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## Guarantees for Development

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The Development Assistance Committee: Enabling effective development

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## Abstract

This Working Paper presents the results of a Survey on Guarantees for Development carried out in the context of the OECD DAC work to modernise statistics on external development finance post 2015. No comprehensive and internationally comparable data on guarantees for development and the volume of finance mobilised by them exist at present. This Survey aimed to fill this information gap by estimating the volume of private sector flows to developing countries mobilised by guarantee schemes. Guarantees for development purposes have mobilised over USD 15 billion of private sector flows to/in developing countries over the period of study (2009-11). This report analyses the data from the Survey (e.g. by sector and by country), includes a reflection on how the amount mobilised by guarantees can be captured at an international level and comments on the leverage ratio as a measure of efficiency of development finance.

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# GUARANTEES FOR DEVELOPMENT

## A survey by the Working Party on Development Finance Statistics (WP-STAT) of the OECD's Development Assistance Committee (DAC)

### I. Introduction

The OECD Development Assistance Committee (DAC) collects and publishes data on external resource flows – i.e. financial resources, good or services from developed to developing countries. At its High Level Meeting in December 2012, the DAC was mandated to take a new and broader look at development finance and to improve statistics on external development finance beyond Official Development Assistance (ODA).

No comprehensive and internationally comparable data on guarantees for development and the volume of finance mobilised by them exist at present: guarantees are not captured in the DAC statistical framework or in international financial statistics more generally. The Survey on guarantees for development, carried out in the context of the new DAC mandate, aimed to help fill this information gap<sup>1</sup>.

For the purposes of the Survey, “guarantees for development” were defined as guarantees extended with the promotion of the economic development and welfare of developing countries as their **main** objective. The Survey was based on a questionnaire sent to Development Finance Institutions (DFIs), aid agencies and Ministries of Foreign Affairs in 24 DAC and 12 non-DAC countries, and to 17 International Finance Institutions (IFIs) (see Annex 1)<sup>2</sup>.

The main objective of the Survey was to estimate the volume of private sector flows to developing countries mobilised by guarantee schemes over the period 2009-11. The Survey aimed also to: i) explore the feasibility of collecting qualitative and quantitative information on guarantee schemes in the future, as part of statistical reporting on external development finance to the DAC; and ii) contribute to the on-going reflection and discussions in various fora on how to measure the leverage impact of different instruments used in development finance.

The report is structured as follows. Section II recalls the key terminology and presents the main results from the data analysis, including an estimation of the amount mobilised by guarantee schemes. Section III explains the reasoning behind the definition of “amount mobilised”, compares its calculation with that of a leverage ratio and comments on the latter as a measure of efficiency of development finance. Finally, section IV summarises challenges and next steps.

This publication aims to encourage reflections on the role and measurement of guarantees in the post-2015 development finance framework. Comments and suggestions to the Secretariat on this topic are welcome and can be addressed to [dac.contact@oecd.org](mailto:dac.contact@oecd.org).

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1. Detailed information obtained for this report at the level of individual guarantees is confidential. Results are therefore being presented at aggregate level.
  2. Guarantees extended by export credit agencies were excluded as development is not their primary objective.

## II. Data Analysis

This section presents the main results of the Survey. The data relate to over 1000 long-term guarantees<sup>3</sup> issued by 14 countries and organisations (see Table A2). Key terminology used in the Survey data collection and analysis is recalled in Box 1. Some characteristics of short-term guarantees are presented in Box 2.

### Box 1 - Key terminology

The term **guarantee** refers to a legally binding agreement under which the guarantor agrees to pay part or the entire amount due on a loan, equity or other instrument in the event of non-payment by the obligor or loss of value in case of investment.

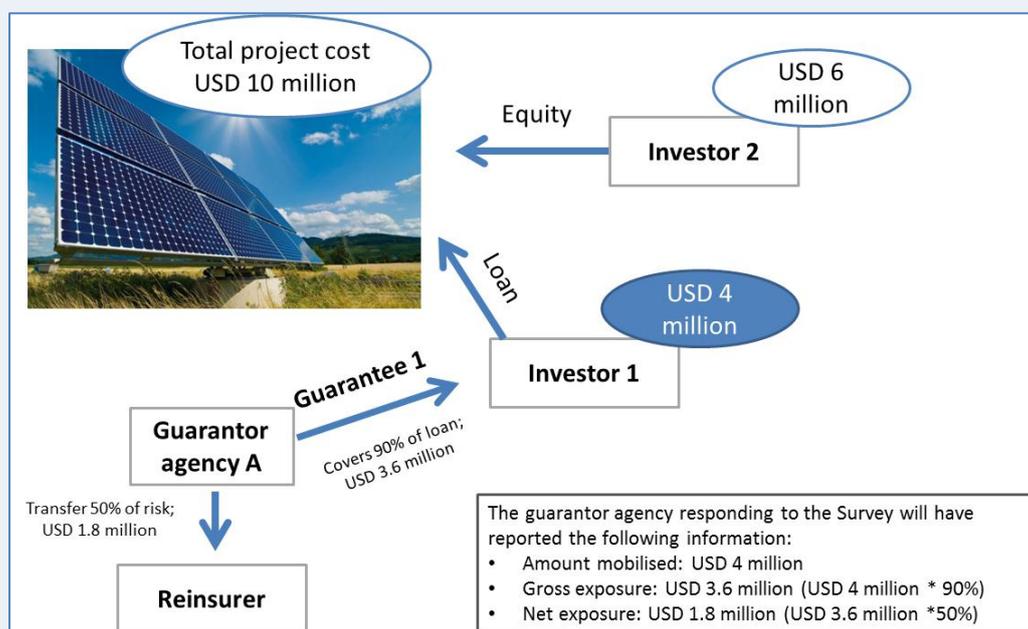
**Guarantees for development** are those extended with the promotion of the economic development and welfare of developing countries as the main objective (i.e. with a **development motive**). The Survey followed an “institutional approach” in the sense that only institutions with a developmental mandate were included in the sample.<sup>4</sup>

**Amount mobilised** by a guarantee is the full nominal value of the instrument (e.g. loan, equity) to which the guarantee relates, regardless of the share of this value covered by the guarantee (USD 4 million in Figure 1).

**Gross exposure** is the full amount the guarantor will pay to the investor if the risk covered materialises, regardless of reinsurance (USD 3.6 million in Figure 1).

**Net exposure** is the gross exposure minus the amount the guarantor would recover through reinsurance (USD 1.8 million in Figure 1).

Figure 1 – Amount mobilised, gross and net exposure in Survey (example)



3. Long-term guarantees cover risks for one year or more. Data on short-term guarantees were collected at an aggregate level due to confidentiality issues, and could therefore not be included in the overall data analysis.

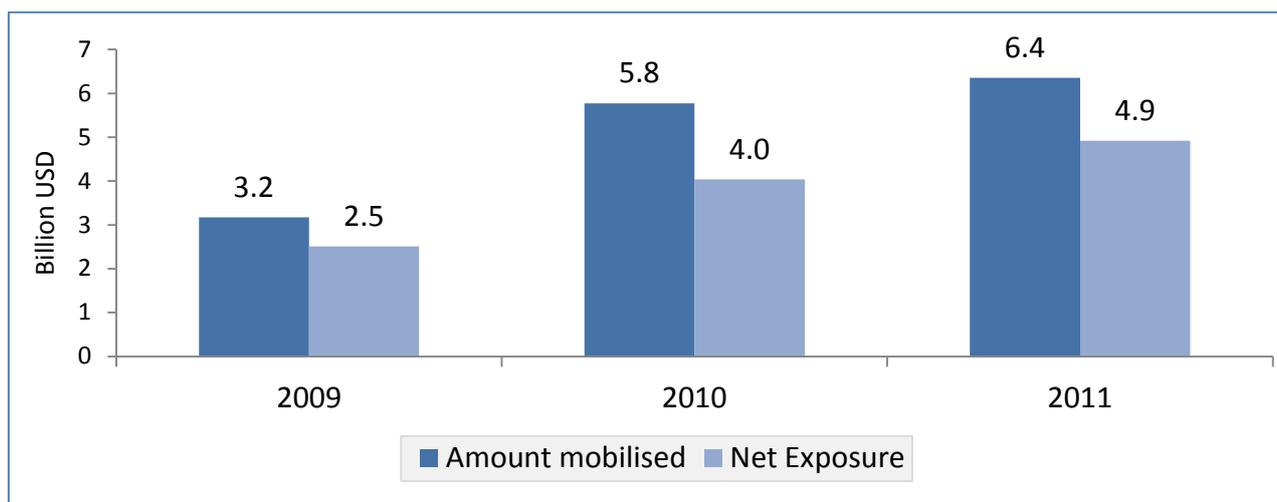
4. One member reported however a few guarantees issued by the export credit agency on behalf of the Ministry of Foreign Affairs.

