

# METHODOLOGIES TO MEASURE AMOUNTS MOBILISED FROM THE PRIVATE SECTOR

With the help of concrete examples, this document describes the methodologies proposed for calculating amounts mobilised from the private sector through guarantees, syndicated loans and shares in CIVs, credit lines and direct investment in companies through this Survey.

## 1. SYNDICATED LOANS

### DESCRIPTION

Syndicated loans are defined as loans provided by a group of lenders (called a syndicate) who work together to provide funds for a single borrower. The main objective is to spread the risk of a borrower default across multiple lenders, and thus encourage private investment. A syndicated loan arranged by an official institution may include financing from the market through the so-called “A/B loan” structure. The official institution often retains a portion of the loan for its own account (A Loan), and sells participations in the remaining portion to other participants (B Loan). The borrower signs a single loan agreement with the lender of record. Official arrangers may also seek to syndicate “parallel loans” from other official institutions (e.g. IFIs) and other participants that are not eligible participants for B-loans<sup>1</sup>. In these cases, the official arranger identifies investments, structure deals, and negotiates with the borrower in coordination with all parallel lenders.

### KEY ASSUMPTION AND ATTRIBUTION

The implicit assumption is that the private investor would not have provided the loan without the official sector involvement as an arranger or as a participant. The amount mobilised is attributed to the arranger and the participant(s) as follows:

$P = \text{volume of private investment mobilised}$	$O = \text{volume of official investment}$
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- **50%** to the official arranger (e.g. MDBs, bilateral DFIs).
- **The remainder 50%** to the other official participant(s), pro-rata to the financier’s share of the official portion of the loan.

$$\text{Amount mobilised by Arranger} = (P * 50\%) + \frac{O_{\text{Arranger}}}{O_{\text{Total}}} * (P * 50\%)$$

$$\text{Amount mobilised by Lender 1} = \frac{O_{\text{Participant}}}{O_{\text{Total}}} * (P * 50\%)$$

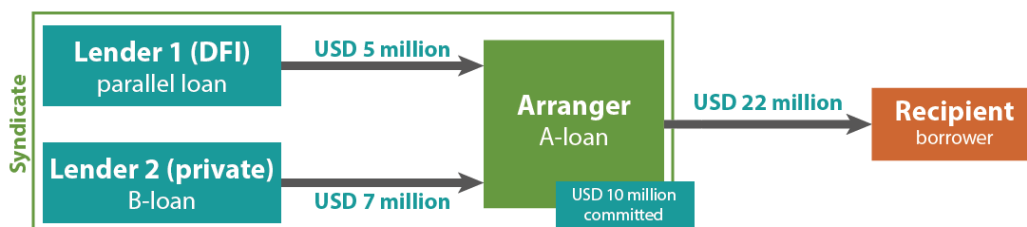
In the case of a **private arranger**, 100% of the amount mobilised is attributed to the official participants. The assumption is that private investors (including the arranger) would not have invested without the presence of official participants in the syndication.

<sup>1</sup> Typically, in order to be eligible to participate in a syndication through a B-loan, the financial institution needs to be private in nature. Governmental, quasi-governmental or other official agencies including multilateral agencies are not B-loan eligible.

## EXAMPLE

Figure 2 below illustrates a typical syndicated loan where an official institution (e.g. a DFI) provides a parallel loan of USD 5 million (Lender 1), and a private investor from an OECD country provides the B loan of USD 7 million (Lender 2). In this example, the arranger commits USD 10 million. The characteristics of the arranger determine the extent to which private finance mobilised is attributed to the different actors of the syndication.<sup>2</sup>

Figure 1: Example of a typical syndicated loan



## REPORTING INSTRUCTION

### Scenario 1: arranger is an official institution

Table 1: Reporting instructions, syndicated loans, arranger is an official institution

YOUR INSTITUTION IS...	the Arranger	a Participant (i.e. Lender 1 in figure 2)
<b>SURVEY FIELDS</b>		
Field 8 – Leveraging mechanism	1=Syndicated loan, arranger	2=Syndicated loan, participant
Field 10 – Commitment	10 000	5 000
Field 11 - Amounts mobilised from the private sector	5 833	1 167
Field 12 – Origin of funds mobilised	3=Third OECD/ high income country	3=Third OECD/high income country
Field 17 – Type of arranger	Official institution	Official institution
Field 18 – Total official investment	15 000	15 000
Field 19 – Total private investment	7 000	7 000

