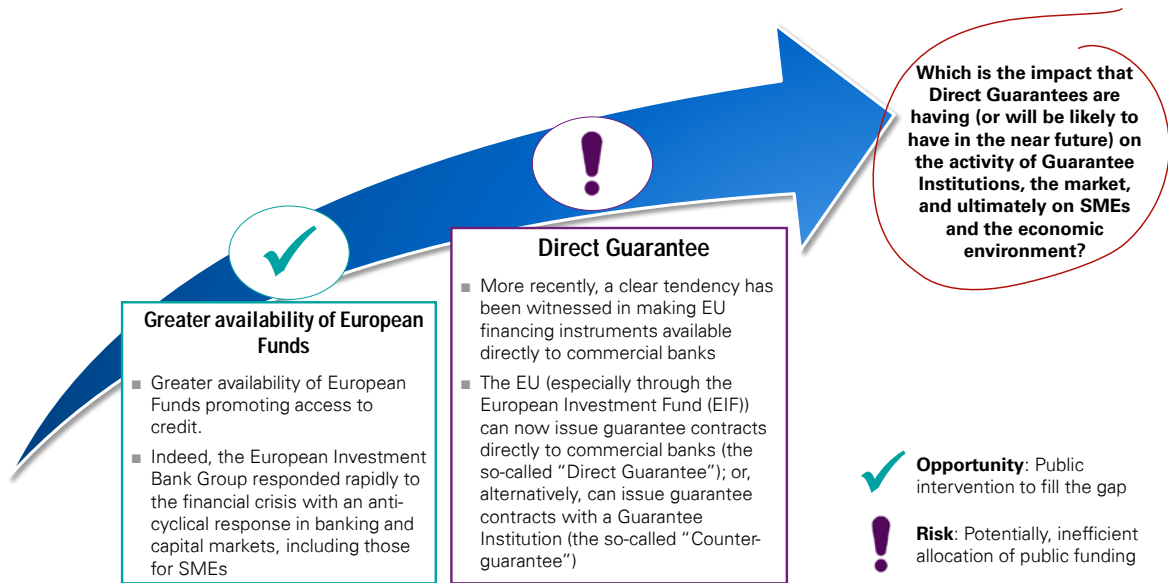
2.5 Key changes to the Guarantee System

The most striking changes occurred in the last few decades which might have/have had an impact on the Guarantee system, therefore on the activity of Guarantee Institutions, are as follows:

- the **increasing role** that **EU Institutions** play in providing **Financial Institutions with public money** available for granting credit to SMEs, meaning more public funds are available to improve SMEs financing;
- **a greater openness of EU Institutions towards the signature of guarantee contracts** directly in favour of more traditional financing channels, such as commercial banks.

The compound effect of these two changes appear to generate unintended consequences on the Guarantee market, and, ultimately, on the activity of Guarantee Institutions. The key point relies, in fact, on how public money are channelled through to the final recipients, SMEs, and on clearly identifying the key players within the market by distinguishing them from the tools and instruments which are the “sponsors” providing the means for SMEs financing. To understand both this issues, a more comprehensive analysis is needed on the added value that Guarantee Institutions bring about as well as of the rationale underlying their role as the most suited institutions to provide SMEs with financing. In addition, the potential distortionary effects that an increase in the number of Direct Guarantees might generate needs to be carefully investigated. An in-depth analysis of both these issues is provided in the following Sections.

Figure 20: Summary of key changes to the Guarantee System.



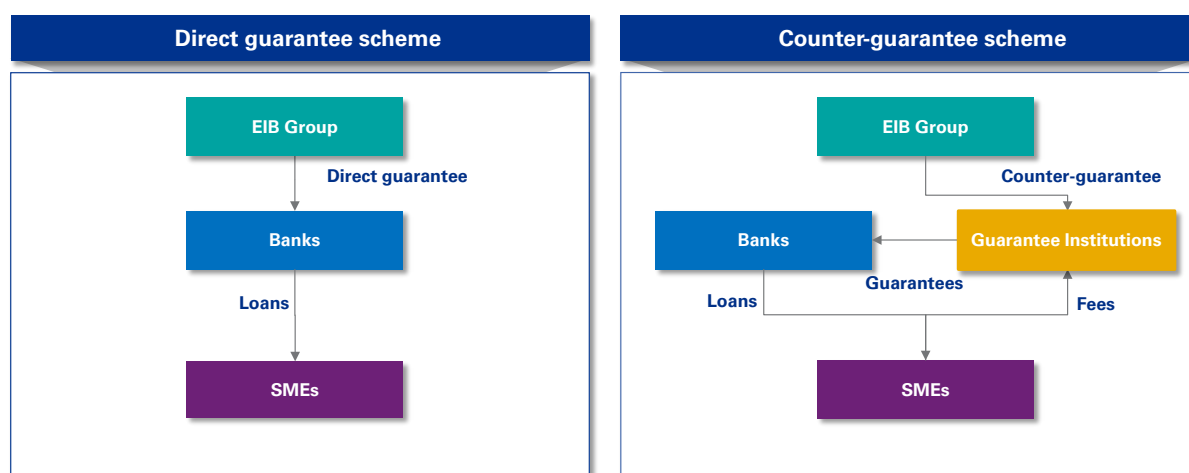
Source: KPMG elaboration.

3 “Direct Guarantees” vs “Counter-guarantees”: potential effects of Direct Guarantees on the market and on Guarantee Institutions



In order to understand the different value-adding potential of Direct Guarantee schemes vs the Counter-guarantee schemes, it should be noted that the difference between these two schemes is first of all related to the number of parties/players involved in the guarantee scheme. In particular, Counter-guarantee model of guarantees distribution involves at least four parties, as already mentioned in section 1.3.1. The Guarantee Institution often receives a national Counter-guarantee or/ and grants a Counter-guarantee to a Guarantee Institution that grants a guarantee so that in many cases even more entities are involved. Conversely, Direct Guarantee model of guarantees distribution involves only three parties. Thus, what essentially distinguishes Counter-guarantee schemes from Direct Guarantee schemes is the presence of an additional player (i.e. the Guarantee Institutions) which acts as an intermediate link between banks and SMEs that have economically sound investment projects, but do not dispose of sufficient collateral, and therefore cannot get access to finance, or, if they do, finance is not sufficient. A guarantee provided by a Guarantee Institutions on behalf of SMEs to the bank replaces this missing collateral and enables the bank to grant the loan.

Figure 21: Structure of the Counter-guarantee scheme vs Direct Guarantee scheme.



Source: KPMG elaboration.

Does the presence of an additional player in the Counter-guarantee scheme enhance the creation of more value and activate synergies among the main private and public players involved? Or can such presence end up increasing complexity and generating confusion among the different players?

Despite their policy relevance, these questions still first need to be answered, and are therefore addressed in more detail in the following sections.