## II.a. How much?

**Guarantees for development – extended by DAC donor governments (aid agencies and DFIs) and IFIs – mobilised USD 15.3 billion from the private sector for development purposes from 2009 to 2011.**

Figure 2 shows the amount mobilised from the private sector by guarantee schemes for developmental purposes and the risk taken by the guarantor - measured by the net exposure - for the period 2009 to 2011<sup>5</sup>.

**Figure 2 - Amount mobilised and net exposure (USD billion)**



The amount mobilised by guarantees – i.e. the cash flow from the private sector in support of projects in developing countries – doubled from USD 3.2 billion in 2009 to USD 6.4 billion in 2011. The average net exposure was 70% of the amount mobilised.

The scale of resources mobilised for development through guarantee schemes remains small in the overall picture of development finance. In 2011, developmental guarantees covered activities valued at USD 6.4 billion, which is around 12 per cent of country-programmable aid (USD 54.8 billion) and less than 1 per cent of international private flows. However, it would seem that there is considerable potential to expand the use of guarantees: several donors are yet to establish guarantee programmes, while those who do offer guarantees are expanding their use.

## II.b. By whom?

**Over 50% of the amount mobilised was guaranteed by multilateral agencies (IFIs).**

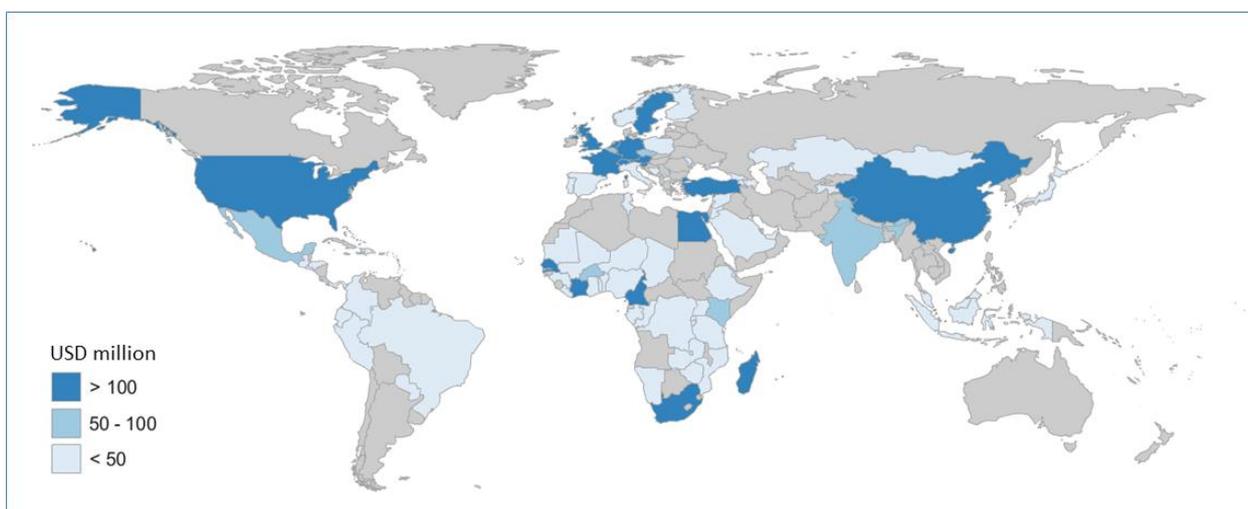
The Survey found that IFIs use more guarantees for development purposes than their bilateral counterparts (DFIs), with the exception of OPIC which accounted for 65% of total amount mobilised by DFIs. Several bilateral institutions stated that, being obliged by law to offer only ODA-eligible financial products, they could not include guarantees in their portfolio. Guarantees are not counted as ODA as they do not represent a financial flow.

5. The gross exposure was used as a proxy of the amount mobilised when the latter was not available. Data on net exposure are missing for a few guarantees.

**15% of the resources mobilised by guarantees were domestic.**

Figure 3 shows the origin of the private flows mobilised and their amounts. It is interesting to note that guarantees have also mobilised a significant amount of domestic resources in developing countries: 15% of the resources mobilised by guarantees (USD 2.3 billion) in 2009-11 were domestic.

**Figure 3 – Amount mobilised by origin of funds**

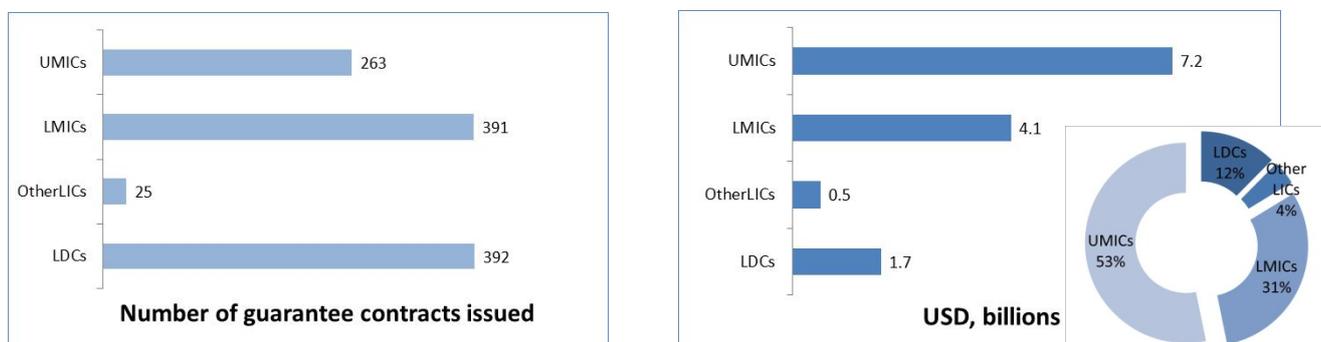


**II.c. To whom?**

**More than 50% of the resources mobilised by guarantees benefited upper-middle income countries.**

In terms of the number of guarantees issued (Figure 4 left-hand side), almost 40% of the contracts issued benefited least-developed countries (LDCs). However, in terms of amount mobilised, more than 50% of the total resources mobilised went to upper-middle income countries (Figure 4, right-hand side). This information suggests that contracts were significantly smaller in size in LDCs. The average risk exposure (not shown in Figure 4) did not vary significantly between income groups.

