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DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS
COMMITTEE ON FINANCIAL MARKETS

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OECD/EC Survey on evaluating publicly supported credit guarantee programmes for SMEs

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English - Or. English

OECD/EC SURVEY ON EVALUATING PUBLICLY SUPPORTED FINANCIAL GUARANTEE PROGRAMMES FOR SMEs[1]

1. Background

1. Boosting sustainable growth by enhancing the contribution of financial markets and institutions to SME financing has been identified as one of the work priorities in the Committee on Financial Markets (CMF) Programme of Work and Budget for the 2015-16 biennium. The Committee agreed in this context that one avenue for work in this area was to examine the relative costs and benefits of financial guarantee support programmes for SMEs, focusing in particular on public guarantee schemes. In an environment of ongoing constraints affecting public finances, there is a premium on the efficient use of public funds.

2. In order to develop efficiently this work, the CMF decided at its April 2015 meeting to ask the Secretariat to first circulate a questionnaire among members to collect information on evaluation studies undertaken in CMF jurisdictions on the costs and benefits of such guarantee programmes.[2] The European Commission's Joint Research Centre (JRC) expressed its interest in collaborating on the design of the questionnaire and the compilation and analysis of responses and proposed that the survey be extended to non-OECD European Union countries. A draft survey on evaluating financial credit guarantee schemes (CGS) for SMEs, prepared by the OECD Secretariat in collaboration with the EC JRC, was discussed by the Committee in October 2015. It was also presented to the Working Party on SMEs and Entrepreneurship (WPSMEE) at its meeting in October 2015. The present (final) survey reflects the discussions at these meetings as well as comments and suggestions received subsequently in writing from delegates. The results of the survey are planned to be presented to the CMF at its October 2016 meeting.

2. Purpose

3. The purpose of this questionnaire exercise is to compile the different approaches taken among CMF members and partner countries to assess the costs and benefits of public credit guarantee arrangements and identify approaches to the evaluation of these that are widely used and those that are less widely used, but that are considered innovative and potentially particularly effective.[3]

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[1] The broad approach underlying this draft survey was presented at a Meeting on "SMEs access to finance and the role of credit guarantees schemes" at the European Central Bank. The current version has benefitted from comments and suggestions made at that meeting as well as from those received from colleagues with whom an earlier version of the present draft was shared on an informal basis, including colleagues supporting the work of the OECD's Working Party on SMEs and Entrepreneurship (WPSMEE), the World Bank, the European Central Bank, and the European Commission Directorate General for Internal Market, Industry, Entrepreneurship and SMEs.

[2] Appendix 1 provides a list of selected guarantee programmes in place in OECD countries (at this point possibly incomplete and inaccurate). The responses are expected to help completing and correcting the information provided in that list.

[3] For reference, Appendix 2 includes an overview of some key features of selected evaluations of credit guarantee schemes.

4. A specific focus will be placed on identifying effective approaches to detecting i) situations in which there is robust evidence that the benefits outweigh the costs and “gazelles” (high-performance, often young, enterprises) were empowered to provide additional positive impact on the economy and ii) situations in which the costs of financial guarantee programmes exceed their benefits. Such a situation could occur, for example, when private alternatives are crowded out or where so-called “zombie companies” (low profitability companies which effectively use the implicit subsidy element for the credit guarantee to avoid market exit) are kept alive.[4] Identifying such situations can help to reinvigorate policy support for viable SMEs. In times of constrained public finances and weak real activity growth prospects, there is a premium on ensuring the most efficient use of public funds to support real activity and employment growth.

5. The fact that new guarantee arrangements have been created recently, while a large number of CGS already existed, does not testify their efficacy or efficiency. These arrangements might facilitate the growth of high-performance companies, but may also discourage the development of alternative financing solutions and further analysis is required to distinguish these cases. However it is not so clear to what extent and how public authorities evaluate and monitor the effectiveness of their domestic CGS and what, if any, impediments might prevent such evaluations. In fact, the availability of new micro-level data sets and the developments of new estimation techniques over recent years is facilitating quantitative assessments.

6. The present questionnaire asks squarely how respondent countries are evaluating the performance of their domestic public CGS. What are the various dimensions of benefits considered and how are they measured? What factors are considered in assessing the costs? Is the counterfactual also considered?

7. In order to develop an empirical approach to assess the performance of a CGS, and measure its costs and benefits, it is first necessary to identify its aim. The questionnaire stops short of proposing a specific explicit definition of costs and benefits however, recognising that these concepts depend on the stated objective of a CGS, which can include a variety of dimensions, beyond that of facilitating access to finance, additionality and financial sustainability. In fact, there is no single universally accepted definition of the aim of public CGS. As a reference for respondents, the CMF in October 2015 broadly endorsed the following definition:

The aim of a CGS is to encourage additional lending to SMEs that would otherwise not have received credit, even though they might make productive use of the funds and thus improve on the outcome without the public intervention. A condition is however i) that the lending facilitated by the guarantee should not substitute for private funding that could have taken place in the absence of the guarantee and ii) that the arrangement is financially sustainable and poses no significant risks to taxpayers.