3.1 Value added generated by Guarantee Institutions to SMEs

Prior to the assessment of the advantages of the Counter-guarantee scheme as compared to the Direct Guarantee scheme, and in order to isolate the potential effects of Direct Guarantees on the market, one has first to analyse the added value that Guarantee Institutions bring about and why they are believed to be the most suited institutions to provide SMEs with financing also in time of crisis. Concerning such issues, there is wide agreement (both in empirical studies and in the literature) that the fundamental advantages brought by Guarantee Institutions include at least the following:

- **reduce informational asymmetries between agents:** when a firm requests a loan for a sound project but is unable to meet the collateral requirements of the bank, the presence of a Guarantee Institution can facilitate credit granting to the firm by reducing the information asymmetries between the latter and the bank. Indeed, the presence of the Guarantee Institution can activate virtuous cycle whereby a learning process takes place between lenders (i.e. banks) and borrowers (i.e. firms). Lenders discover that borrowers benefiting from the guarantee are not as risky and unprofitable as initially expected and therefore are more inclined to grant credit to the borrowing

firms²⁷. In essence, Guarantee Institutions, on the side of SMEs, facilitate a proper assessment of the borrowing firm's intangible and qualitative elements (experience, training, skills, business and technical value of the project, ability to fulfil the business plan etc.) in the risk assessment of loan applications. Guarantee Institutions have deep knowledge of the local market, are able to thoroughly assess SMEs needs for financing and their "ability" to re-pay the loan, and, in some cases, to support them through advisory services that increase their "transparency" towards the banks. On the other hand, on the side of the lending bank, Guarantee Institutions provide additional qualitative information which completes the strictly "financially-oriented" analysis carried out by the bank, allowing the latter to further improve its risk assessment at no cost. It must also be noted that informational asymmetries between lenders (e.g. banks, Guarantee Institutions) and SMEs borrowers have been exacerbated by the financial crisis. Micro and SMEs in many cases are not "financially-savvy" enough to convince banks they are able to repay the loan or to fulfil the minimum requirements. Because of that, on one hand, banks tend not to finance SMEs who would really be in need of financing, either for survival or for making investments and grow their business; and these SMEs will also tend to be those classified as "high-risk borrowers". Additionally, banks see their relationship with Guarantee Institutions as key; indeed, in most cases, the banking system has the right incentives to recognise the role of Guarantee Institutions and create synergies with them; and not only because of their role as guarantors, but also because, thanks to their relationships and knowledge of the local market, they are able to bridge the information gap (and the trust gap) which characterise the relationship between banks and SMEs;

- **limit "adverse selection"** (for high-risk borrowers) **and "moral hazard"** (for existing borrowers) mechanisms: as a consequence of informational asymmetries reduction between firms and banks, Guarantee Institutions can also contribute to reduce moral hazard and adverse selection problems. These Institutions typically evaluate borrowing SMEs carefully and can thus act as a screening device by providing a positive signal to lenders regarding their credit quality and thereby reducing moral hazard and adverse selection (the latter related to the fact that, with information asymmetries being present, higher interest rates attract riskier borrowers, which can result in credit rationing)²⁸. It follows that, if Guarantee Institutions deny the request for guarantee, banks are very unlikely to issue the loan or they tend to impose stricter conditions, by means, for example, of higher interest rates or even requiring further guarantees. Conversely, thanks to the role played by Guarantee Institutions, more credit is made available and at better conditions, a higher number of SMEs are able to obtain credit, and adverse selection mechanisms (leading to the attraction of high risk borrowers) are potentially limited;
- **full coverage of the whole market**, i.e. no market distortion between banks. Independently of their geographical scope (i.e. either regional or national), Guarantee Institutions are able to provide banks with full coverage of the whole market acting together with banks and helping prevent potential distortions in intra-banks competition. Indeed, if more banks are serving the same market but only some of them can contract a Direct Guarantee agreement with the EIB Group, such banks need to request less collateral from the borrowers, which potentially distorts competition given the possibility for a restricted number of banks to make their claims directly against the EIB Group, should the borrower default. Thus, the question arises as whether all bank "types" are eligible to contract a Direct Guarantee with the EIB Group or rather only specific types (in terms of size and/or proximity to the local SMEs market) are allowed;
- **offer a wider range of products**, supporting SMEs properly, also through advisory services. Partly related to the role of Guarantee Institutions in preventing potential distortions of competition, is the

²⁷ This effect has been particularly investigated by Meyer and Nagarajan (1996).

²⁸ On adverse selection issues related to asymmetric information see Jaffee and Russell (1976) and Stiglitz and Weiss (1981).

possibility to offer a wide range of services to a larger array of beneficiaries across sectors must be taken into account. This comes from eliminating direct competition with commercial banks;

- **higher reduction of the interest rates for SMEs**, based on the direct experience of AECM Members in some countries, banks, in case of Direct Guarantees, tend to support SMEs with a reduction in collateral requirements but only with a small reduction in interest rates. Conversely, in case of guarantee issued by Guarantee Institutions, on average, the reduction in interest rates is greater than in the former case;
- **Guarantee Institutions continue their activities also in time of crisis**, when they are even more needed. Indeed, in a slow-growth period, demand for guarantees increases and Guarantee Institutions can provide effective support to SMEs, thereby contributing to value added creation and efficient use of taxpayers money;
- **fill the financing gap**, working as wealth-pooling mechanism. As argued earlier, one of the main rationale for the presence of Guarantee Institutions lies in the inefficiencies created by adverse selection, when borrowers do not have enough collateralisable wealth to satisfy collateral requirements and induce self-selecting contracts. In this setting, Guarantee Institutions can act as a wealth-pooling mechanism that allows to finance borrowers who, alternatively, would not have obtained credit. Indeed, when becoming member of a Guarantee Institution, the “good” borrower can more easily gain access to the credit market, whereas the probability of not obtaining credit is reduced. The opposite occurs for “bad” borrowers pooling their wealth in the Guarantee Institution. This means that Guarantee Institutions eventually act as a sorting device between “good” and “bad” borrowers²⁹.

In light of the value-adding potential of Guarantee Institutions, which strictly depends on the factors and reasons stated above, the risk of jeopardising or crowding out Guarantee Institutions should be prevented and the role of the latter preserved.

3.2 Advantages of Counter-guarantees

Looking at the specific advantages of Counter-guarantees besides those to SMEs, a number of factors can be identified both for commercial banks and for Guarantee Institutions.

With regard to advantages for **commercial banks**, it is important to highlight the following:

- an increase in the volume of credit issued after benefitting from guarantee coverage;
- a selection and short-list of “more deserving” SMEs carried out directly by the Guarantee Institutions, thus enlightening the operational burden for the bank and speeding up the process;
- a decrease in the number of non-performing loans;
- a reduction in capital adequacy needs (to a potentially greater extent than in Counter-guarantee, as shown in one of the analysed case studies);
- the easing of overall operational activities (e.g. paperwork, application, issue of the guarantee).

²⁹ See Busetta and Zazzaro (2006).

As far as the advantages to the **Guarantee Institutions** are concerned, a few aspects can be considered, including the following:

- an increase in the capital of Guarantee Institutions which can be freed-up, hence increasing “issuable” guarantees;
- Guarantee Institutions serve all SMEs within a Region or a Country, whereas banks are able to reach out to a more limited clients portfolio;
- a deeper knowledge of the market and of SMEs, thanks to a larger customer base and the experience in the decision making process usually accumulated by Member of Guarantee Institutions as entrepreneurs or representatives of SMEs;
- a targeted assistance and support to the SMEs;
- loss coverage.