**Figure 4 - Amount mobilised by beneficiary income group**

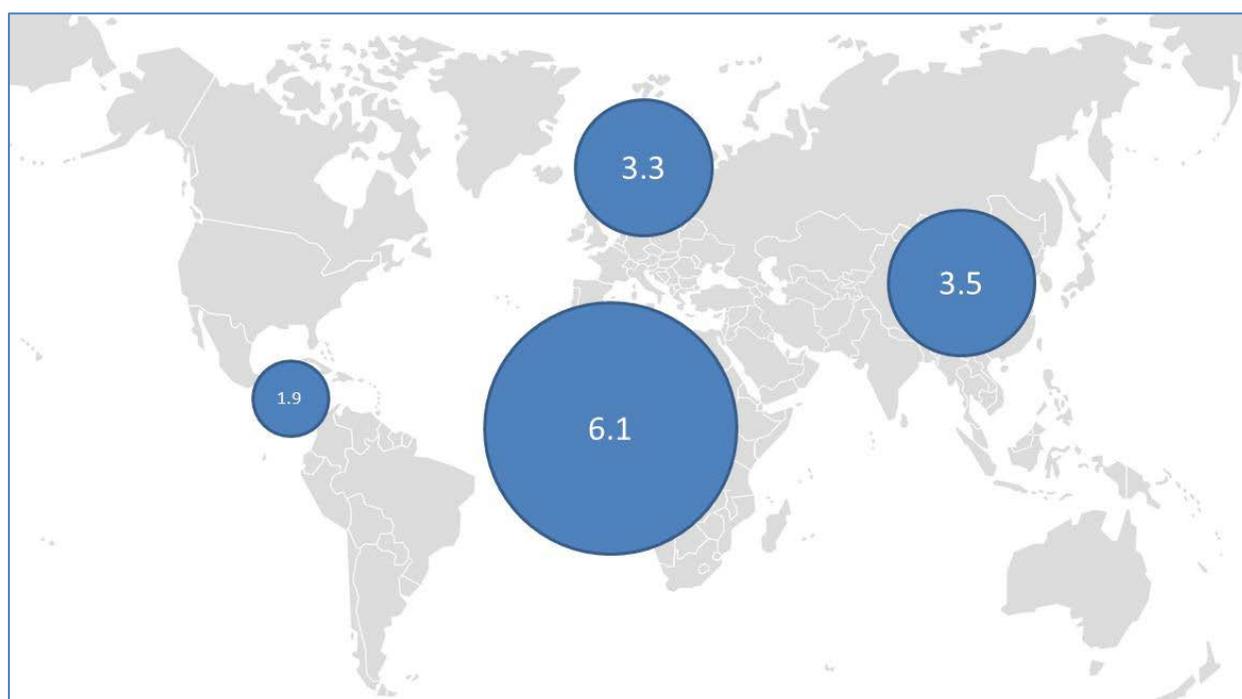


LDCs: least-developed countries; Other LICs: other low-income countries; LMICs: lower-middle income countries; UMICs: upper-middle income countries.

**Africa was the region benefiting the most from guarantees.**

The region benefiting the most from guarantees was Africa, followed by Asia and Eastern Europe (41, 24 and 22 per cent of total amount mobilised respectively). Over one-third of the resources made available in Africa went to UMICs – in particular to Botswana, Tunisia and South Africa – another third benefited LDCs and “Other LICs”. In terms of the number of contracts, over 650 guarantees were issued in Africa, 201 in Asia, 74 in Europe and 143 in Latin America. Contracts issued in Africa were significantly smaller than those issued in other regions. A list of beneficiary countries is included in Annex 2.

**Figure 5 – Regions benefiting from resources mobilised by guarantees (USD, billion)**



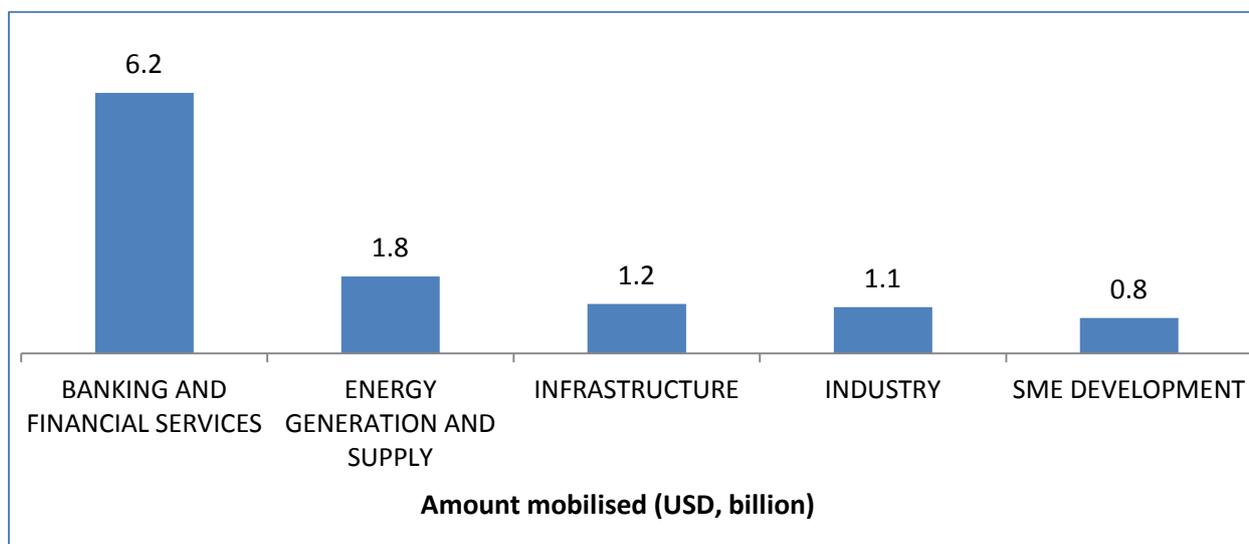
**II.d. To which sector?**

**The banking and financial services sector benefited the most from guarantees.**

Figure 6 shows the Top 5 sectors benefiting from guarantees<sup>6</sup>. Guarantees were mainly used for banking and financial services, e.g. credit lines for micro-finance loans, improvement of portfolio structure and refinancing.

6. The sector codes used in this analysis are a subset of the OECD/DAC codes. Respondents were encouraged to use OECD/DAC sector codes, however many respondents used their institutions’ internal codes. In order to undertake the sectorial analysis, the information on the main sector, sub-sector and project description was used to map each institution’s codes to those of the OECD/DAC.

Figure 6 - Top 5 sectors benefiting from guarantees



**Guarantees were not widely used for climate-change-related projects.**

Taking into account the on-going discussions on guarantees in the climate finance context, Survey respondents were asked to identify if the guaranteed project addressed climate change adaptation or mitigation issues. Only 25 guarantees (out of over 500 guarantees for which the information was available) were marked as having a climate change objective. This figure could be an underestimation for the following reasons: i) the Survey did not provide a precise definition for climate-change-related project<sup>7</sup>; ii) the project description of some guarantees suggests that, even if not so tagged, the project could have been considered as climate-change-related, and vice versa; and iii) several institutions mentioned that guarantees were being used for climate-change-related projects from 2012 on, while the Survey covered years 2009-11. An increase in the use of guarantees for climate-change-related projects could therefore be expected in the future.

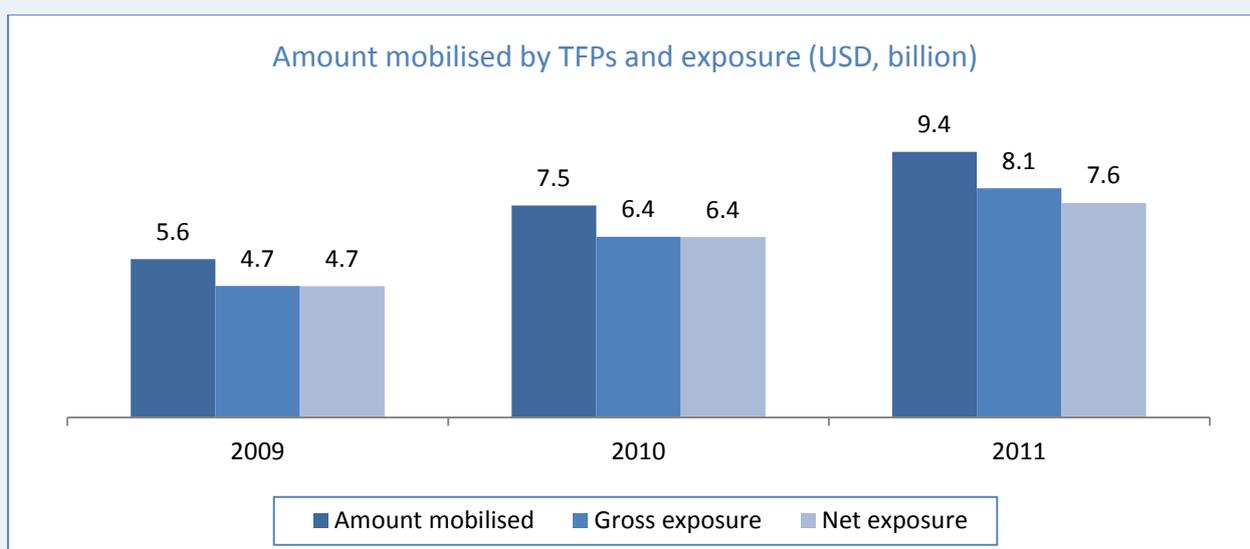
7. The DAC Rio markers were not used in the Survey to avoid overburdening the respondents, not necessarily familiar with the marker definitions. The question included in the Survey was the following: "Indicate if the project addresses climate change adaptation or mitigation issues. For "Yes", the climate change adaptation/mitigation objective has to be explicitly promoted in project documentation." Response options were "Yes", "No" and "Not tracked".