8. The mandate and design of a CGS differ from one country to another and, within some countries, from one scheme to another. The definition above focuses not only on the issue of mobilising additional funds for SMEs, but acknowledges that such efforts might have undesirable consequences, such as replacing private lending and creating fiscal costs. While the latter aspect can be assessed empirically in a more or less straightforward way, the former – even if very important to inform policy decisions – does not lend itself as readily to an empirical assessment. It is important nonetheless to take such aspects into consideration. Given the inherent difficulties in measuring other aspects such as outreach and social cohesion, etc., the above definition also abstracts from such categories. That said, the questionnaire is flexible enough to allow national respondents to go beyond the above definition and, taking into account

4 The results of the present work are also meant to uniform the work on exit policies and productivity growth currently being undertaken by the Working Party No.1 on Macroeconomic and Structural Policy Analysis of the OECD (see e.g. ECO/CPE/WP1(2015)14).

the specific dimensions of the stated objectives of the guarantee scheme considered, to report on how the costs and benefits of these additional objectives are evaluated.

9. The present questionnaire exercise, initiated by the CMF in 2015, is particularly timely, as there presently are no internationally agreed good practices on evaluation methods of CGS. Currently, high-level principles have been or are being developed with regard to SME policies, including in relation to public guarantee programmes for SME credit, which suggest a need for regular evaluation of the costs and benefits of such programmes.[5]

3. Suggested next steps

10. The present survey is circulated among OECD member countries, non-OECD EU countries and other partner countries. The Secretariat kindly asks participating countries to identify a *contact point/lead respondent*, who will coordinate national contributions to the survey.

11. The survey consists of 4 sections. The first section collects information regarding the identity of the contact point/lead respondent. The second section invites the respondent to provide some basic information on the general characteristics of the credit guarantee arrangements that exist in its country (e.g. type of SMEs covered and features of the arrangements). Section 3 focuses directly on the assessment of the costs and benefits of the CGS. This section asks what type of CGS has been evaluated, at what frequency and by whom. It also asks details about frequency of analysis, type of data used, etc. and in particular what factors have been considered as costs and benefits in the evaluation and what have been the results of the evaluation.

12. The Secretariat asks lead respondents to submit a consolidated national response to the survey to the extent feasible, by including all relevant agencies involved in providing financial guarantee support for

[5] The World Bank has developed high-level principles for the design, implementation, and evaluation of public credit guarantee schemes for SMEs. This work is the result of collaboration with FIRST, formed by a group of donors (https://www.firstinitiative.org/) in support of a Task Force representing international associations of both CGSs and lenders. They include as Principle 16 the following: "The performance of the CGS, in particular its outreach, additionality and financial sustainability, should be systematically and periodically evaluated and the findings publicly disclosed." Also, at their April 2015 meeting in Washington, DC, the G20 Finance Ministers and Central Bank Governors, asked the OECD, together with other relevant international organisations, to develop voluntary high-level principles on SME financing. Following up on that request, a first draft of proposed "G20-OECD principles" was circulated for comment to the OECD Working Party on SMEs and Entrepreneurship, the OECD Committee on Financial Markets, and the CMF & G20/OECD Task Force on Institutional Investors and Long-term Investment. Following the reception of comments, the document was revised and circulated as a draft progress report to the 20-21 August meeting of the G20 Investment and Infrastructure Working Group. It was again revised in line with comments received and transmitted to the 4-5 September meeting of the G20 Finance Ministers and Central Banks Governors, who welcomed the progress report in their communiqué. In addition, APEC Finance Ministers welcomed the progress on the development of these principles at their meeting on 11 September. Further consultations are now underway at the international level, including with the G20 Global Partnership on Financial Inclusion, with a view to delivering a final report for the G20 Leaders Summit. A broader consultation process among the OECD and G20 countries will take place before finalization of the principles. These principles are addressed to OECD and G20 countries and other interested economies, to support their efforts to enhance access to a diverse range of financing instruments by SMEs and entrepreneurs. One principle emphasizes the need for public programs to be assessed to ensure their additionality and cost effectiveness. Currently, effective approaches to the implementation of the principles are being developed.

SMEs in their jurisdiction. Lead respondents should consider all studies undertaken by the public sector, relevant agencies, academia and industry that they consider to be credible.

13. Note that the Association of European Guarantee Institutions (AECM), which is a non-profit organisation gathering together credit guarantee schemes, offered its collaboration in this context. Where relevant, *contact points/lead respondents* might wish to invite inputs from AECM members.

Specific instructions for the survey

- In countries where more than one evaluation of the costs and benefits of a CGS has been undertaken, respondents are invited to submit a separate survey for each evaluation. Parts 1 and 2 of the survey will remain the same, while Parts 3 and 4 will change accordingly.

- Format for numerical values: if necessary, please provide all the numbers in units as it follows:
  - please use "," to separate thousand.
  - please use "." to separate units from decimals.
  - please always state the currency.

  (Example: 1 million Euro and 50 cents is EUR 1,000,000.50)

Contact points/lead respondents are invited to provide a consolidated national response (using as many survey templates as there are CGS evaluations) and submit the response(s) to **CGSevaluationsurvey@oecd.org** ***by 30 April 2016.***

For technical questions please contact Lucie.amour@oecd.org and for other questions Sebastian.schich@oecd.org and/or Jessica.cariboni@jrc.ec.europa.eu.

Part 1: Contact information

1. Country:
2. Name of authority of lead respondent:
3. Type of institution of lead respondent:

Central bank	☐
Treasury	☐
Agency/institution administering the credit guarantee arrangement	☐
Other (please specify):	☐

4. Name of contact person:
5. Contact details:
6. Other authorities or institutions consulted (Please specify):

Part 2: Main characteristics of Credit Guarantee Schemes

7. Do specific initiatives exist in your jurisdiction to address the credit financing needs of small and medium-sized companies (SMEs) by providing credit guarantees?