3.3 Distortionary effects

If several advantages for both commercial banks and Guarantee Institutions can be related to the use of Counter-guarantee schemes, on the other side a number of potential distortionary effects can similarly be identified in case of an increase in the number of issued Direct Guarantees. Such potential effects are generated along the value chain among the different players in the guarantee market and mostly include the following:

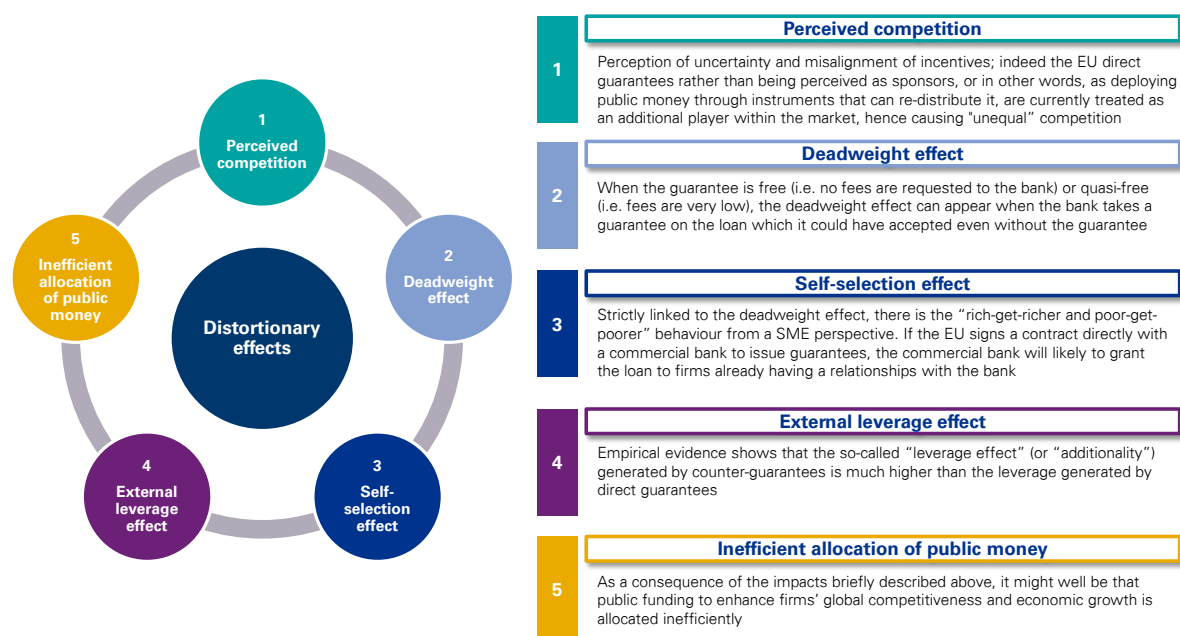
- perceived competition;
- deadweight effect;
- self-selection effect;
- external leverage effect;
- inefficient allocation of public money.

The distortionary effects mainly derive from the conditions of Direct Guarantee agreements which make them very attractive to banks. In detail, when EU Institutions (i.e. EIF) sign contracts directly with banks, guarantees are provided:

- at no fee for the banks or quasi-free (i.e. fees are very low);
- in a systematic and automatic way without processing delay;
- at AAA rating.

In the following paragraphs, each effect is illustrated in more detail.

Figure 22: Overview of potential distortionary effects associated to an increase in the number of Direct Guarantees.

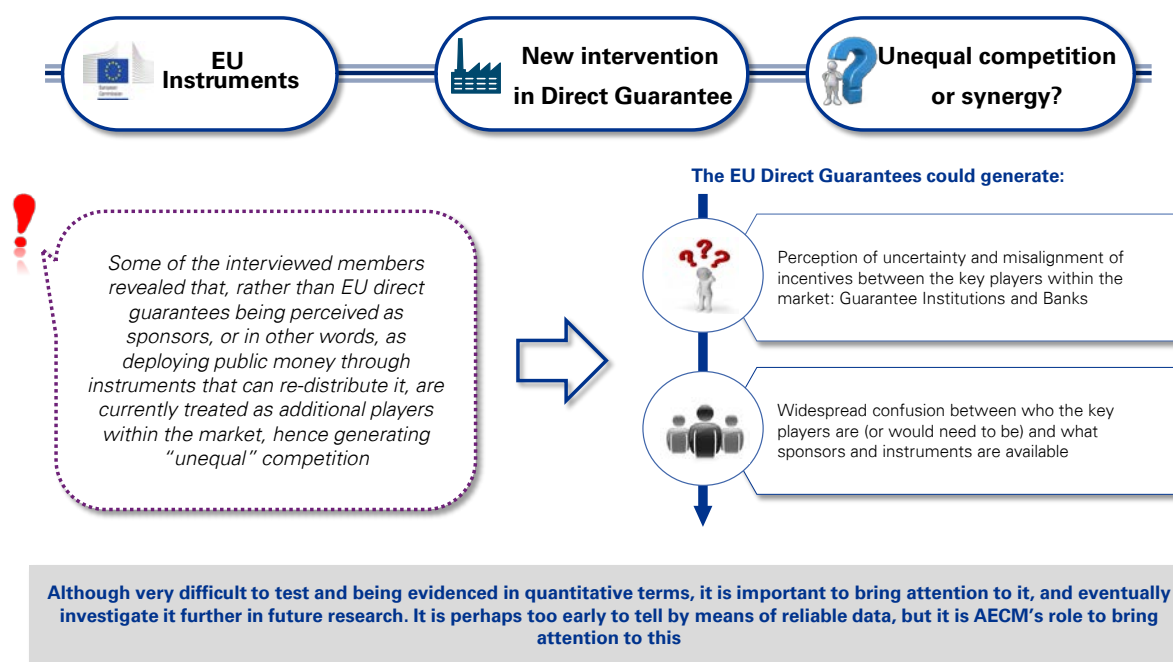


Source: KPMG elaboration.

3.3.1 Perceived competition

Direct experience and interviews with key players and AECM members show that the first effect that EU Direct Guarantees might have on the guarantee market is a perception of uncertainty and misalignment of incentives between the key players within the market, namely Guarantee Institutions and Banks. As a consequence, a further distortion emerges consisting in a "confusion effect" which stems from the difficulty to distinguish the role of each player along the value chain, i.e. from widespread confusion between who the key players are (or would need to be) and what sponsors and instruments are available. Such effect is grounded in the interviews conducted with some of AECM members. Indeed, the interviewed members revealed that, rather than EU Direct Guarantees being perceived as sponsors or, in other words, as deploying public money through instruments that can re-distribute it, Direct Guarantee schemes are currently treated as "an additional player" within the guarantee market, hence generating "unequal" competition. Although very difficult to test and being evidenced in quantitative terms, it is important to bring attention to it, and eventually investigate it further in future research. It is perhaps too early to tell by means of reliable data, but it is AECM's role to bring attention to this. Coherently with AECM's institutional role, such impacts are therefore highlighted in this Study even to prevent a potential risk of triggering the trend towards jeopardising or even crowding out Guarantee Institutions. As an example, consider the case of one AECM member that was forced to cancel the plan to join Horizon 2020, once two big banks were granted Direct Guarantees from the EIF, which are free of charge and state-aid free, thus eventually crowding out the AECM Member.

Figure 23: Distortionary effect: perceived competition.



Source: KPMG elaboration.

3.3.2 Deadweight effect

One of the key impacts associated to the great use of Direct Guarantee schemes vs Counter-guarantee schemes is the so-called "deadweight effect", according to which particularly favourable conditions applied by EU to commercial banks when issuing funding for Direct Guarantee (e.g. the cost of the guarantee itself) provide an incentive for banks to use the guarantee even when unnecessary. When the guarantee is free (i.e. no fees are requested to the bank) or quasi-free (i.e. fees are very low), the deadweight effect emerges when the bank takes a guarantee on the loan which it could have accepted even without the guarantee, therefore with no additionality being generated. Thus, in general, a deadweight effect is produced any time there are forms of public support distributed by commercial actors which are cost-free and non-discriminating on the profile of beneficiaries such that a large part of the support is ultimately granted to beneficiaries which do not need it. Three main motives could lead to this deadweight effect:

- to **reduce capital adequacy needs**: a motivation made even more relevant in the aftermath of the financial crisis and in light of the new tighten capital requirement for banks;
- to **replace available securities for commercial reasons**: one reason that could induce banks to take a guarantee on the loan which it could have accepted even without the guarantee is to replace available securities for commercial reasons, or to increase the attractiveness of their commercial offer to the customers, compared to that of other competitors banks, by reducing the nature and value of traditional securities requested to borrowers;
- **operational reasons and advantages.**