## Box 2 – Short-term guarantees: Trade Finance Programmes (TFPs)

Trade Finance Programmes (TFPs) – or short-term guarantees – fill market gaps for trade finance by providing guarantees and loans to banks to support trade. TFPs provide companies with the financial support they need to engage in import and export activities in the most challenging markets. The differences between TFPs and export-credit guarantees are the following:

- the guarantor agency's mandate is developmental in the former and export-facilitating in the latter;
- operations are not tied for TFPs as the guarantor is an IFI and not a specific country;
- most TFP operations are exports or imports between developing countries.

TFPs mobilised over USD 22 billion from 2009 to 2011. These data refer to short-term guarantees issued by the European Bank for Reconstruction and Development, Inter-American Development Bank, Asian Development Bank and International Finance Corporation. Data on TFPs are not fully comparable to those on long-term guarantees due to the use of a different definition of amount mobilised to the one proposed in the Survey.



### II.e What are the main characteristics of guarantees issued for development?

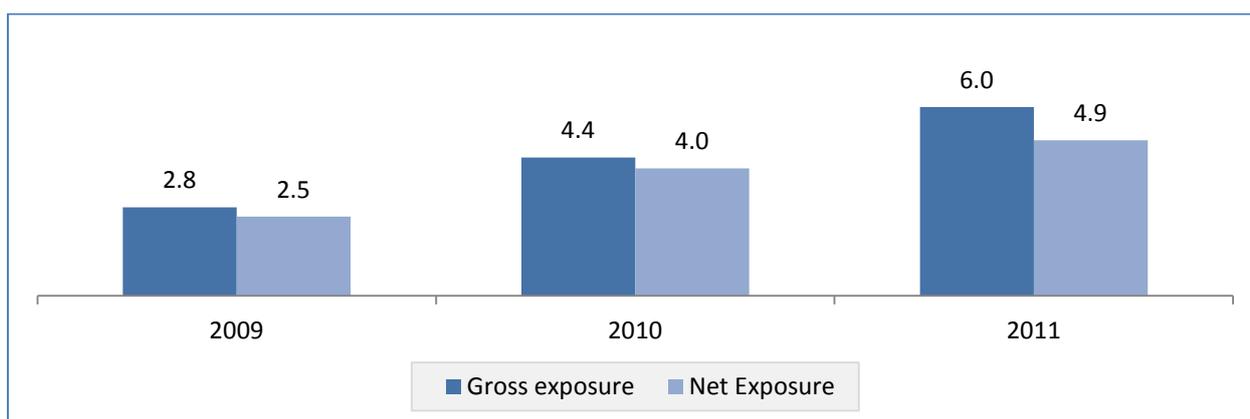
Guarantees covered political risks, commercial risks or both. The size and coverage of political risk guarantees, mainly issued by IFIs (and in particular by MIGA) is significantly higher than those of commercial risk guarantees (Table 1).

**Table 1 – Guarantees by type of risk covered**

Risk covered	Average amount mobilised (USD, million)	Average gross exposure (USD, million)	Percentage coverage
Both commercial and political risks	42	36	87%
Commercial risk	4	2	44%
Political risk	18	18	99%

When reinsurance is used as a means of risk management, the risk assumed by the guarantor is measured by the net exposure (Figure 7). Five institutions used reinsurance to manage the risk associated with guarantees; others used their own resources, mainly in the form of capital reserves. Another mechanism to spread risk was the use of co-guarantees (six institutions).

**Figure 7 – Guarantors' gross and net exposure (USD, billion)**

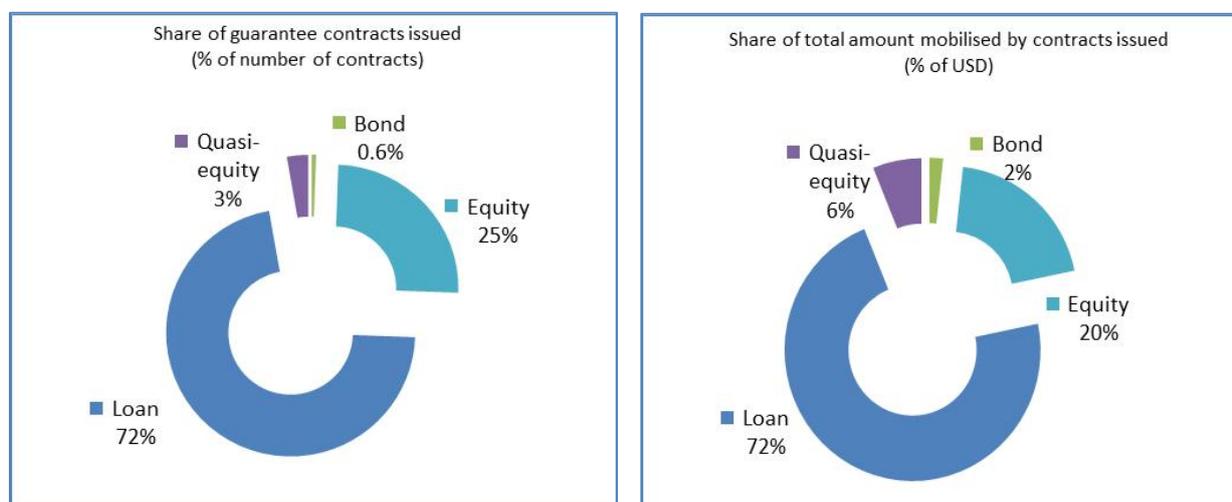


Information on fee income and claims paid is incomplete in the Survey, as several agencies left the relevant field empty. Available data from the Survey, online research and interviews with guarantor agencies suggest that the provision of guarantees has not typically been a loss-making activity and that the claim rate is very low, of approximately 1 to 2 per cent of the guarantor's exposure during the period 2009-11.

Guarantees are issued as individual or portfolio guarantees. Individual guarantees were more widely used, and covered, on average, a higher proportion of the risk than portfolio guarantees.

Loan guarantees were more widely used than equity, quasi-equity and bond guarantees. Over 70% of the guarantees in the sample covered loans in terms of both number of contracts and amount mobilised (Figure 8).

**Figure 8 – Instruments covered by guarantees**



### III. Measuring the Catalytic Effect of Guarantees: A First Reflection

The terms “mobilising”, “leveraging” and “catalysing” private flows are frequently used in discussions on development finance, but no internationally **agreed** definitions of these terms exist. While many organisations publish data on their leveraging, their calculation methodologies vary. Indeed, the meaning of these terms differs according to the instruments they refer to (e.g. loans, guarantees) and the actors involved in the transactions (e.g. development agency, private sector).

#### **Definition of “amount mobilised”**

For the purposes of the Survey, the term “amount mobilised” (or amount leveraged)<sup>8</sup> was defined as follows: “The “amount mobilised” by a guarantee is the full nominal value of the instrument (e.g. loan, equity) to which the guarantee relates, regardless of the share of this value covered by the guarantee.” Figures 9 and 10 provide examples to guide the reader through the reasoning behind the Survey definition.