   ☐ Yes ☐ No

8. If yes, please provide the relevant information so that Appendix 1 could be corrected or complemented:

9. What particular identified weaknesses are the credit guarantee arrangements targeting? (Please tick as many as apply)

i) Lack of sufficient collateral	
a) General lack of sufficient collateral	☐
b) Lack of sufficient collateral for specific firms	☐
c) Lack of sufficient collateral for firms in specific sectors	☐
d) Lack of adequate type of collateral (e.g. immovable versus movable)	☐
ii) Inadequate skills for producing financial statements of the quality and detail required by lenders	☐
iii) Lack of transparency or sufficient historical data to arrive at standard credit risk assessments	☐
iv) Other economic or social shortcomings (e.g. export performance, social cohesion, etc., please specify):	☐

10. Following the outbreak of the financial crisis, were changes to the existing CGS made (e.g. objectives) or new ones introduced?

☐ Yes ☐ No

Have stated objectives of existing CGS changed?

☐ Yes ☐ No

Were new CGS introduced?

☐ Yes ☐ No

If yes, please provide a short description of any relevant change or list the new arrangements.

11. As regards the success of these arrangements in addressing the identified market failures, has an evaluation of their costs and benefits been ever conducted?

☐ Yes ☐ No

If no, please summarize the reasons (e.g. lack of adequate data, lack of expertise, etc..):

If yes, please proceed to Part 3.

Part 3: Evaluation of costs and benefits of credit guarantee schemes

Part 3.a: General overview

12. If you have evaluated more than one programme or arrangement of those listed in appendix 1, please identify to what programme or arrangement the responses in the remainder of this survey apply (kindly enclose the relevant document to your response if feasible):

13. Please identify which of the following types of SMEs are covered by the evaluated arrangement (please tick as many as apply)

SMEs that meet certain criteria in terms of…		
i) employment	☐	Criteria:
ii) turnover	☐	Criteria:
iii) gender/ethnicity of entrepreneur	☐	Criteria:
iv) balance sheet total	☐	Criteria:
v) EU SME definition[6]	☐	
vi) other (please specify):	☐	Criteria:
SMEs in certain sectors:		
i) manufacturing	☐	
ii) services	☐	
iii) export-oriented	☐	
iv) high-tech	☐	
v) research	☐	
vi) agriculture	☐	
vii) all sectors	☐	
viii) other (please specify):	☐	

14. Which forms of support are granted by the arrangement under evaluation?

i) partial individual guarantees	☐
ii) full individual guarantees	☐
iii) overall guaranteed loan portfolio, or	☐
iv) specific programmes	☐

[6] SMEs definitions typically differ across countries. The EU definition of SMEs can be found in the European Commission Recommendation http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:124:0036:0041:EN:PDF

15. Frequency of the assessment: has the evaluation been...?

i)	…a one-off assessment	☐
ii)	… part of more than one assessment conducted at irregular intervals, or	☐
iii)	…part of regular assessments	☐

16. Has the evaluation been *commissioned* by…?

i)	…the government/a ministry	☐
ii)	…the agency providing the guarantees	☐
iii)	…an industry body	☐
iv)	…*conducted independently* by a research institution	☐
v)	…other (please specify):	☐

17. Who has *conducted* the evaluation?

i)	a public authority (please specify):	☐
ii)	an entity providing guarantees to SMEs (e.g. self-assessment)	☐
iii)	a research institution/university	☐
iv)	other (please specify):	☐

Part 3.b: Details of the cost-benefit analysis conducted[7]

18. Against which of the following objectives was the CGS evaluated in the study[8]?

i)	Financial sustainability (i.e. ability to generate the resources required for operating)	☐
ii)	Financial additionality (i.e. increase flow of funds or improve terms of flow of funds towards viable credit-constrained SMEs)	☐
iii)	Economic additionality (i.e. effect of increased access to finance by beneficiary SMEs on economic welfare)	☐

[7] More details available in Venetoklis, T. (2000), "Methods applied in evaluating business subsidy programmes: A survey", Helsinki, VATT, Government Institute for Economic Research, available at http://www.vatt.fi/file/vatt_publication_pdf/k236.pdf

[8] See Appendix 2 for a definition of financial and economic additionality.

19. What has been the general consensus of the evaluation study regarding the performance of the CGS? (please choose one)

i) positive	☐
ii) mixed and rather positive	☐
iii) mixed and rather negative	☐
iv) negative	☐

20. The data gathered to conduct the cost-benefit analysis was at the … level.

i) …firm…	☐
ii) …sectorial (please specify)…	☐
iii) …regional…	☐
iv) …national…	☐

21. If the data considered was at the firm level, was data available for:

i) SMEs, but without discriminating whether they benefit from support or not	☐
ii) (only) SMEs that benefit from support	☐
iii) (both) SMEs that benefit from support and those that (applied for, but) were not granted support	☐

22. The following data were considered for the analysis…

i) primary data[9]	☐
ii) secondary data[10], or	☐
iii) both	☐

23. To the extent primary data was considered, it was gathered through…

i) … interviews/questionnaires with parties receiving support	☐
ii) … other parties directly or indirectly involved in the process of granting the loans or providing the credit guarantees on the loans, or	☐
iii). … regular data collection on the part of the CGS to allow evaluations, or	☐
iv) … other (please specify):	☐

[9] Data collected by the investigator as part of a study through one or more methods like questionnaires, interviews, direct observations.

[10] The investigator does not directly collect the data but uses already existing sources such as databases.