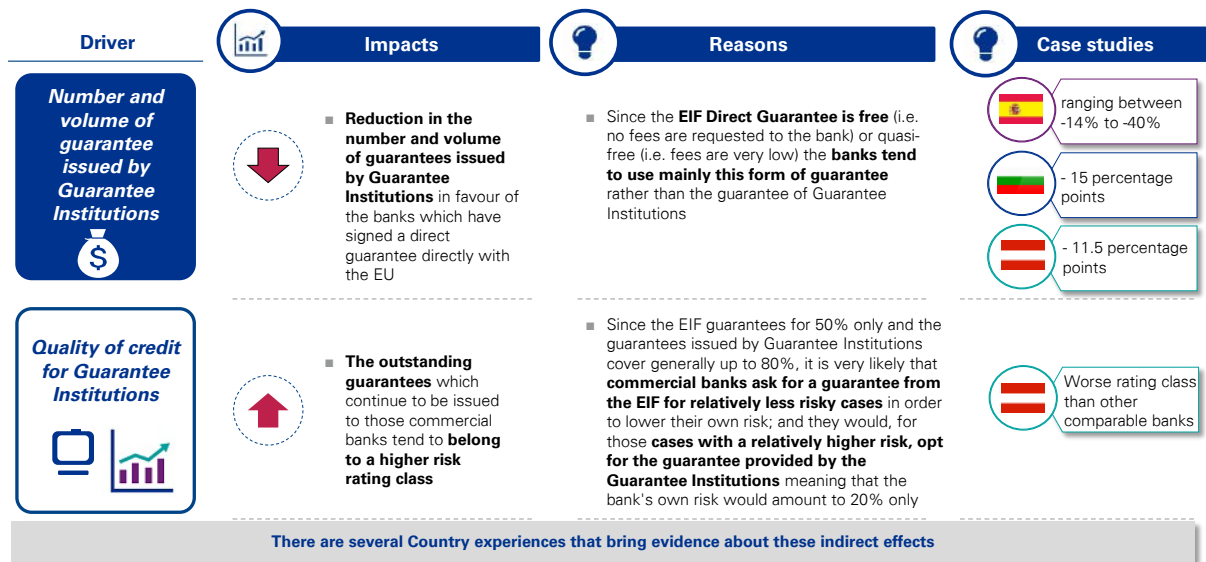
The deadweight effect has two important indirect effects, as shown by the case studies analysed, with regard to the experience of Austria, Bulgaria, Spain and Italy:

- an effect on the number and volume of guarantees (up to 40% reduction in some cases analysed in the Study) issued in favour of the banks which have signed a Direct Guarantee directly with the EU;

- an effect on the quality of credit, meaning that the outstanding guarantees which continue to be issued to those commercial banks tend to belong to a higher risk rating class. It can be inferred that those commercial banks would be willing to collaborate with the guarantee institution only for riskier cases.

Clearly, the deadweight effect cancels out the “win-win” situation which, theoretically, should characterise the relationship between banks and Guarantee Institutions, providing them with the right incentives to issue Counter-guarantee, and also being able to free capital for other activities.

Figure 24: Indirect effects associated to the deadweight effect.

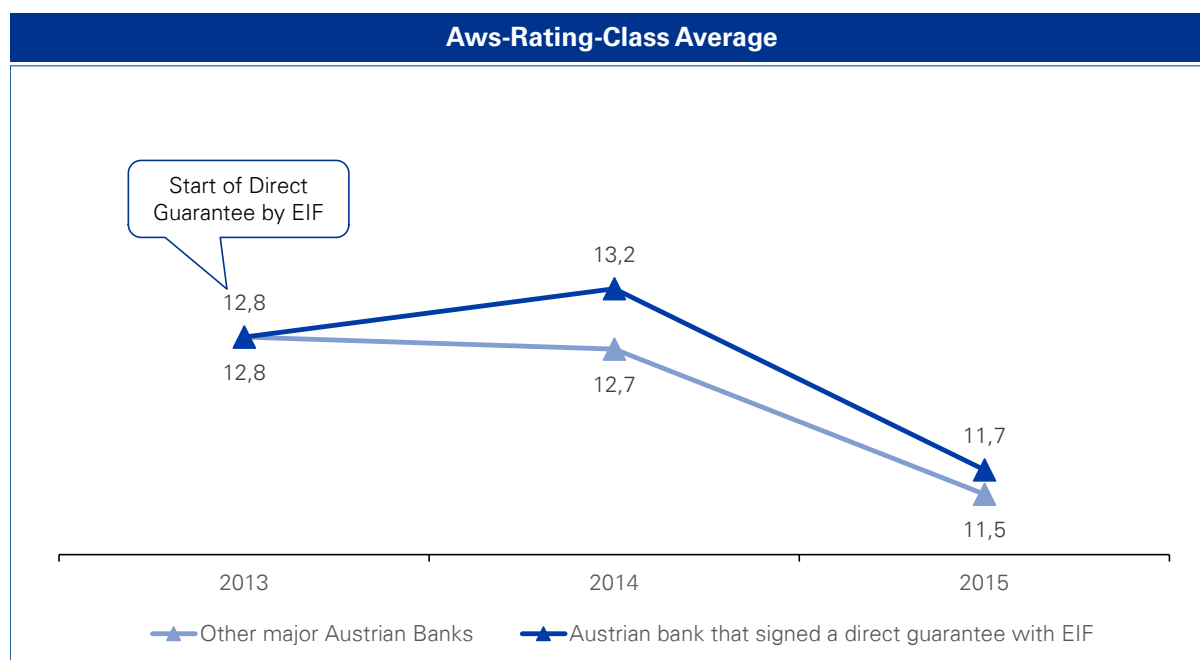


Source: KPMG elaboration.

Evidence on the deadweight effect is also provided by some of the case studies taken into account, especially those of Spain, Austria, Bulgaria and Czech Republic.

In particular, the Spain Case Study demonstrates, with reference to the Direct Guarantee and growth-sustaining program named “*Iniciativa Pyme*,” that banks mostly used the program to cover existing SMEs risks through the EIF guarantee, without creating any additionality. Moreover, the Austrian case study illustrates the indirect impact of the deadweight effect on the quality of credit: the average rating class of the guarantees provided by the Austrian Guarantee Institutions in favour of one Austrian bank, which had signed a Direct Guarantee contract with the EIF, had been worse than the other comparable Austrian banks since the end of 2013, when that bank started to benefit from the Direct Guarantee provided by EIF through the “RSI guarantees” program (as shown in Figure 25 below, where 1 is the lowest risk class and 24 is the highest risk class).

Figure 25: AWS Rating Class Average.



Source: Austrian AECM's member Austria Wirtschaftsservice (AWS).

The Direct Guarantee of EIF to that Austrian bank also had a significant effect on AWS' guarantee business with the bank. In fact, total new guarantees granted by AWS experienced a fall of 11.5 percentage points in the period 2013-15, shifting from 20.5% in 2013 to 9% in 2015 (see Figure 26).