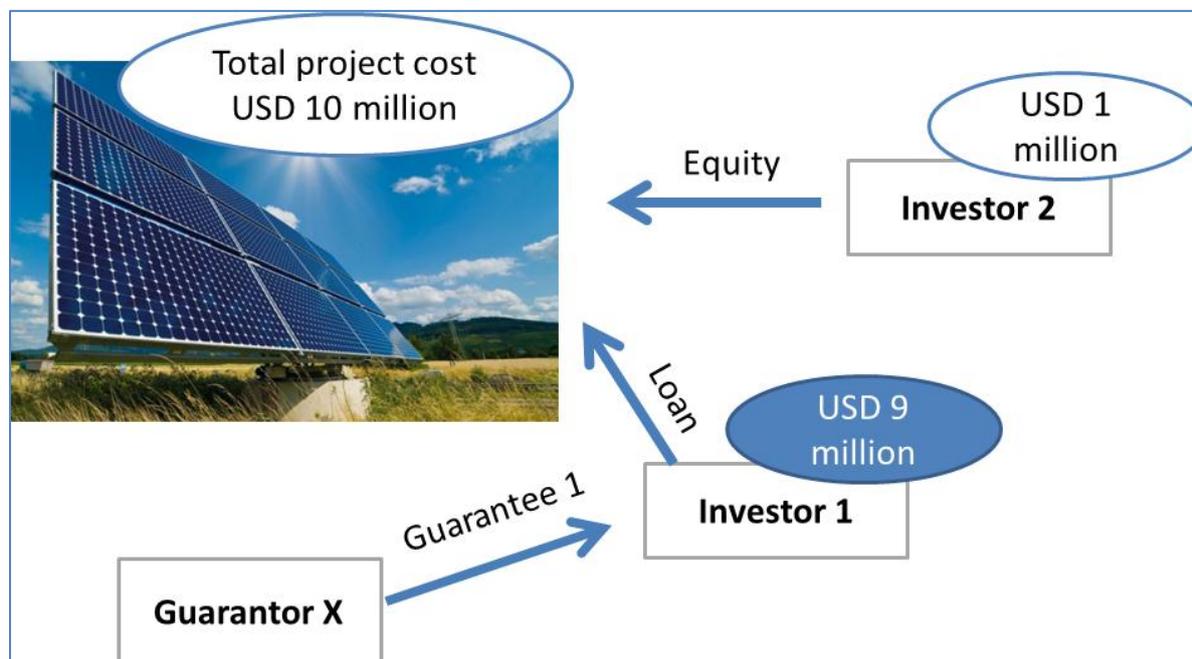
Figure 9 illustrates an example of a project funded by investors 1 and 2, with Investor 1’s lending being guaranteed by Guarantor X. The “amount mobilised” could be:

1. the face value of the instrument being guaranteed (USD 9 million); or
2. the total project cost (USD 10 million).

Choosing between the two options involves a trade-off between minimising the risk of double-counting and avoiding the underestimation of the real mobilisation/leverage effect of the guarantee.

8. No distinction was made between the terms “mobilised” or “leveraged”.

Figure 9 – Case where amount guaranteed accounts for most of the total project cost



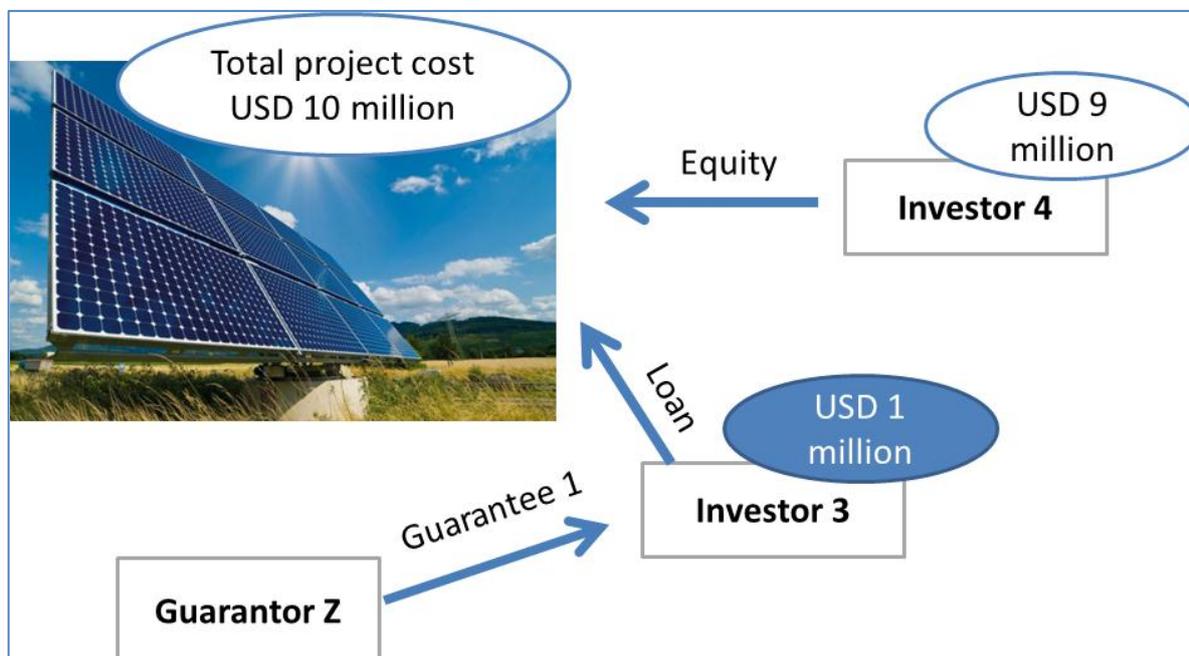
Option (1) was chosen for the Survey. Its implicit assumption is that Investor 1 would not have invested in the project without the guarantee, i.e. *causality* is assumed between the guarantee and the instrument being guaranteed.

Option (1) could be considered, however, as a “conservative” approach. It raises the question of *whether Investor 2 would have invested in the project without Guarantor X’s guarantee*, and if not, whether the “amount mobilised” by the guarantee should be the total project cost (USD 10 million) instead of the loan extended by Investor 1 (USD 9 million).

Logically, the larger the share of the investment being guaranteed in the total project cost, the higher the probability that the project would not have proceeded without a guarantee. On this basis one could argue that the “amount mobilised” as defined in the Survey underestimates the mobilisation/leverage effect of the guarantee by USD 1 million. However, if another guarantor responding to the Survey guarantees Investor 2, there is no underestimation, as this institution will report its guarantee for USD 1 million, resulting in a total amount mobilised of USD 10 million.

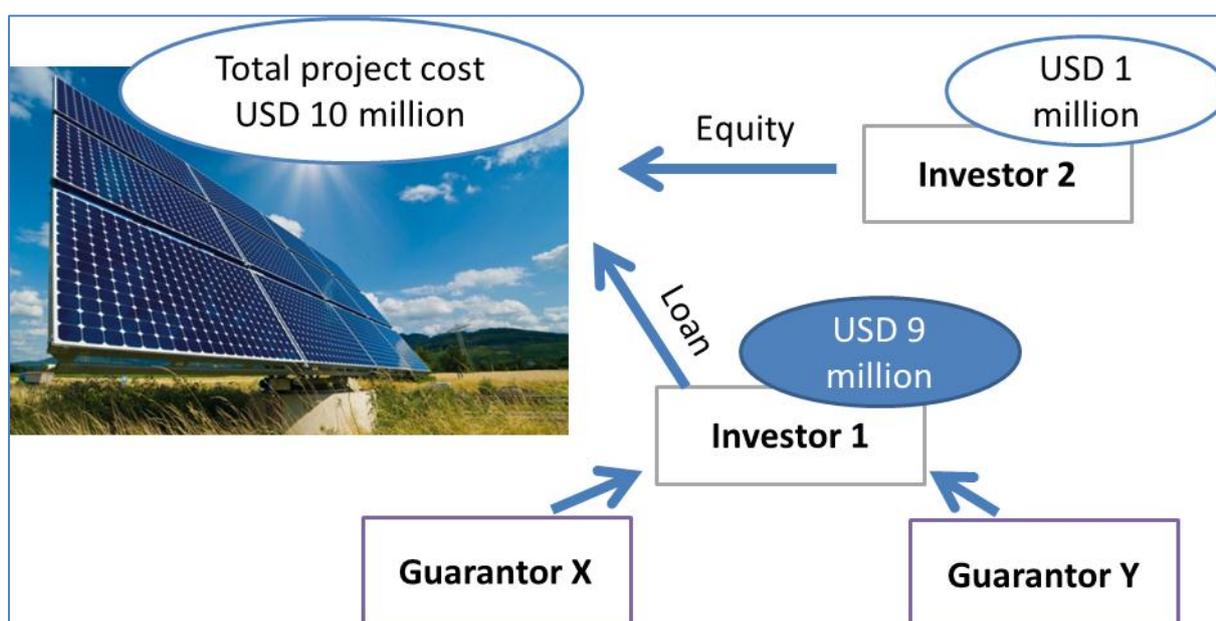
Figure 10 shows a different example – the loan being guaranteed is small compared to the total project cost. In this case, the probability that the project would have proceeded without the guaranteed loan is very high as most of the funding is already available through other sources (Investor 4). Applying option (2) (the total project cost) as a definition of “amount mobilised” would cause an overestimation of USD 9 million, an amount much higher compared to the underestimation incurred with the conservative approach (USD 1 million or null in Figure 9). Furthermore, if another guarantor was involved in the project and both guarantors reported to the DAC, option (2) would result in a total amount mobilised of USD 20 million (twice the amount mobilised in reality).