24. To the extent secondary data was considered, it was gathered from… (please tick as many as possible)

i)	…project data, socio-economic indicators	☐
ii)	…case studies	☐
iii)	…commercial databases (please specify):	☐
iv)	…"administrative" databases[11] (please specify):	☐
v)	… other documentation (please specify):	☐

25. What type of method was applied in analysing the data?

i)	qualitative (e.g. descriptive)	☐
ii)	quantitative (e.g. econometric or statistical)	☐
iii)	both	☐

26. The cost-benefit analysis was developed:

i)	at the level of the guarantee arrangements itself or at macro level	☐
ii)	at the level of the beneficiaries/non beneficiaries of SMEs	☐
iii)	both	☐

[11] An example of commercial database is Orbis, containing information on companies, including financial statements and selected analytical indicators. An example of an "administrative" database is the Italian Credit Register, an information system operated by the Bank of Italy that collects the data supplied by banks and financial companies on the credit they grant to their customers.

27. If the analysis was conducted at the level of guarantee arrangements (i.e. considering data describing the guarantee arrangement itself or at macro level), what factors or variables were considered in the assessment of the costs and benefits (please tick as many as apply)?

Category	Factors	Considered in evaluations	Considered as benefit	Considered as cost
(1) operating results of CGS	New guaranteed loans (amounts)	☐	☐	☐
	New guaranteed loans (number)	☐	☐	☐
	Guaranteed loans outstanding (amounts)	☐	☐	☐
	Guaranteed loans outstanding (number)	☐	☐	☐
	Claim expense payments	☐	☐	☐
	Return on financial investments	☐	☐	☐
	Return on assets	☐	☐	☐
	Employment	☐	☐	☐
	Personal income, wages, salaries	☐	☐	☐
	Number of firms	☐	☐	☐
	Recovery	☐	☐	☐
	Operating profits	☐	☐	☐
	Cost-of-fund measures	☐	☐	☐
	Losses on guarantees (amount paid out to lenders)	☐	☐	☐
	Other (please specify)	☐	☐	☐
(2) Contributions to operating costs of CGS	Public sector contributions to funding	☐	☐	☐
	Private sector contributions to funding	☐	☐	☐
	Public sector guarantees or counter-guarantees to loan arrangements	☐	☐	☐
	Other (please specify)	☐	☐	☐
(3) Potential effects of CGS activity at macro level	On SMEs, e.g. SME growth, employment, etc…	☐	☐	☐
	On economy, e.g. GDP growth, export performance, etc… at macro level	☐	☐	☐
	Other (please specify):	☐	☐	☐
	To the extent potential effects of CGS activity at macro level were considered as factors in the evaluations, how was a robust link between CGS activity and these factors at macro level established? (please specify)			

28. If the analysis was conducted at the level of SMEs or the wider economy, what factors have been considered in the assessment of the costs and benefits (please tick as many as apply)?

Category	Factors	Considered in evaluation	What were the results? CGS significantly affected the factor in desired direction	CGS significantly affected the factor in undesired direction	Effect inconclusive or insignificant
Potential effects of activity of guarantee arrangement on SMEs	Amount of bank debt	☐	☐	☐	☐
	Amount of total debt	☐	☐	☐	☐
	Share of long-term debt	☐	☐	☐	☐
	Cost of credit	☐	☐	☐	☐
	Investments	☐	☐	☐	☐
	Total assets	☐	☐	☐	☐
	Employment maintained or created	☐	☐	☐	☐
	Growth performance	☐	☐	☐	☐
	Turnover	☐	☐	☐	☐
	Sales	☐	☐	☐	☐
	Probability of default	☐	☐	☐	☐
	Other, especially measures of moral hazard (please specify):	☐	☐	☐	☐
Potential effects of CGS activity on economy	On economy, e.g. GDP growth, export performance, etc…	☐	☐	☐	☐
	Other (please specify)	☐	☐	☐	☐
	To the extent potential effects of CGS activity at firm level were considered as factors in the evaluations, how was a robust link between CGS activity and these factors established? (please specify)				

29. Does the evaluation approach measure the counterfactual[12] (e.g. to ensure attainment of the principle that public intervention should be based on identified market failures and avoid crowding out development of private alternatives)?

☐ Yes ☐ No

If no, please summarize the reasons (e.g. lack of adequate data, lack of expertise, etc..):

If yes, please indicate what technique has been adopted to divide the sample of SMEs into treatment and control groups

i) SMEs in the treatment group are those eligible for support by the CGS, SMEs in the control group are those not eligible	☐
ii) SMEs in the treatment group obtained a guarantee from a CGS, SMEs in the control group did not receive any guarantee	☐
iii) Treatment and control groups are built by means of robust statistical techniques (please specify the technique)	☐
iv) Other (please specify):	☐

30. Please provide any additional information on the costs/benefits analysis developed in the study or other methodological details that you consider relevant:

31. Does the assessment evaluate the adequacy of the premium that SMEs/banks pay to the CGS (e.g. if the collected premium are sufficient to cover CGS expenditures)?

☐ Yes ☐ No

[12] Constructing the counterfactual means assessing what would have happened to programme participants had the programme not existed. Developing a counterfactual typically implies considering two groups of firms, one "treated" (i.e. benefitting from the guarantee) and one "non-treated" (i.e. not benefitting from the guarantee). The two groups can be constructed in different ways.

32. In addition to assessing to what extent CGS have been successful in effectively overcoming identified market failures, was the broader impact of credit guarantee arrangements on the attainment of a wider set of public policy goals evaluated?