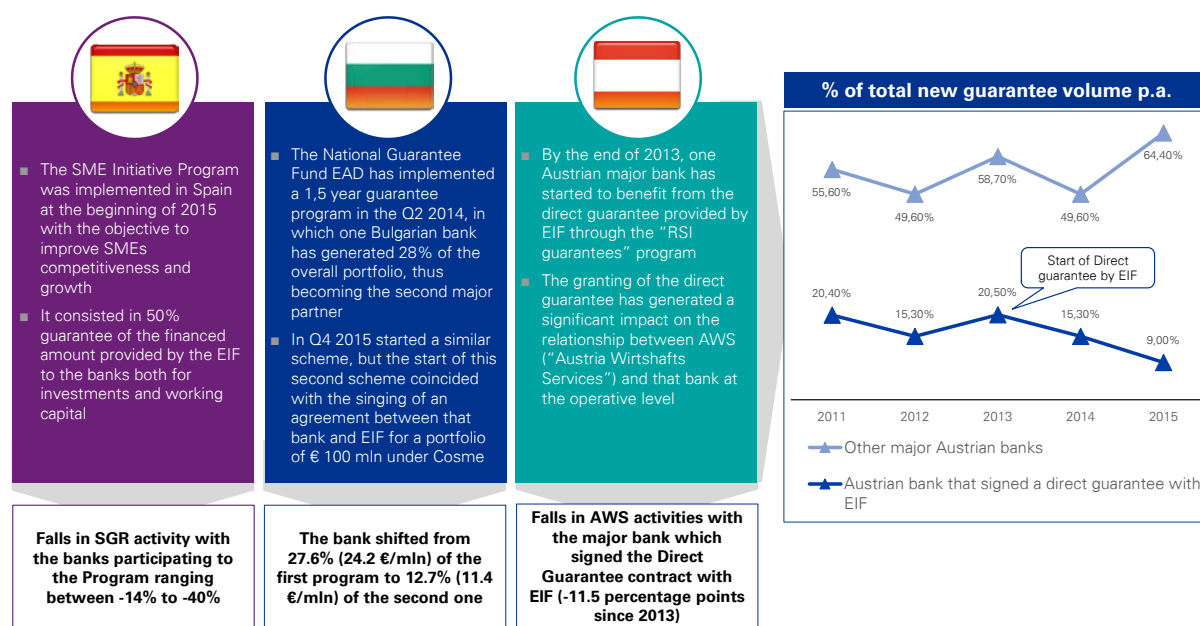
Moreover, the Bulgarian Case Study refers to The National Guarantee Fund EAD implementation of a one year and a half guarantee program in Q2 2014, in which one Bulgarian bank generated 28% of the overall portfolio, thus becoming the second major partner. In Q4 2015 a similar scheme started, but this coincided with the signing of an agreement between that bank and EIF for a portfolio of 100 €/mln under COSME. The consequence is that the bank shifted from 27.6% (24.4 €/mln) of the first program to 12.7% (11.4 €/mln) of the second one³⁰, which provides us with evidence of the second indirect impact linked to the deadweight effect, concerning the reduction in the number and volume of guarantees issued by Guarantee Institutions.

Furthermore, in Spain, since the beginning of 2015, at the start of the SME Initiative Program, Guarantee Institutions ("*Las Sociedades de Garantía Recíproca*" – SGR) experienced a fall in the activity related to the banks participating to the Program (ranging between -14% to -40% - see Figure 26).

Worth mentioning the case of Czech Republic too, where one Czech Republic bank signed a Direct Guarantee contract with the EIF in 2016, covering 60 €/mln of loans in the year so far (at the end of September 2016). In fact, in 2016 no guarantee has yet been issued by Guarantee Institutions to that bank, whereas in 2015 the amount of guarantees reached 0.52 €/mln.

³⁰ Data as of 30.06.2016.

Figure 26: Evidence of the deadweight effect: number and volume of guarantee issued by Guarantee Institutions in Spain, Bulgaria and Austria Case Studies.



Source: KPMG elaboration on data from AECM Members.

3.3.3 Self-selection effect

Strictly intertwined with the deadweight effect (and with the consequential limitations to the creation of financial additionality), is the "rich-get-richer and poor-get-poorer" from a SMEs' perspective. There is preliminary evidence coming from the guarantors' experience that if the EU signs a contract directly with a commercial bank to issue guarantees, the commercial bank is likely to grant a large proportion of loan to firms already having a relationships with the bank, and which would have had anyway access to finance through the bank, taking advantage of other instruments. Empirical evidence (see Spain Case Study mentioned above) shows that commercial banks use Direct Guarantees on loans granted to firms that already have a relationship with the bank in order to reduce capital adequacy needs. Therefore, there might be a distortionary selection, implying that "disadvantaged SMEs" (i.e. those struggling to obtain credit, typically micro enterprises or single entrepreneurs, start-ups or innovation companies) are being left out.

3.3.4 External leverage effect

Empirical evidence (as also shown by the Italian and the Spanish case studies) shows that the so-called "external leverage effect" generated by Counter-guarantees is particularly significant. The external leverage effect is an effect generated within the guarantee system, based on which Guarantee Institutions can grant more than they actually have, because they have to pay for the actual amount granted to SMEs if and only if SMEs do not pay their debts back to financing banks. Calculated as the ratio between the outstanding loans guaranteed to the underlying own funds of the guarantee scheme, the extent of the external leverage effect depends on whether credit is short-term or long-term credit, and it is certainly a favourable element if and only if it is managed properly.

However, the external leverage effect represents part of the "multiplier effect" generated in the economy. Indeed, the *multiplier effect* for the European fund is the ratio between total investment and EFSI contribution, and it is the result of two combining effects:

- **internal leverage effect.** The initial investment of the EFSI provides partial risk protection (a 'first loss guarantee') to the EIB and EIF, which should enable them to finance three times the initial amount by issuing bonds;

- **external leverage effect.** The EIB investment should help improve investors confidence and encourage private investors to invest five times that amount.

The internal leverage effect is the same across all Financial Instruments, whereas the external leverage effect could vary; in this Study, therefore, we focus on the latter. It is important to note that the estimates reported here are computed using a different method as compared to that adopted by the European Commission³¹ and the EIF to estimate the multiplier effect generated by guarantees. Since two different methodologies are used, estimates are not directly comparable.

As explained in this Study, the value chain of Direct Guarantees is the result of the guarantee activity of one single player, namely the bank, taking advantage of a single guarantee instrument, namely the EU scheme. As such, SMEs guarantees can be a source of funding or regulatory capital relief, which in turn generates leverage into the economy, thanks to the investments that SMEs can make, generating economic value into the local and national economy. However, the value chain of Counter-guarantees implies that an additional player, the Guarantee Institutions, takes a role in guaranteeing for the SMEs on the loan they take with the commercial bank, ensuring also a higher capital relief for banks (for instance, in Italy the capital relief for banks is 56% higher in case of Counter-guarantees than in the case of Direct Guarantees). Indeed, the value chain of Counter-guarantees implies that both players can benefit from funding or capital relief: leverage is generated both from the bank and the guarantors; together with the “catalytic effect” born by SMEs investments into the economy, this can translate into a much higher economic additionality.

For instance, a good example is given by the effect that can be observed in countries like Italy and Spain. Since not enough data is yet available on the effects that EU financing programmes 2014-2020 through Direct Guarantees are having on Guarantee Institutions (it is just too early to tell) the estimation is focused only on the external leverage generated by Counter-guarantees. It can be estimated that the external leverage effect generated by Guarantee Institutions in countries such as Spain and Italy can range between 12.5 euros (Spain) and 13.3 euros (Italy) every 1 euro Counter-guaranteed by Guarantee Institutions.³² To estimate the multiplier effect it is necessary to multiply the internal leverage effect (generated within the EU Institutions and equals to 3x³³) with the external leverage effect estimated (i.e. in Italy is almost 40x (=3x*13,3x), whereas in Spain is 37,5x (=3x*12,5x)).