Figure 10– Case where amount guaranteed accounts for a small share of the total project cost



A risk of double counting arises in the case of co-guarantees, no matter which definition of amount mobilised is chosen. Figure 11 illustrates the case where both guarantors X and Y guarantee Investor 1; if both report to the DAC, guarantees will be reported twice. In order to avoid this, two variables were included in the Survey to identify co-guarantees; and the “co-guarantor name” allowed the tracking of the guarantees that had been reported twice.

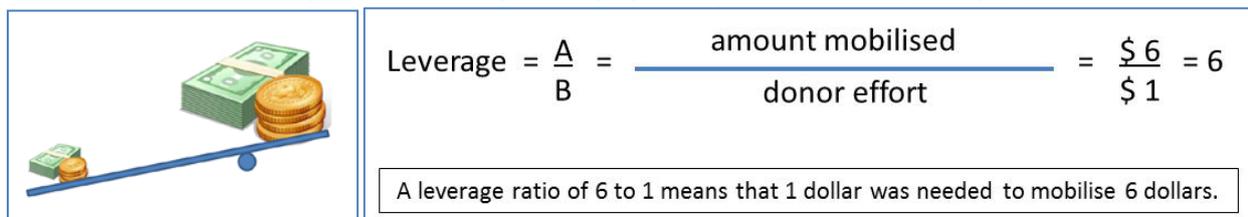
Figure 11 – Co-guarantee



### III.b. Amount mobilised vs. leverage ratio - the problem of calculating the leverage effect

For any type of transaction, the leverage ratio measures the amount of resources employed compared with the amount of resources mobilised. Figure 12 presents a simple example and highlights the two pieces of information needed for the calculation: the amount mobilised (numerator) and the effort made by the public institution to mobilise the resources in the numerator (denominator).

Figure 12 – Leverage ratio graphically and in formula (example)



According to the Survey, guarantees mobilised over USD 15 billion from the private sector for development purposes during the period 2009-11. The **amount mobilised** is of particular interest for analyses from the recipient’s point of view as it shows how many resources were made available to developing countries through guarantees. Measuring the **donor effort** to mobilise these resources – the denominator in the leverage ratio calculation - is less straightforward<sup>9</sup>.

In the case of guarantees, the public institution (or donor) effort is not immediately clear in the form of a discrete payment. However, it could be expressed for example in terms of the *risk taken* by the institution<sup>10</sup>. Annex 3 illustrates a few options to quantify the risk taken by the guarantor (i.e. its ex-ante exposure to potential losses), the issues involved with each of the options and the information needed to calculate these. A concrete example of a leverage ratio calculation by the World Bank is also included.

The analysis in Annex 3 aims to highlight the complexity, subjectivity and amount of data needed to calculate the leverage ratio. It suggests that the leverage ratio may not be an appropriate measure for quantifying the catalytic effect of guarantees at an aggregate level.

The leverage ratio may be used, as is often the case, at the institutional level to measure the strategic use of resources, or “efficiency” of the instruments being used, to mobilise private sector resources: the higher the leverage ratio, the more the resources mobilised in proportion to the resources allocated by the public institution. However, one should keep in mind that the leverage ratio does not depend only on the catalytic effect of a given financial instrument but also on the context and market conditions in which the instrument is being used. It is likely that any instrument, if used in LICs, will have a lower leverage ratio than the same instrument used in MICs (the public sector efforts needed to make investments in LICs attractive to the private sector are likely to be higher than the efforts needed in MICs).

If the leverage ratio maximisation is seen as the institutions’ “efficiency” measure, there is a risk that resources will flow primarily to MICs, as these are the countries where the context would allow such maximisation. Public resources will be more “efficient” - “efficient” in the sense that less public resources are needed to

9. In particular for guarantees. In the case of “flow instruments”, e.g. a loan, the donor effort is the amount of the loan, which is easily quantifiable. In the case of a loan, the quantification of the numerator – the amount mobilised – is less straightforward due to attribution/causality issues.

10. Claims eventually paid in case of default, capital subscriptions to the agency issuing guarantees or the difference between the guarantee fee charged by the public institution and the guarantee fee at market rates could be other options.

mobilise private sector resources – but at the same time less “effective”, as these resources would not be invested in the countries most in need of external development finance, unless the public resources freed up through increased private sector investment in MICs were re-allocated to LICs.

Another consideration to take into account if using the leverage ratio as a measure of efficiency is that, in terms of *attribution* of the amount mobilised, the higher the leverage ratio, the less likely that the resources mobilised can be attributed to the public intervention.

## IV. Challenges and Next Steps

Based on the Survey results, the DAC will consider a concrete proposal for a regular data collection on guarantees to enable the quantification, at an international level, of the resources made available (amount mobilised) to/in developing countries through guarantee schemes, thereby valorising the use of these instruments by donors.

### **Scope of future analyses on guarantees: development motive vs. development impact**

The results of the Survey highlighted that the boundary between guarantees for development (as defined in the questionnaire) and guarantees extended with a commercial motive is not sharply defined. Developmental and commercial motives could even be interdependent, e.g. when commercial viability is a condition for a publically-funded development institution to guarantee a project<sup>11</sup>.

The scope of data collection may therefore be best defined on an institutional basis. The public institutions issuing guarantees are aid agencies, DFIs, IFIs and export credit agencies. Data on export credit guarantees are already being collected at the activity level by the OECD Export Credit Group and work is currently underway to harmonise this data collection with the DAC system. As a consequence, only guarantees issued by aid agencies, DFIs and IFIs would be subject to data collection by the DAC. Analytical studies on guarantee schemes could include both developmentally and commercially motivated guarantees, if deemed useful by the analyst.

### **Confidentiality issues**

For this survey, most countries were able to provide detailed information at the level of individual guarantees. This allowed aggregates to be compiled by recipient country, sector, etc. However, information on individual guarantees is usually classified as commercial-in-confidence, and the survey responses from individual countries and institutions cannot be published or released. In considering any regular data collection, the DAC may therefore wish to consider the scope of data that would be subject to publication.

In addition, and also for confidentiality reasons, a number of IFIs were not able to provide information at the level of individual guarantees, mainly in the case of short-term guarantees. A possible solution here could be to collect data on individual guarantees for long-term contracts, and only collect aggregates by beneficiary country and sector for short-term guarantees.

### **Methodology to calculate the amount mobilised by guarantees**

Data on the amount mobilised, as defined in the Survey, were not always readily available, and the methodology to calculate this amount varies among institutions. In order to develop a statistical collection on guarantees, an agreed definition is essential to ensure consistency and comparability of data.

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<sup>11</sup> Operating in a commercial basis is a criteria for project-eligibility to most DFIs' and IFIs' funding and guarantees.

The definition of “amount mobilised” used in the Survey was considered as appropriate for a future data collection. Nevertheless, two further suggestions have been made: 1) capturing the total project cost, to ensure that the guarantees’ catalytic effect is not underestimated by a “conservative” approach; 2) estimating the amount mobilised through the net exposure, as the latter represents the guarantor risk (and matches with the contingency liability in the guarantor’s balance sheets) and ensures a lower degree of double-counting.

### **Leverage ratio**

The Survey suggests that the leverage ratio is not an appropriate measure for quantifying the catalytic effect of guarantees **at an aggregate level**. In practice, collecting the amount of data needed to calculate it would not be cost-efficient. Furthermore, comparisons between countries would be biased if the probability of default – a complex indicator to measure – is not properly captured.