☐ Yes ☐ No

a. If yes, what were the policy objectives?

i)	financial stability	☐
ii)	competitiveness	☐
iii)	job creation	☐
iv)	distribution of income and wealth	☐
v)	social cohesion	☐
vi)	sustainable economic development	☐
vii)	Other (Please specify)	☐

b. How did the evaluation establish how the credit guarantee arrangements contributed to that goal?

33. Have the results of the evaluation been used for any operational decision on the functioning of the credit guarantee arrangement?

☐ Yes ☐ No

If yes, please specify:

APPENDIX 1: SELECTED CREDIT GUARANTEE SCHEMES SMES IN OECD COUNTRIES (INCLUDING MUTUAL CREDIT GUARANTEE SCHEMES AND DEVELOPMENT BANKS, BUT EXCLUDING REGIONAL INITIATIVES)

Country	Arrangement	Established initially/in present form	Type
Australia	Export Finance and Insurance Corporation (EFIC)	1957/1991	Public
Austria	Austria Wirtschaftsservice GmbH (AWS)	1954	Public
	NÖ Bürgschaften und Beteiligungen GmbH (NÖBEG)		Public/Private
Belgium	Société Wallonne de Financement et de Garantie des Petites et Moyennes Entreprises (Sowalfin)	2002	Public
	PMV NV	2004	Public
Canada	Industry Canada (Canada Small Business Financing Program)	1961/1999	Public
Chile	Fondo de Garantìa Para Pequeños Empresarios (FOGAPE)	1980	Public
Czech Republic	Czech-Moravian Guarantee and Development Bank (CMZRB)	1992	Public
Denmark	Vækstfonden (Growth Fund)	1992	Public
Estonia	Estonian Credit and Export Guarantee Fund (Kredex)	2001	Public
Finland	Finnvera	1999	Public
France	Société de Caution Mutuelle Artisanale (Socama)	1968/1980	Mutual
	Banque publique d'investissement (Bpifrance)	2012	Public
Germany	Verband Deutscher Bürgschaftsbanken	1960s	Private
	Kreditanstalt für Wiederaufbau (KfW)	1948	Public
Greece	Credit Guarantee Fund for Small and Very Small Enterprises S.A. (TEMPME)/ Hellenic Fund for Entrepreneurship and Development (ETEAN SA)	2003/2011	Public
Hungary	Rural Credit Guarantee Foundation (AVHGA)	1991	Public/Private
	Garantiqa Hitelgarancia Zrt	1992	Public/Private
Iceland			
Ireland	SME Credit Guarantee Scheme	2012	Public
Israel	State Guarantee Fund for Small Businesses	1993	Public
Italy	Confidi		Mutual
	Fund for Guarantee to SME (SGS)	1996	Public
	Società di Gestione Fondi per l'agroalimentare (SFGA)		Public
Japan	Credit Guarantee Corporations (CGCs)	1937	Public/Private
Korea	Korea Credit Guarantee Fund (KODIT)	1976	Public/Private
	Korean Technology Finance Corporation (KOTEC)	1989	Public/Private
	Korean Federation of Credit Guarantee Foundations (KOREG)	2000	Public/Private
Luxembourg	Mutualité de Cautionnement et d'Aide aux Commerçants, société coopérative (MCAC)	1969	Mutual

Mexico	Nacional Financiera (Nafinsa)	1935/2000	Public
Netherlands	Netherlands Enterprise Agency	2014	Public
New Zealand			
Norway			
Poland	Bank Gospodarstwa Krajowego (BGK)		Public
Portugal	National Mutual Guarantee System (SNGM)	2002	Mutual
Slovak Republic			
Slovenia	Slovene Enterprise Fund (SEF)	1992	Public
Spain	Sociedades de Garantía Recíproca (SGR)	1978	Mutual
Sweden			
Switzerland			
Turkey	Kredi Garanti Fonu (KGF)	1993	Public/Private
United Kingdom	Enterprise Finance Guarantee (EFG)	2009	Public
United States	Small Business Administration (e.g. 7(a) program)	1953	Public

Notes: Incomplete and possibly inaccurate. EFIC provides finance and insurance solutions to support Australian exports and overseas investments and includes a specific SME division. Originally set up in 1957, it was established in its current form in 1991. NÖBEG is a regional development bank, supporting business in Niederösterreich. Sowalfin is a public limited company set up for SMEs from Wallonia. PMV NV is an independent investment company fully owned by the Flemish regional government. The Canada Small Business Financing Program was established in 1999, succeeding the Small Business Loans (SBL) Program. FOGAPE is managed by state-owned BancoEstado. CMZRB was set up by the government and major Czech banks; it became fully state-owned in 2012. The Danish Growth Fund (Vaekstfonden) is a state investment fund that contributes to the creation of new companies by providing capital and advice. Kredex is a credit guarantee agency, the objectives of which include to develop SMEs. Finnvera is a specialised financing company owned by the State of Finland and it is the official Export Credit Agency (ECA) of Finland; it was founded in 1999 through a merger of Kera Plc and the Finnish Guarantee Board. The first Socama was created in 1968 in Lorraine and, in 1980, the various regional Socama formed the Fédération Nationale des Socama. Bpifrance was created in 2012, combining Oséo (created in 2005) and other entities. The Verband Deutscher Bürgschaftsbanken (VDB) is the joint representation of the 17 German Guarantee Banks and 14 Participation Companies for SMEs in Germany. ETEAN of Greece provides SME support by providing credit guarantees. TEMPME was established in 2003 with the purpose of providing credit guarantees in favour of small and very small enterprises. In Isreal, the government serves as the loan guarantor for bank loans. In Italy, local *confidi* are grouped into aggregate national Italian Federations, according to their sector of operation; these federations provide the link between the guarantee institutions themselves and the business associations which promote them. A third level in the universe of guarantee institutions consists of guarantee funds, such as the SGS. In Japan, 51 credit guarantee corporations exist (the oldest one from 1937) and the guarantees extended by them are automatically insured by the Japan Finance Corporation. In Korea, credit guarantee unions (later re-labelled 'foundations') were established cities and provinces since 1996 to extend credit guarantees for micro enterprises lacking substantial collateral. In Mexico, Nafinsa underwent a significant change in the early 2000s, when a sharp focus was placed on support for small and medium-sized Mexican enterprises. In the Netherlands, NEA is the result of a merger between NL Agency and the Dienst Regelingen in 2014. It administers a government guarantee scheme for loans to SMEs, referred to as BMKB. In Portugal, SPGM Sociedade de Investimento S.A., created in 1992, now acts as the coordinating body for the whole system, which exists in its present form since 2002. In Spain, SGR benefit from a public counter-guarantee run by the public CERSA (Compañía Española de Reafianzamiento, S.A. – the "Spanish Counter-guarantee Company"), set up by the Ministry of Industry to support small-and-medium-sized enterprises. In the United Kingdom, the Enterprise Finance Guarantee (EFG) scheme was introduced in 2009 to replace the Small Firms Loan Guarantee (SFLG) scheme, which was created in 1981. Both schemes aim to encourage bank lending to SMEs and entrepreneurs who lack collateral and business track records. The EFG is managed by the government-owned British Business Bank.