Figure 27. External leverage of Counter-guarantee in Spain



Source: Cesgar (Confederación Española de Sociedades de Garantía Recíproca) and Afi (Analistas Financieros Internacionales), 2012

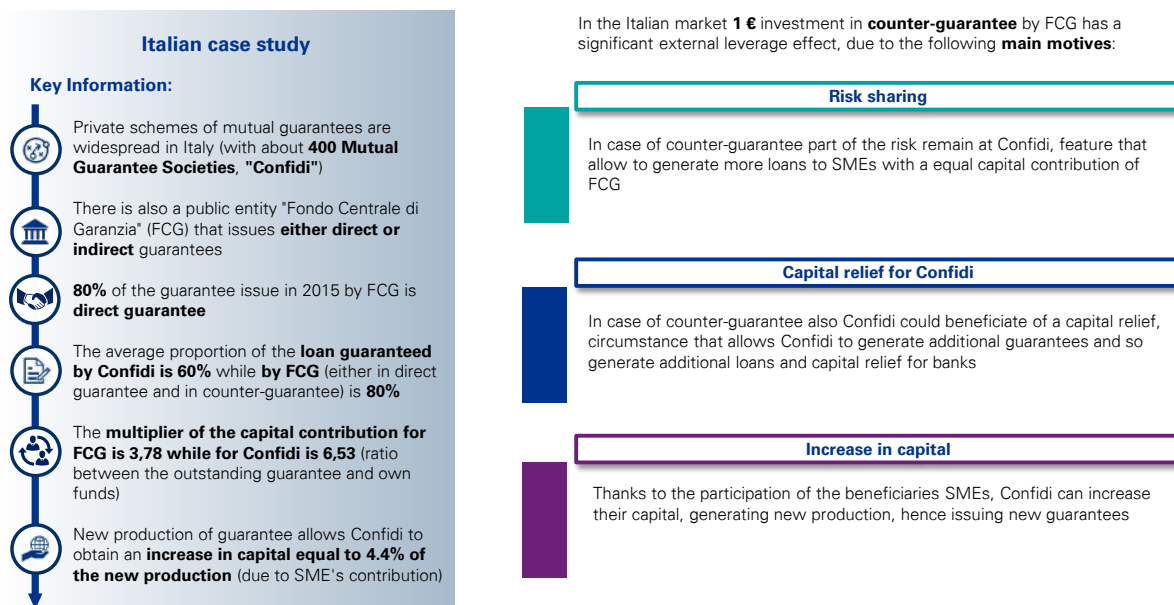
³¹ Source: COM(2014) 903 final, "An investment Plan for Europe"

³² Cesgar (Confederación Española de Sociedades de Garantía Recíproca) and Afi (Analistas Financieros Internacionales), 2012. According to the data provided by CESGAR for the Spanish Case Study, the external leverage effect is higher than the one reported here (and equal to X 37.5). This difference is mainly due to the effect of the national counter-guarantee (CERSA, in the case of Spain) which guarantees for the Guarantee Institution (such as SGR, in the case of Spain). Therefore, this external leverage effect is possible due to the risk sharing model among the Guarantee Institutions, the national counter-guarantee public company (CERSA) and its counter-guarantee agreement with EIF.

³³ Source: COM(2014) 903 final, "An investment Plan for Europe"

As far as the Italian case is concerned, a theoretical model has been implemented, looking at the main characteristics of the Italian guarantee market, hence allowing estimation of the external leverage in the case of Counter-guarantee (X13.3)³⁴.

Figure 28. Italian case study. Main motives for a significant external leverage effect in case of Counter-guarantee.



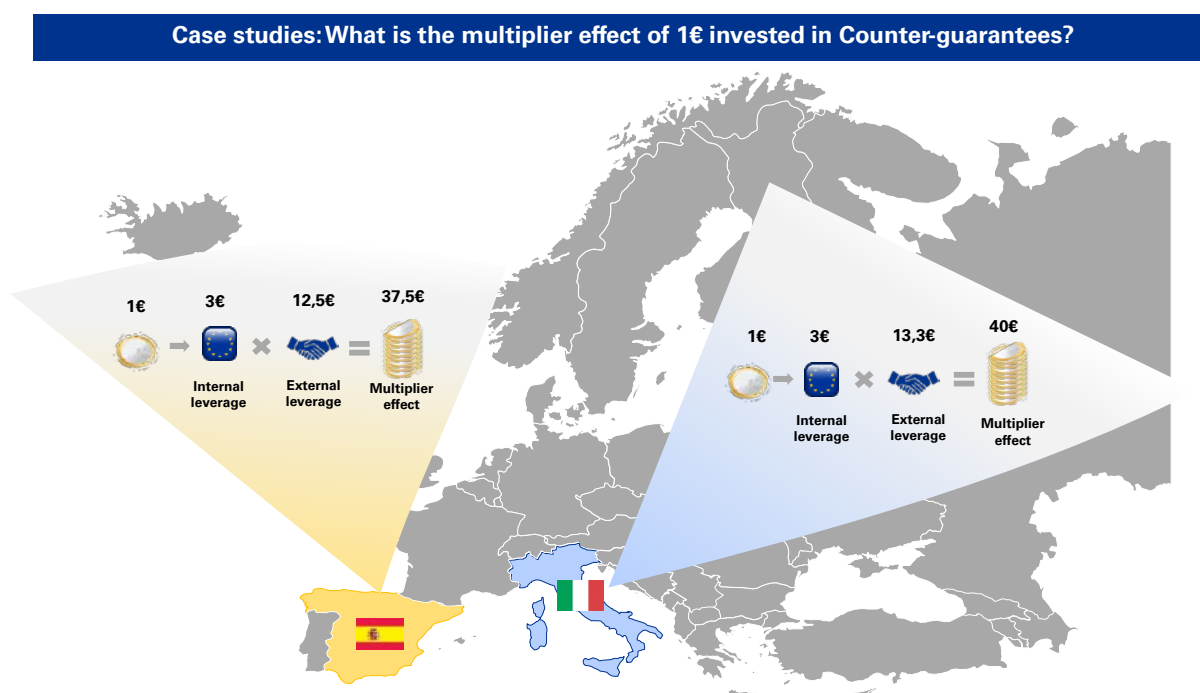
Source: KPMG elaboration.

It is straightforward to see that a combination of private and public schemes might thus be more efficient and beneficial to the economy than a private only or public only scheme, also because of the added value also thanks to their ability of boosting capital flows during downturns. In other words, synergies between public and private players generate both financial and economic additionality. It is important to note that the estimates reported here are computed using a different method as compared to that adopted by the European Commission³⁵ and the EIF to estimate the multiplier effect generated by guarantees. Since two different methodologies are used, estimates are not directly comparable.

³⁴ More details about the calculations are available upon request.

³⁵ Source: COM(2014) 903 final, "An investment Plan for Europe".