The measurement of **donor effort** at the level of individual guarantees was not specifically addressed in the Survey as this issue is part of a wider on-going political discussion under the post-2015 development finance framework. The forthcoming proposal will therefore be limited to capturing the guarantees’ catalytic effect from the recipient’s point of view (amount mobilised). A donor effort measure would be premature at this stage but could be elaborated in due course.

## ANNEX 1 - SAMPLE AND RESPONSE RATE

The Survey was organised through the DAC Working Party on Development Finance Statistics (WP-STAT) in collaboration with statistical correspondents in both DAC and non-DAC countries and IFIs.

The sample included DFIs, aid agencies and Ministries of Foreign Affairs of 24 DAC donors<sup>12</sup>; and 17 IFIs. The list of countries and institutions in the sample is given in Table A2. Export credit agencies were not included in the sample as development is not their primary objective.

Information was collected at the level of individual guarantees for long-term guarantees<sup>13</sup> issued between 2009 and 2011. Data on short-term guarantees were collected at an aggregate level due to confidentiality issues, also for the period 2009-11.

The Survey response rate was 85%, with 20 countries (bilateral institutions) and 15 IFIs having responded to the Survey. Overall, 17 countries or institutions provided guarantees for development and 4 other institutions plan to use these instruments for development in the near future (Table A1).

**Table A1 – Responses to the Survey by type of institution – Long- and short-term guarantees**

	Bilateral institutions	Multilateral institutions	Total
Issuing guarantees	8	9	17
Not issuing guarantees	10	4	14
Planning to issue guarantees in the near future	2	2	4
<b>Total</b>	<b>20</b>	<b>15</b>	<b>35</b>

From 2009 to 2011, 1170 long-term guarantees and several thousands of short-term guarantees<sup>14</sup> were issued. Fifty-five guarantees were excluded from the sample; the rationale used to exclude them is described in Box 3.

Data analysis in section II focuses on guarantees having mobilised funds from the private sector. These guarantees represent over 90% of the amount mobilised in the sample. Intra-agency guarantees were out of the scope of the Survey, which may explain the small percentage of public sector funding. Guarantee beneficiaries<sup>15</sup> were also mainly private companies (over 80%); both public and private beneficiaries were included in the analysis.

12 . Twelve non-DAC donors were also invited to participate in the Survey. Four of them replied; none of them providing guarantees for development. These countries were not included in this report's analysis.

13 . Long-term guarantees cover risks for one year or more.

14 . The exact number of contracts issued as short-term guarantees is not available.

15 . Beneficiary is the entity in the developing country where the ultimate investment is made. In the case of loans, it is the borrower whose debt will be paid by the guarantor should the obligor fail to pay its debt to the investor.

### Box 3 – CRITERIA FOR DATA CLEANING

A total of 55 reported transactions were excluded from the analysis, for the following reasons (a few guarantees were excluded for more than one reason):

- Type of investor was not private. As the main objective of the exercise was to estimate the amount mobilised from the private sector, those guarantees for which the investor was a public organisation were excluded from the analysis (16 guarantees).
- The beneficiary country was not an ODA-eligible country (36 guarantees).
- The instrument being guaranteed was itself a guarantee (2 guarantees).
- Missing data on amount mobilised and exposure. (2 guarantees).
- Use of co-guarantees. If two institutions in the sample were co-guarantors of the same underlying instrument, the same guarantee was reported twice. In order to avoid double counting, only one of such guarantee was included in the analysis (3 guarantees).

**Table A2 - List of countries and institutions in the sample**

Respondents (country and institution)	Guarantees for development?	Amount mobilised 2009-11 (USD, million)
Australia – AUSAID	No response	
Austria - Oesterreichische Entwicklungsbank AG	Yes	304.3
Belgium - DGDevelopment, Ministry of Foreign Affairs	No	
Canada - Export Development Canada	No	
Denmark – DANIDA	No	
European Union - EuropeAid; EIB	No response	
Finland – FINNVERA	Yes	209.1
France - Agence Francaise de Développement; PROPARCO	Yes	1116.1
Germany – KfW; DEG	Yes	62.9
Greece - Ministry of Foreign Affairs	No	
Ireland – DFA	No response	
Italy - Ministry of Foreign Affairs - General Directorate for Development Cooperation	In the near future	
Japan - MFA; JICA; JBIC	No	
Korea – KEXIM	In the near future	
Luxembourg - Directorate for Development Cooperation, Ministry of Foreign Affairs	No	
Netherlands - Atradius, Min. Dev. Coop., DG International Trade, Foreign Ec. Relations	No	
New Zealand – NZAID	No response	
Norway - NORAD; NORFUND	Yes	29.7
Portugal – SOFID	Yes	3.7
Spain – CESCE	No	
Sweden – SIDA	Yes	12.6
Switzerland – SECO	No	
United Kingdom - DFID; UK Export Finance	No	
United States - USAID; OPIC	Yes	5621.2
Asian Development Bank (ADB)	Yes*	
African Development Bank (AFDB)	Yes**	139.5
Arab Fund for Economic and Social Development (Arab Fund)	No	
Arab Bank for Economic Development in Africa (BADEA)	No	
Caribbean Development Bank (CDB)	No	
Credit Guarantee and Investment Facility (CGIF)	In the near future	
Climate Investment Funds (CIF)	No response	
European Bank for Reconstruction and Development (EBRD)	Yes***	
Inter-American Development Bank (IADB)	Yes****	69.8
Int. Bank For Reconstruction and Dev./Int. Dev. Association (IBRD/IDA)	Yes	1496.2
International Fund for Agricultural Development (IFAD)	No	
International Finance Corporation (IFC)	Yes****	1199.9
Islamic Development Bank Group [ISDB (ICIEC)]	Yes	430.9
Multilateral Investment Guarantee Agency (MIGA)	Yes	4467.9
Nordic Development Fund (NDF)	In the near future	
OPEC Fund for International Development (OFID)	No response	
Private Infrastructure Development Group (PIDG) – GuarantCo	Yes <sup>b</sup>	144.2

\* Issues both long and short-term guarantees. Only short-term guarantees were reported as no long-term guarantee was issued in the period 2009 to 2011. Data on short-term guarantees is not reported in this table as not comparable to long-term guarantee data.

\*\* Issues both long and short-term guarantees. Only long-term guarantees were reported as no short-term guarantee was issued in the period 2009 to 2011.

\*\*\* Issues both long and short-term guarantees. Both were reported to the Survey, however long-term guarantees were excluded from the analysis as the investor was a multilateral organisation (not private).

\*\*\*\* Issues both long and short-term guarantees; both were reported to the Survey.

<sup>a</sup> The gross exposure was used as a proxy of the amount mobilised.

<sup>b</sup> The gross exposure was used as a proxy of the amount mobilised.

## ANNEX 2 - COUNTRIES BENEFITING FROM LONG-TERM GUARANTEES

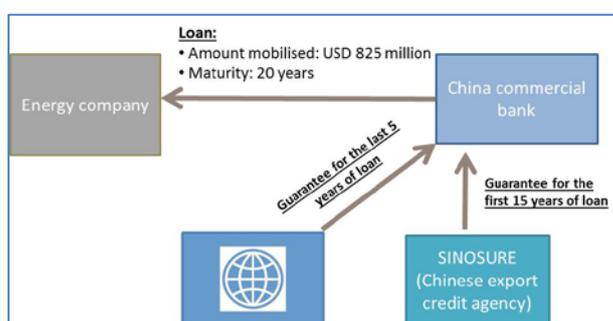
Region	Beneficiary country	Amount mobilised 2009-11 (USD, million)
Africa	Algeria	173.2
	Angola	13.6
	Benin	15.2
	Botswana	825.3
	Burkina Faso	84.6
	Burundi	4.1
	Cameroon	176.4
	Central African Rep.	0.8
	Chad	19.5
	Congo, Dem. Rep.	25.4
	Congo, Rep.	19.9
	Cote d'Ivoire	219.8
	Djibouti	25.4
	Egypt, Arab Rep.	72.5
	Ethiopia	224.0
	Gabon	43.8
	Ghana	729.9
	Guinea	12.3
	Kenya	472.7
	Liberia	180.2
	Libya	7.4
	Madagascar	140.8
	Malawi	6.0
	Mali	47.6
	Mauritania	5.3
	Mauritius	53.6
	Morocco	0.2
	Mozambique	36.0
	Namibia	74.8
	Niger	4.9
	Nigeria	368.9
	Rwanda	82.3
	Senegal	378.8
	Seychelles	135.5
Sierra Leone	12.7	
Somalia	0.1	
South Africa	342.5	
Swaziland	1.2	
Tanzania	28.2	
Togo	54.9	
Tunisia	325.7	
Uganda	42.8	
Zambia	28.0	
Zimbabwe	40.0	
Country not specified	525.6	
<b>Sub-total: Africa</b>	<b>6082.1</b>	