Source: OECD (2013)[13] and websites of listed programmes.

[13] OECD (2013), "Thematic Focus: Credit Guarantee Schemes" in Financing SMEs and Entrepreneurs 2013. An OECD Scoreboard, OECD Publishing, Paris.

APPENDIX 2: SELECTED EVALUATION STUDIES

This appendix aims at illustrating some key features of a selection of studies conducted to evaluate the effectiveness of different credit guarantee arrangements worldwide, focusing on the methodology applied and on how the counterfactual measurement was constructed, if any.

A key challenge is to address the issue of *additionality*. Following the Principles for Public Credit Guarantee Schemes for SMEs being developed by a Task Force of the World Bank, *financial additionality* refers to incremental credit flows to SMEs and includes improvements in funding conditions in terms of loan size, price, maturities, amount of collateral required and loan processing time. *Economic additionality* refers to the economic effects that result from CGS activities, including with respect to employment, investment and real activity growth. Most of the studies considered in the appendix focus on *financial additionality* (i.e. better access to finance) and only some on *economic additionality* (i.e. better economic performance, employment).

The quantitative approaches adopted in the different studies mostly rely upon econometric approaches (e.g. difference-in-differences, instrumental variable effects). Where the measurement of the counterfactual is considered, it is generally addressed by dividing the sample of SMEs into those receiving/eligible for receiving the support and those who are not, and then comparing the differences in estimates obtained for each group. Few recent studies apply more advanced techniques to build statistical robust treated and control groups.

Reference paper, CGS analysed, goal and type of SMEs analysed, if relevant	Study commissioned by	Impact level	Data source and year(s)	Type of analysis	Methodology used	Counterfactual measurement?	Overall conclusions
Zecchini S., Ventura M. (2009): The impact of public guarantees on credit to SMEs, *Small Business Economics*, Vol 32, p. 191-206. **CGS:** Italy, Fund for Guarantee to SME (SGS). **Goal:** Evaluate the effectiveness of SGS in increasing credit availability without compromising financial sustainability. **SMEs:** defined by the EU legislation, provided they have sound economic and financial conditions. Some sectors are excluded from guarantee.	Independent	National	• Fund's data: SGS. • SMEs financial statements data: AIDA database. Years: 1999 - 2004	Econometric	Difference-in-Difference approach (DID)	YES. Treatment and control groups are obtained dividing the SMEs in the sample into those who received the guarantee and those who did not.	SGS reached a measure of effectiveness in reducing SMEs borrowing costs and easing financing constraints.
D'Ignazio A., Menon C. (2013): The causal effect of credit guarantees for SMEs: evidence from Italy, *Bank of Italy Working Papers*, n. 900. **CGS:** Italy, partial CGS in an Italian region. **Goal:** Evaluate the effectiveness of a regional CGS program. **SMEs:** SMEs headquartered in the region, turnover 1-43 million € in 2007, OR turnover < 50 million € and less than 250 employees.	Independent	Regional	• Guaranteed SMEs: official database maintained by the regional administrative body. • All the others SMEs financial data: Central Credit Register (Centrale dei rischi, Bank of Italy) and Cerved database. Years: 2003 - 2010	Econometric	OLS and IVE (Instrumental Variable Effects). Tested also with DiD	YES. Division of SMEs into treatment and control groups is derived from some peculiar features of the guarantee scheme analysed, combined with the unforeseen acquisition of a local bank by one of the largest IT banking groups.	While the total amount of bank debt was unaffected, treated firms showed a significant increase in long-term component and they benefited from a substantial decrease in the interest rates. Moral hazard: the DP of treated firms was larger than that of a similar untreated SME. Weak effect on the real outcomes (no significant impact on investments and trade debts).