Figure 29: Spain and Italy case studies

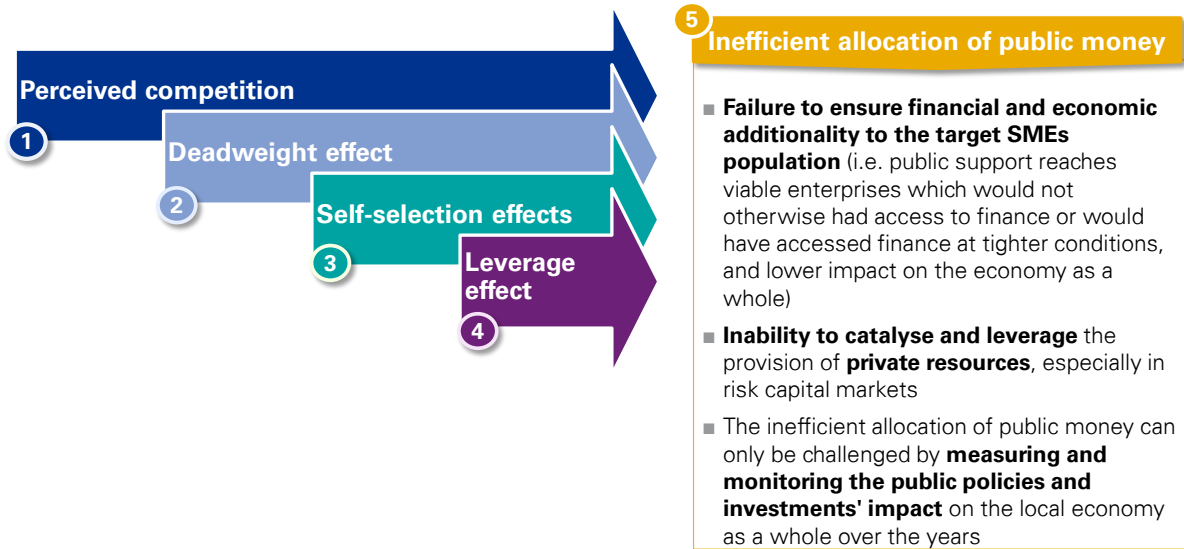


Source: Cesgar (Confederación Española de Sociedades de Garantía Recíproca) and Afi (Analistas Financieros Internacionales), 2012; KPMG elaboration.

3.3.5 Inefficient allocation of public money

As a consequence of the impacts briefly described above, it might well be that public funding to enhance firms' global competitiveness and economic growth is allocated inefficiently. If this holds true, policy responses and the foundation for Guarantee Institutions might fail the rationale behind their activities. Far from being straightforward to be measured, the inefficient allocation of public money can only be challenged by measuring and monitoring the impact that public policies and investment can have on the local economy as a whole over the years. Since public programmes for SMEs should help catalyse and leverage the provision of private resources, especially in risky capital markets, a public scheme can be successful if and only if the design of public policy and programmes to enhance SMEs access to finance can ensure both financial and economic additionality by paying attention to the targeted SMEs population, eligibility criteria, credit risk management and fees structure. This means, on one hand, in terms of financial additionality, that public support is able to reach viable enterprises which would have not otherwise had accessed to finance or would have accessed finance at tighter conditions, such as higher financing costs or shorter debt maturity; on the other hand, with reference to economic additionality, public intervention should prove capable to produce a net positive impact on the economy as a whole.

Figure 30: Distortionary effects: overview



Source: KPMG elaboration.

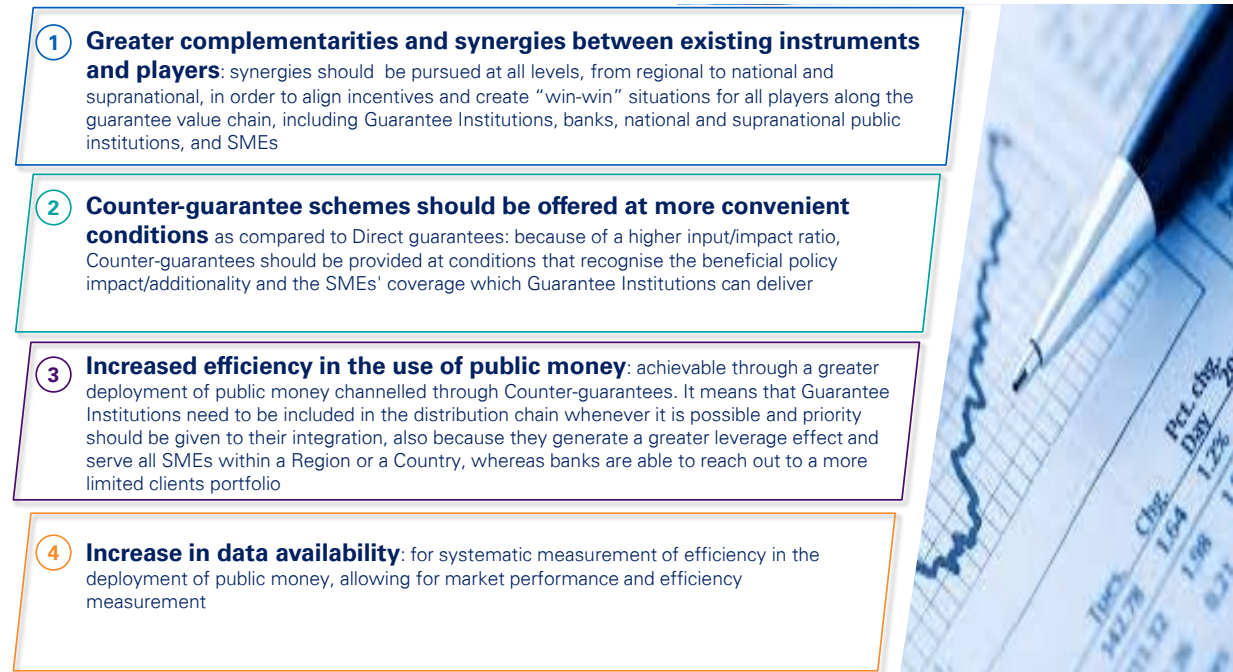
4 Policy recommendations



The evidence gathered in the previous sections of this Study helps identify a few recommendations to relevant stakeholders which can be summarised as follows:

- 1) **greater complementarities and synergies between existing instruments and players:** synergies should be pursued at all levels, from regional to national and supranational, in order to align incentives and create “win-win” situations for all players along the guarantee value chain, including Guarantee Institutions, banks, national and supranational public institutions, and SMEs;
- 2) **Counter-guarantee schemes should be offered at more convenient conditions** as compared to Direct Guarantees: because Counter-guarantees typically feature, in relative terms, higher input/impact ratio, lower deadweight effect, higher additionality and generate greater added value in the economy (as a consequence of the involvement of Guarantee Institutions), they should be provided at conditions that reflect the positive policy impact/additionality which Guarantee Institutions deliver. Furthermore, Counter-guarantees, being issued by Guarantee Institutions, benefit all SMEs in a Region or Country; whereas Direct guarantee, being typically issued by banks tend to benefit more certain clients portfolios only. In addition, well-priced and well-designed Counter-guarantee schemes can be leveraged in order to strengthen the ability of such schemes to substantially alleviate SMEs need for credit, thus contributing to close the financing gap. In addition, the circumstance that, when EU Institutions (i.e. EIF) sign contracts directly with banks, guarantees are provided at no fee for the banks, creates an unequal competition within the guarantee market, since Guarantee Institutions, by contrast, need to charge a fee for their guarantees. Therefore, it should be advisable that EU institutions ask banks a fee too (perhaps in line, if not slightly higher, with the average fees of Counter-guarantees) in order to prevent crowding out of Guarantee Institutions and allow Guarantee Institutions to keep generating added value to SMEs;
- 3) **increased efficiency in the use of public money**, achievable through a greater deployment of public money channelled through Counter-guarantees, generating greater impacts on the market and on the wider economy; especially when Guarantee Institutions are backed by partial/full public support, the positive macroeconomic impact of Counter-guarantee schemes (e.g. through the stimulating effect on employment) outweighs the cost for the tax payers due to default payments. It means that **Guarantee Institutions need to be included in the distribution chain whenever it is possible** and priority should be given to their integration; this includes also the channelling of the money foreseen in accordance with the investment plan (so called Juncker package);
- 4) **increase in data availability** for systematic measurement of efficiency in the deployment of public money, allowing for market performance and efficiency measurement. Counter-guarantee guarantee schemes at all levels (i.e. national and supranational) have room to improve in the field of data availability and measurement. 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 pursued.

Figure 31: Policy recommendations.



Source: KPMG elaboration.