Calculation of the amounts mobilised from the private sector for example 1 (lender 2 is private and thus does not report):

$$\text{Amount mobilised by Arranger} = \text{USD } 5\,833 = (\text{USD } 7\,000 * 50\%) + \frac{\text{USD } 10\,000}{\text{USD } 15\,000} * (\text{USD } 7\,000 * 50\%)$$

$$\text{Amount mobilised by Lender 1} = \text{USD } 1\,167 = \frac{\text{USD } 5\,000}{\text{USD } 15\,000} * (\text{USD } 7\,000 * 50\%)$$

In case there is more than one official lender involved in the syndication – for example instead of lender 1, there are two official lenders, 1.a and 1.b, investing USD 3 million and USD 2 million respectively – the amounts mobilised would be calculated pro-rata as follows:

$$\text{Amount mobilised by Lender 1. a} = \frac{\text{USD } 3\,000}{\text{USD } 15\,000} * (\text{USD } 7\,000 * 50\%)$$

$$\text{Amount mobilised by Lender 1. b} = \frac{\text{USD } 2\,000}{\text{USD } 15\,000} * (\text{USD } 7\,000 * 50\%)$$

<sup>2</sup>In case of syndicated loans with participants bearing different levels of risk due to contractual arrangements, for the sake of simplicity, the different levels of seniority are not taken into account in the calculations.

## Scenario 2: arranger is a private company

Table 2. Reporting instructions, syndicated loans, arranger is private

<b>YOUR INSTITUTION IS...</b>	<b>the Arranger</b>	<b>a Participant (i.e. Lender 1 in figure 2)</b>
<b>SURVEY FIELDS</b>		
Field 8 – Leveraging mechanism	n.a.	2=Syndicated loan, participant
Field 10 – Commitment	n.a.	5 000
Field 11 - Amounts mobilised from the private sector	n.a.	17 000
Field 12 – Origin of funds mobilised	n.a.	3=Third OECD/high income country
Field 17 – Type of arranger	n.a.	Private institution
Field 18 – Total official investment	n.a.	5 000
Field 19 – Total private investment	n.a.	17 000

Calculation of the amounts mobilised from the private sector for example 3 (lender 2 is private and thus does not report):

$$\text{Amount mobilised by Lender 1} = \text{USD } 17\,000 = \frac{\text{USD } 5\,000}{\text{USD } 5\,000} * (\text{USD } 17\,000 * 100\%)$$

## 2. SHARES IN COLLECTIVE INVESTMENT VEHICLES<sup>3</sup>

### DESCRIPTION

Shares in collective investment vehicles (CIVs) are those invested in entities that allow investors to pool their money and jointly invest in a portfolio of companies. A CIV can either have a flat structure – in which investment by all participants has the same profile with respect to risks, profits and losses – or have its capital divided in tranches with different risk and return profiles, e.g. by different order of repayment entitlements (seniority), different maturities (locked-up capital versus redeemable shares) or other structuring criteria. Moreover, CIVs can be close- or open-ended. Close-ended CIVs have a limited period of time during which new investments in the CIV may be made (fund-raising period), while open-ended CIVs can issue and redeem shares at any time.

### KEY ASSUMPTION AND ATTRIBUTION

The amount mobilised through CIVs is defined as the total private investment committed during the fund-raising period. When multiple official institutions invest in CIVs, a pro-rata attribution of the amounts mobilised is needed.<sup>4</sup> The calculation method therefore takes into account the number of official investors involved in the CIV:

- **50%** of the amounts mobilised are attributed to each official participant in the riskiest tranche<sup>5</sup> of the CIV equally.
- **The remaining 50%** are attributed to **all** official participants pro-rata to the official financiers' share in the CIV at the moment of the private investment, regardless of the risk taken (i.e. including investors in both the riskiest and mezzanine/senior tranche).

For practical reasons, the maximum fund-raising period during which official investments in both close- and open-ended CIVs can claim to have mobilised private investments **is five years**. This time limit has been set to recognise the fact that investment in some sectors (e.g. micro finance) is deemed riskier and may thus require a longer fund-raising period than other sectors (the private sector may wait until the CIV has built up a positive track record before investing).

### EXAMPLE

Imagine a flat, open-ended CIV, whose inception date was on 15 September 2008, where two official investors – DFI 1 and DFI 2 – invest USD 10 million and USD 4 million respectively in October 2008 in the riskiest tranche, a private investor from the beneficiary country invests USD 6 million in June 2012, one official institution (DFI 3) invests USD 12 million in January 2013 in the mezzanine/senior tranche and a private investor from a third high income country invests USD 8 million in April 2013 (see Table 4 below). The **amount mobilised** from the private sector during the fund-raising period is **USD 14 million**, of which USD 6 million in 2012 and USD 8 million in 2013.