Reference paper, CGS analysed, goal and type of SMEs analysed, if relevant	Study commissioned by	Impact level	Data source and year(s)	Type of analysis	Methodology used	Counterfactual measurement?	Overall conclusions
Columba F., Gambacorta L., Mistrulli P. E. (2010): Mutual guarantee institutions and small business finance, *Journal of Financial Stability*, Vol 6, Issue 1, p. 45-54. **CGS:** Italy, Mutual Guarantee Institution (MGI). **Goal:** (a) verify whether MGI afforded affiliated firms with better credit conditions than other similar firms; (b) test whether the benefits depend on MGI characteristics. **SMEs:** Firms with less than 20 employees such that: (a) they are recorded in the Italian Credit Register and received a loan in 2005; (b) the bank giving the loan participated to the Survey on Loan Interest Rates.	Independent	National	• Firms' financial data: Central Credit Register. • Banks' loans data: Survey on Loan Interest Rates. Year: 2004	Econometric	OLS	YES. Treatment and control groups are obtained dividing the SMEs in the sample into those affiliated to a MGI and those who are not.	Firms affiliated with MGI paid less for credit (lower interest rates) with respect to similar firms which were not MGI members. An increase in the number of MGI affiliates had a positive effect up to a limit, after which the free riding problem outweighs the benefits.
Mistrulli E., Vacca V. (2011): I confidi e il credito alle piccole imprese durante la crisi, *Bank of Italy Occasional Papers*, n. 105. **CGS:** Italy, Mutual Guarantee Institution (MGI) **Goal:** (a) give an overview of the main characteristics of the IT MGS; (b) show whether the MGS support to SMEs during the crisis played a role. **SMEs:** Firms with less than 20 employees.	Independent	National /regional	• Italian Credit Register. • Cerved-Cebil database. Years: 2004 – 2009 for the descriptive statistics; 2007 - 2009 for the econometric analysis.	Descriptive statistics + econometric	Descriptive analysis: number of MGI, market structure of MGI, MGI's financial statements, amount of guarantees, geographical and sector distributions. Econometric analysis: OLS and Probit.	YES. Treatment and control groups are obtained dividing the SMEs in the sample into those affiliated to a MGI and those who are not.	The support granted by the MGI was effective also during the crisis, as firms associated to MGI resulted in higher growing rate and got lower interest rates for the loans. However, the loans granted to these firms quickly deteriorated.

Reference paper, CGS analysed, goal and type of SMEs analysed, if relevant	**Study commissioned by**	**Impact level**	**Data source and year(s)**	**Type of analysis**	**Methodology used**	**Counterfactual measurement?**	**Overall conclusions**
Hankock D., Peek J., Wilcox J.A. (2007): The repercussions on small banks and small businesses of bank capital and loan guarantees, AFA 2008 New Orleans Meeting Paper **<u>CGS:</u>** US, Small Business Administration (SBA) **<u>Goal:</u>** (a) how much SBA-guaranteed loans cushioned the real activities (b) whether the size of these effects were larger during recession or when interest rates were higher. **<u>SMEs:</u>** Independently owned and operated firms with less than 500 employees.	Independent	National	• SBA-guaranteed loans: SBA databases. • Measures of SMEs activities at state level: *Statistics of US Businesses.* • Banks loans: Call Reports (Federal Reserve Bank of Chicago). • Macroeconomic indicators: US Bureau of Economic Analysis. Years: 1991 - 2000	Econometric	OLS.	NO.	Loan guarantees raised real economic activities at small businesses. Larger numbers/amount of disbursements of SBA-guaranteed loans were associated with more output, employment and dollar payrolls. They also tended to modestly reduce failures and bankruptcies. SBA might be regarded of as stabilizing force that can mitigate, to some extent, the adverse effect of macroeconomic activity.
Tunahan H., Dizkirici A. S. (2012): Evaluating the Credit Guarantee fund (KGF) of Turkey as a Partial Guarantee Program in the Light of International Practices, *International Journal of Business and Social Science*, Vol. 3, Issue 10. **<u>CGS:</u>** Turkey, Credit Guarantee Fund (KGF) **<u>Goal:</u>** evaluate the structure and performance of CGS and compare it with international practices.	Independent	National	KGF reports. Years: 1994 - 2010	Descriptive statistics	Key figures on the KGF functioning and comparison with other CGS worldwide. Discussion of some issues of the Turkish system.	NO.	The fund of the KGF is low compared with other countries. The average guaranteed amount is higher than EU average but default rate is higher and leverage ratio is lower compared to standard international practices.