Region	Beneficiary country	Amount mobilised 2009-11 (USD, million)
America	Antigua and Barbuda	0.0
	Argentina	4.0
	Bolivia	12.2
	Brazil	127.1
	Chile	30.0
	Colombia	89.2
	Costa Rica	78.0
	Dominica	0.0
	Dominican Republic	8.7
	Ecuador	15.2
	El Salvador	34.0
	Guatemala	54.3
	Haiti	63.3
	Honduras	158.9
	Mexico	386.6
	Nicaragua	41.3
	Panama	197.4
	Paraguay	85.2
	Peru	234.2
	Uruguay	0.1
Country not specified	246.7	
<b>Sub-total: America</b>	<b>1866.3</b>	
Asia	Afghanistan	107.3
	Armenia	23.0
	Azerbaijan	67.5
	Bangladesh	9.1
	Cambodia	17.1
	China	254.7
	Georgia	104.3
	India	392.5
	Indonesia	762.3
	Iraq	32.3
	Jordan	154.7
	Kazakhstan	381.9
	Kyrgyz Republic	8.0
	Lebanon	90.9
	Mongolia	45.3
	Nepal	0.3
	Pakistan	169.5
	Philippines	48.0
	Sri Lanka	26.7
	Syria	9.3
	Tajikistan	4.8
	Thailand	306.1
	Timor-Leste	0.2
Uzbekistan	0.8	
Vietnam	102.4	
West Bank and Gaza	102.6	
Country not specified	326.3	
<b>Sub-total: Asia</b>	<b>3547.8</b>	
Europe	Albania	117.3
	Bosnia and Herzegovina	243.4
	Kosovo	74.0
	Macedonia, FYR	202.3
	Moldova	38.7
	Serbia	1172.4
	Turkey	1053.3
	Ukraine	222.4
Country not specified	149.8	
<b>Sub-total: Europe</b>	<b>3273.5</b>	
Multiple regions	527.8	
<b>Total</b>	<b>15297.6</b>	

## ANNEX 3 - CALCULATING THE LEVERAGE RATIO: A CONCRETE EXAMPLE, DATA NEEDS AND METHODOLOGICAL OPTIONS

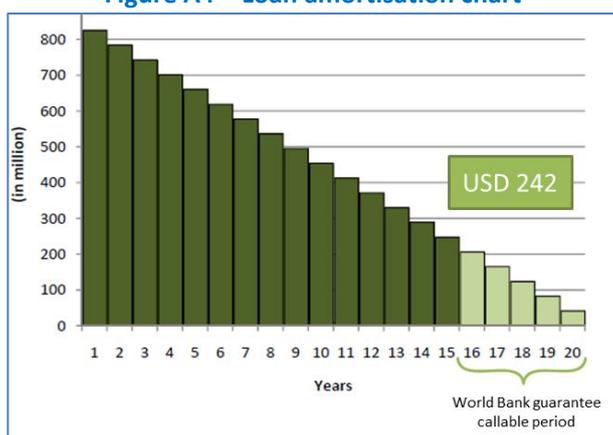
Figure A3 shows an example of a co-guarantee. A commercial bank in China lends USD 825 million to an energy company. The loan maturity is 20 years. Sinosure – the Chinese export credit agency - guarantees the first 15 years of the project; the World Bank guarantees the last 5 years.

Figure A3 – An example of a “complex” guarantee scheme



The World Bank calculated its guarantee’s leverage effect as the ratio between the face value of the loan being guaranteed and the present value of the Bank’s exposure<sup>16</sup>. The amount mobilised is USD 825 million. The exposure is the maximum amount the World Bank will have to pay should the company not reimburse the commercial bank in the last 5 years of the loan. This amount, the loan residual amount, is USD 242 million (Figure A4). The present value of the exposure is USD 121 million, resulting on a leverage ratio of 7 to 1.

Figure A4 – Loan amortisation chart



This is only one of many possible ways to calculate the leverage ratio. Table A5 illustrates some other options to calculate the leverage ratio, in particular to quantify its denominator. For simplicity, the numerator – i.e. the amount mobilised – is defined as in the Survey.

16 . Source: <http://siteresources.worldbank.org/INTGUARANTEES/Resources/BotswanapowerMorupule.pdf>

An important limitation of most of the options proposed is that the probability of default is not being considered in the calculation. The risk taken by the guarantor is composed of two elements: the net exposure (which is the maximum amount the guarantor will have to pay in case of default) and the probability of default, which varies with the context. The fact that two guarantors have an equal net exposure (e.g. USD 10 million) does not mean that the risk (or effort) being taken by the guarantor is the same<sup>17</sup>. As a consequence, if the probability of default is not included, comparisons between guarantors may be biased.

Other variables to take into consideration are the type of risk and the currency of the instrument being guaranteed. A guarantee covering both commercial and political risks has a higher probability to be called upon than a guarantee covering only one or the other. A guarantee covering a loan in a developing country local currency implies, at least in theory, a higher risk than a guarantee covering a loan in a hard currency. Not considering such characteristics is another source of bias for comparisons between different guarantors.

The data needed to calculate the leverage ratio varies according to the methodology used and to the specific project. In practice, there is no one-fits-all methodology and, at an aggregate level, collecting the amount of information needed to calculate the ratio seems unrealistic.

**Table A5 – Options to calculate the leverage ratio of guarantees**

Options for denominator	Issues	Information needed for calculation*
1. Net exposure	The probability that the risk materialises is small. As a consequence, the public institution effort is overestimated and the leverage effect is underestimated. Furthermore, as the guarantee and context characteristics are not taken into account, comparisons between guarantors may be biased.	<ul style="list-style-type: none"> <li>• Amount mobilised</li> <li>• Net exposure</li> <li>• Loan maturity**</li> <li>• Period when the guarantee can be called upon</li> <li>• Discount rate for present value calculation***</li> </ul>
2. Net Exposure X probability of default	In practice, the probability of default is project-specific and a complex indicator to measure, even at the project level. If not properly captured, comparisons between guarantors may be biased.	<ul style="list-style-type: none"> <li>• Amount mobilised</li> <li>• Net exposure</li> <li>• Loan maturity</li> <li>• Period when the guarantee can be called upon</li> <li>• Discount rate for present value calculation</li> <li>• Reinsurer premium</li> <li>• Probability of default (project-specific)</li> </ul>
3. Amount of capital immobilised (provision)	Agencies provision a certain amount per dollar guaranteed as a “reserve” in case of default (e.g. 25 cents per dollar guaranteed). This option captures the fact that the agency cannot use the immobilised capital to invest in other projects. However, the amount of capital immobilised is not a cash flow and will be available in the institution’s portfolio after the guarantee expires (except in the case of default). As a consequence, this option overestimates the public institution effort and underestimates the leverage effect of guarantees.	<ul style="list-style-type: none"> <li>• Amount mobilised</li> <li>• Provision (amount of resources immobilised)</li> <li>• Loan maturity</li> <li>• Period when the guarantee can be called upon</li> <li>• Discount rate for present value calculation</li> <li>• Reinsurer premium</li> </ul>

\*Assuming the instrument being guaranteed is a loan.  
\*\*If a guarantee covers the whole maturity of a loan, then the loan maturity, duration of the guarantee and discount rate would not be needed for the leverage ratio calculation. A variable would still be needed to indicate that this is the case.  
\*\*\*The institution may guarantee the last years of the loan repayments. As a consequence, the exposure does not start with the signature of the contract but only when the guarantee can be called upon. If this is the case, the present value of the exposure needs to be calculated.

17 . For example, a USD 10 million net exposure in a MIC is generally less risky than a USD 10 million net exposure in a LIC.