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<sup>3</sup> Please note that this methodology was amended since the last survey in 2015 to also address the official investments in the mezzanine/senior tranche of the CIV.

<sup>4</sup> A pro-rata attribution based on the volume of the investment would be easy to calculate but would fail to take into account the fact that mobilisation also heavily depends on the official agency's non-monetary contributions (e.g. due diligence). Such an approach would result in a general underestimation of the amounts mobilised by small DFIs that often take an active role in a deal but invest relatively small amounts compared to other official agencies.

<sup>5</sup> The rationale here is that first-loss investors, or investors that otherwise carry higher risks than other equity or more senior investors, have the highest impact on the mobilisation of private investors.

Table 3: Example of investments in a CIV (USD thousand)

Investment year Investors	October 2008	June 2012	January 2013	April 2013
DFI 1 – Riskiest tranche	10 000			
DFI 2 – Riskiest tranche	4 000			
DFI 3 – Mezzanine/senior Tranche			12 000	
Private investor 1		6 000		
Private investor 2				8 000
<b>Total investments</b>	<b>14 000</b>	<b>6 000</b>	<b>12 000</b>	<b>8 000</b>

The expected reporting from the official investors is illustrated in table below. The amounts mobilised are calculated as follows:

**Reporting in 2012:** the amount invested by Private investor 1 is attributable to DFIs 1 and 2.

$$\text{Amount mobilised by DFI 1} = \text{USD } 3\,643 = \frac{1}{2} * (\text{USD } 6\,000 * 50\%) + \frac{\text{USD } 10\,000}{\text{USD } 14\,000} * (\text{USD } 6\,000 * 50\%)$$

$$\text{Amount mobilised by DFI 2} = \text{USD } 2\,357 = \frac{1}{2} * (\text{USD } 6\,000 * 50\%) + \frac{\text{USD } 4\,000}{\text{USD } 14\,000} * (\text{USD } 6\,000 * 50\%)$$

**Reporting in 2013:** the amount invested by Private investor 2 is attributable to DFIs 1, 2 and 3 (50% of the amounts mobilised are attributed equally to the official investors in the riskiest tranche, DFI 1 and DFI 2, to reflect the higher risk exposed to and the resulting larger mobilisation effect. The remaining 50 % are attributed to all three official investors in the CIV pro-rata to their financial share in the official investment).

$$\text{Amount mobilised by DFI 1} = \text{USD } 3\,538 = \frac{1}{2} * (\text{USD } 8\,000 * 50\%) + \frac{\text{USD } 10\,000}{\text{USD } 26\,000} * (\text{USD } 8\,000 * 50\%)$$

$$\text{Amount mobilised by DFI 2} = \text{USD } 2\,615 = \frac{1}{2} * (\text{USD } 8\,000 * 50\%) + \frac{\text{USD } 4\,000}{\text{USD } 26\,000} * (\text{USD } 8\,000 * 50\%)$$

$$\text{Amount mobilised by DFI 3} = \text{USD } 1\,846 = \frac{\text{USD } 12\,000}{\text{USD } 26\,000} * (\text{USD } 8\,000 * 50\%)$$

## REPORTING INSTRUCTIONS

Table 4: Reporting instructions, shares in CIVs

SURVEY RESPONDENTS	DFI 1	DFI 2	DFI3
SURVEY FIELDS			
<b>Reporting in year 2012</b>			
Field 8 - Leveraging mechanism	4=Shares in the riskiest tranche of structured CIV	4=Shares in the riskiest tranche of structured CIV	n.a.
Field 10 - Commitment	0	0	n.a.
Field 11 - Amounts mobilised from the private sector	3 643	2 357	n.a.
Field 12 - Origin of funds mobilised	2=Beneficiary country	2=Beneficiary country	n.a.
Field 20 - Inception date of the CIV	15/09/2008	15/09/2008	n.a.
Field 21 - Total amount invested by your institution	10 000	4 000	n.a.
Field 22 - Number of official investors in the riskiest tranche	2	2	n.a.
Field 23 - Number of official investors in the mezzanine/senior tranche	0	0	n.a.
Field 24 - Total official investment	14 000	14 000	n.a.
Field 25 - Private investment	6 000	6 000	n.a.
<b>Reporting in year 2013</b>			
Field 8 - Leveraging mechanism	4=Shares in the riskiest tranche of structured CIV	4=Shares in the riskiest tranche of structured CIV	5=Shares in the mezzanine/senior tranche of structured CIV
Field 10 - Commitment	0	0	12 000
Field 11 - Amounts mobilised from the private sector	3 538	2 615	1 846
Field 12 - Origin of funds mobilised	3=Third OECD/high income country	3=Third OECD/high income country	3=Third OECD/high income country
Field 20 - Inception date of the CIV	15/09/2008	15/09/2008	15/09/2008
Field 21 - Total amount invested by your institution	10 000	4 000	12 000
Field 22 - Number of official shareholders in the riskiest tranche	2	2	2
Field 23 - Number of official shareholders in the mezzanine/senior tranche	1	1	1
Field 24 - Total official investment	26 000	26 000	26 000
Field 25 - Private investment	8 000	8 000	8 000