Reference paper, CGS analysed, goal and type of SMEs analysed, if relevant	Study commissioned by	Impact level	Data source and year(s)	Type of analysis	Methodology used	Counterfactual measurement?	Overall conclusions
Uesugi I., Sakai K., Yamashiro G. M. (2010): The effectiveness of Public Credit Guarantees in the Japanese Loan Market, *Journal of the Japanese and International Market*, Vol. 24, p. 457-480. **CGS:** Japan, Special Credit Guarantee Program (SCG) for Financial Stability. **Goal:** Study the effectiveness of CGS in not only increasing the availability of loans to SMEs, but in also improving the ex-post performance of borrowing firms.	Independent	National	• SMEs financial statement data: Surveys of the Financial Environment. • Financial statement variables: Financial Information Database (FID), Nikkei Financial Quest Database, Database on Shinkin banks and the Database on credit cooperatives. Years: 1998 - 2005	Econometric	Treatment effects are estimated as differences between the impacts for treated and control groups.	YES. SMEs divided into treatment and control groups by means of the matching estimation approach.	The SCG seemed to be effective as it improved the funds' availability. However, as ex-post performance deteriorated more among SCG users than among non-users, the program resulted to be ineffective. Moreover, the deterioration in firms' performance was less pronounced among guaranteed firms with abundant net worth.
Boocock G., Shariff M. N. M. (2005): Measuring the Effectiveness of Credit Guarantee Schemes: Evidence from Malaysia, *International Small Business Journal*, Vol. 23, n. 4, p. 427-454. **CGS:** Malaysia, New Principal Guarantee Scheme (NPGS), Credit Guarantee Corporation (CGC). **Goal:** Investigate whether it is possible to generate financial and economic additionality without putting the financial resources under undue strain and/or jeopardizing its relationship with the participating financial institutions. **SMEs:** Less than 150 employees and shareholders' funds less than 10 million RM.	Independent	National	• Survey sent to SMEs. • Case-studies compiled by the borrowers and their lenders. • Discussion with key informants. Years: 1998 - 2000	Descriptive statistics	• Financial additionality: computed for a selection of SMEs. • Economic additionality: evaluated in terms of increase in employment, profit and turnover reported in the survey responses and in the case studies. • Sustainability analysis: based upon the fund's leverage data and data on claims processed/paid.	NO.	Though there were positive outcomes, especially in terms of economic additivity, the financial additivity was below average, there have been high rates of default and the lenders have borne a substantial portion of incurred losses. Moreover, the CGC has neither operated a commercially viable guarantee system over the period analyzed, nor convinced the lenders that the operating costs of the NPGS have been shared equitably.

Reference paper, CGS analysed, goal and type of SMEs analysed, if relevant	Study commissioned by	Impact level	Data source and year(s)	Type of analysis	Methodology used	Counterfactual measurement?	Overall conclusions
Lelarge C., Sraer D., Thesmar D. (2010): Entrepreneurship and Credit Constraints: Evidence from a French Loan Guarantee Program. Chapter in NBER book: International Differences in Entrepreneurship, Josh Lerner and Antoinette Schoar editors. **CGS:** France, Loan Guarantee Program (SOFARIS). **Goal:** Evaluate the impact of a French loan guarantee program on new business formation and growth.	Independent	National	• Guaranteed loans data: SOFARIS Information System. • Data on firms' yearly creations: French National Institute of Statistics. • Firms balance sheet data: Direction Générale des Impots. • Bankruptcy filings: French bankruptcy files. Years: 1989 - 2000	Econometric	• First-stage probit equation to estimate the probability of obtaining a guaranteed loan and plus a DID - Heckman selection model. • Two-stage least squares approach to analyse different measures of firm creation and growth.	YES. Firms in the treatment group are selected among those guaranteed by the Fund who obtained a guarantee within their second year of life. Firms in the control group are all the other SMEs which have not been backed by the Fund. All firms have been observed in their 1st year of life, the in their 3rd and 7th.	Firm level: the obtention of a loan guarantee helped newly created firms to grow faster. However, it also significantly increased their probability of default, suggesting that risk shifting may be a serious drawback of such program. Industry level: the availability of loan guarantees had no impact on the overall number of firms created, but made the average new venture larger both in terms of assets and employment.
D. Seens (2015): Cost-benefit Analysis of the Canada Small Business Financing Program. Canada Small Business Financing Program, Small Business Branch Research and Analysis Directorate **CGS:** Canada Small Business Financing (CSBF) program. **Goal:** Measure the costs of admitting the CGS and the ("additional") direct and indirect benefits and calculate the net benefit/cost. **SMEs:** Firms with gross annual revenue lower than 5 million CAD.	Guarantee scheme	National	• CSBFP data • Bank of Canada interest rates Years: 2003-2012	Descriptive statistics + macroecono mic model	Compute the net present value (NPV) of the net benefits of the program. Effects on the GDP are estimated using the Canadian Input-Output macroeconomic model by Statistics Canada.	YES. Although the assumption regarding the incrementality is based on findings from separate studies.	NPV of benefit exceeds that of costs by a factor of 5 over the period. Sensitivity analysis confirms that benefits significantly outward costs of the program.

Reference paper, CGS analysed, goal and type of SMEs analysed, if relevant	Study commissioned by	Impact level	Data source and year(s)	Type of analysis	Methodology used	Counterfactual measurement?	Overall conclusions
P. Asdrubali, S. Signore (2015): The Economic Impact of EU Guarantees on Credit to SMEs, European Economy Discussion Paper 2, July 2015 **<u>CGS:</u>** Multi-Annual Programmes for SMEs in Central, Eastern and South-Eastern European Countries **<u>Goal:</u>** Evaluate the effects of having received a guaranteed loan on firm performance, measured in terms of employment, production, profitability, and factor productivity. **<u>SMEs:</u>** defined by the EU legislation	Independent	Supra-national and national	• European Investment Fund administrative dataset with information at the level of both financial intermediary benefiting from the guarantee and the SMEs. • Orbis database Years: 2003-2010	Econometric	DiD approach to estimate the before-after performance of treated firms with the before-after performance of control firms.	YES. Propensity score mechanism to associate beneficiaries with the most similar non-beneficiary firms, before the actual obtention of a guaranteed loan.	EU SME Guarantee Facility in the CESEE region had, on average, a positive effect on firms' employment: beneficiary firms increased their workforce by 17.3%, compared to the control groups, within the first 5 years following the issuance of the guaranteed loan. Moreover, by the fifth year after the signature date, the turnover of beneficiaries had increased by 19.6%, compared to non-beneficiary companies. However, beneficiaries faced a temporary setback in productivity; such gap was, however, partially absorbed over the medium run. Micro and young SMEs have benefited the most from guaranteed loans in terms of economic additionality.