References

- Akerlof, G. A. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism. *Quarterly Journal of Economics*, 84, 488–500.
- Arrow, K. J. (1985). The Economics of Agency. In: J. W. Pratt und R. J. Zeckhauser, *Principals and Agents: The Structure of Business*.
- Asdrubali, P., Signore, S. (2015). The Economic Impact of EU Guarantees on Credit to SMEs. Evidence from CESEE countries. European Commission's European Economy Discussion Paper 002 and EIF Working Paper 2015/29.
- Busetta, G., Zazzaro, A., (2006). Mutual Loan-Guarantee Societies in Credit Markets with Adverse Selection: Do They Act as a Sorting Device? (Working Paper No. 23). Università Politecnica delle Marche (I), Dipartimento di Scienze Economiche e Sociali.
- Carpenter, R. E., Petersen, B. C. (2002). Capital market imperfections, high-tech investment, and new equity financing. *The Economic Journal*, 112, 54-72.
- Cesgar (Confederación Española de Sociedades de Garantía Recíproca) and Afi (Analistas Financieros Internacionales), (2012). El Sistema de Garantía Recíproca y su contribución a la actividad empresarial.
- European Commission, Annual Report on European SMEs 2014/2015, Ref. Ares (2016) 1791252
- European Commission, (2013). Ex-Ante Assessment of the EU SME Initiative (European Commission Staff Working Document No. SWD (2013) 517).
- G20/OECD, (2015). High-Level Principles on SME Financing.
- Hoffman, M., Sorenson, B.E., (2015), forthcoming. Growth and risk sharing during the sovereign debt crisis: the big problem of small business finance in the EU.
- Hubbard, R. G. (1997). Capital-market imperfections and investment. *National Bureau of Economic Research*.
- Jaffee, D.M., Russell, T., (1976). Imperfect Information, Uncertainty, and Credit Rationing. *The Quarterly Journal of Economics*, 90, 651–666.
- KPMG, (2011). Credit access guarantees: a public asset between State and Market. International survey on guarantee market players.
- Kraemer-Eis, H., Passaris, G., Tappi, A., Inglisa, G. (2015). SME Securitisation – at a crossroads? EIF Working Paper 2013/031.
- Meyer, R. L., & Nagarajan, G. (1996). Credit guarantee schemes for developing countries: theory, design and evaluation. Ohio State University.
- OECD, (2013). SME and Entrepreneurship Financing: The Role of Credit Guarantee Schemes and Mutual Guarantee Societies in supporting finance for small and medium- sized enterprises.
- OECD (2015). Financing SMEs and Entrepreneurs 2015. An OECD Scoreboard.
- Pombo, P., Molina, H. y Ramírez, J. N. (2015). "The Guarantee Schemes: keys for their implementation". Documento nº 13 de la Asociación Española de Contabilidad y Administración de Empresas AECA. Madrid
- Schmidt, A.G., van Elkan, M., (2010). The Macroeconomic Benefits of German Guarantee Banks. Institut für Mittelstandsökonomie an der Universität Trier (inmit).
- Stiglitz, J. E., Weiss, A., (1981). Credit rationing in markets with imperfect information. *The American Economic Review*, 71, 393-410.

Glossary

| Terms | Definitions |
|-----------------------------------|---|
| Adverse selection | Situation in which buyers and sellers have access to different/imperfect information. In this study it represents the ex-ante information asymmetry between banks and SMEs that could lead to an inefficient allocation of money for the banks or in a credit rationing for SMEs |
| AECM | <i>AECM</i> is an organisation with by 42 affiliated members, operating in 20 EU countries, Bosnia and Herzegovina, Russia, Serbia and Turkey. Its members are mutual, private sector guarantee schemes as well as public institutions, which are either guarantee funds or Development banks with a guarantee division. They all have in common the mission of providing loan guarantees for SMEs who have an economically sound project but cannot provide sufficient bankable collateral. |
| AECM Represented Countries | EU Countries where AECM members operate; plus some extra EU Countries namely Bosnia and Herzegovina, Russia, Serbia and Turkey. |
| Counter-guarantee | Guarantee offered to Guarantee Institutions to cover part of their risks on guarantees issued to banks on SME financing (or issued directly to SMEs) by specific financial institutions (e.g. EIF), by national or by regional public entities. |
| Deadweight effect | Phenomenon according to which the cost of public guarantee fees becomes relatively low for SMEs (or a group of them), up to the point to create distortionary effects in the guarantees market – and in the wider economic and financing market, such as provision of unnecessary guarantees to enterprises that would not actually need financing support (in relative terms to other enterprises), i.e. the financing would have been possible also without a guarantee or the guarantee had no effect at all on the financing. In these cases, there is a sub-optimal allocation of public guarantees, reducing available support resources for credit constrained SMEs. |
| Default rate | The rate of borrowers who fail to repay their loans in full. |
| Descriptive Statistics | Set of statistical methods used to summarise and represent in a clear and consistent way information and data collected. In the Study, it will be used to complete a first assessment of the guarantees' market in different EU Countries. |

| Terms | Definitions |
|---------------------------------|--|
| Direct Guarantee | Guarantee offered directly to banks by specific financial institutions (e.g. EIF) in order to support SMEs' access to finance. |
| Econometric Model | Statistical models (in the area of inference analysis) allowing us to isolate relationships between relevant variables and define the direction of causality between them. In other terms, to estimate the impacts generated by guarantee system. |
| EIF | European institution part of the EIB Group. Its shareholders are the European Investment Bank (EIB), the European Union, represented by the European Commission, and a wide range of public and private banks and financial institutions. EIF offers guarantee to banks and Counter-guarantees to national Guarantee Institutions in order to support SMEs in obtaining loans from banks. |
| EU Countries | 28 Countries, part of the European Union. |
| External leverage effect | Multiplier effect generated within the guarantee system. Guarantee Institutions can usually grant a larger amount of risks than the amount of their resources, because they have to pay for the actual amount granted to SMEs if and only if SMEs do not pay their debts back to financing banks. Thus, with regard to private funds, we look at the relationship between the equity/funds under management of a guarantee institution with the guarantees outstanding; whereas, as far as public funds are concerned, we look at the relationship between the indemnification agreement with the State with the guarantees outstanding. |
| Interest rate | The amount that a bank charges on money that it lends. |
| Market Failure | Situation in which the allocation of goods and services, in the relevant market, is not efficient. An example of market failure is the gap between demand and supply of credit from and to SMEs, causing sub-optimal allocation of funds. The role of Guarantee Institutions is to support SMEs financing to reduce this gap. |
| Moral hazard | Moral hazard represents the information asymmetry after the contract signature. In financial markets there is a risk that the borrower might engage in activities that are undesirable from the lender's point of view because they make him less likely to pay back a loan. |

| Terms | Definitions |
|--------------------------|---|
| Multiplier effect | <p>The multiplier effect for the European fund is the ratio between total investment and EFSI contribution and it is the result of two combining effects:</p> <ul style="list-style-type: none"> ▪ internal leverage effect. The initial investment of the EFSI provides partial risk protection (a 'first loss guarantee') to the EIB and EIF, which should enable them to finance three times this amount by issuing bonds; ▪ external leverage effect. The EIB investment should help improve investors confidence and encourage private investors to invest five times that amount. |
| SME | <p>An enterprise which employs fewer than 250 employees and which has an annual turnover not exceeding EUR 50 million and/or an annual balance sheet total not exceeding EUR 43 million. See Commission Recommendation of 6 May 2003 (2003/361/EC).</p> |
| Wider Impacts | <p>Socio-economic indirect effects (e.g. on employment) generated by different kinds of events/policies. In our Study, wider impacts refer to the indirect effects generated by the guarantee system and the different types of guarantees.</p> |



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