### 3. GUARANTEES

#### DESCRIPTION

Guarantees refer to legally binding agreements 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. The term guarantee refers to both guarantee and insurance scheme.

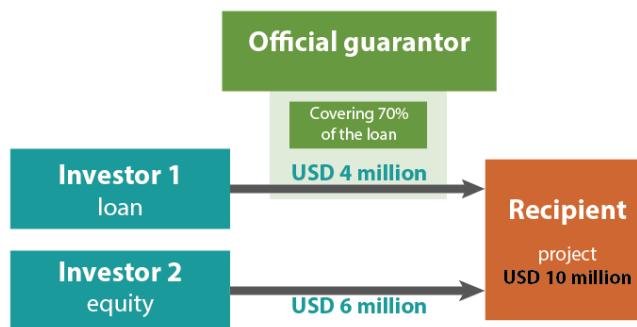
#### KEY ASSUMPTION AND ATTRIBUTION

The implicit assumption is that the private investor would not have provided the loan without the official guarantee. The amounts mobilised by a guarantee is the face value of the operation covered by the guarantee, irrespective of the exposure value of the guarantee. The amount mobilised is attributed to the official guarantor(s). In the case of co-guarantees, the amounts mobilised are attributed pro-rata, according to the amounts guaranteed by each guarantor.

#### EXAMPLE

Imagine a USD 10 million project receiving a loan of USD 4 million from Lender 1 – a private investor from the beneficiary country – and equity from Investor 1 for USD 6 million. Lender 1 benefits from an official guarantee covering up to 70% (USD 2.8 million) of the loan (Figure 1). The amount mobilised from the private investor by the official guarantee is USD 4 million.

Figure 2: Example of a guarantee, mobilisation of private investment



The **official guarantor** is the institution responding to the Survey (see Table 1). **Investor 1** (lender) is private and thus does not report here.

#### REPORTING INSTRUCTIONS

Table 5. Reporting instructions, guarantees

SURVEY FIELDS	OFFICIAL GUARANTOR
Field 7 - Leveraging mechanism	6=Guarantee/insurance
Field 9 – Commitment	0*
Field 11 - Amounts mobilised from the private sector	4 000
Field 12 - Origin of funds mobilised	2=Beneficiary country
Field 26 - Number of guarantors, if any	n.a.

\* The commitment field is reportable for flows only.

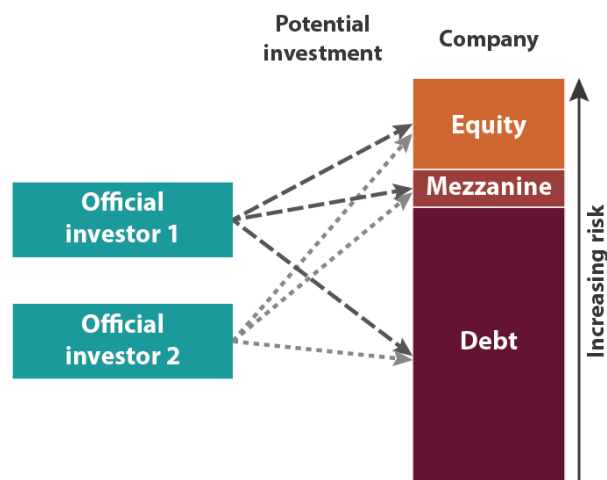
## 4. DIRECT INVESTMENT IN COMPANIES

*-in a piloting phase -*

### DESCRIPTION

For the purpose of this methodology, direct investment in companies refers to on-balance sheet investments in corporate entities which are conducted without any intermediary (e.g. a collective investment vehicle) and which typically consist of or can combine the following instruments/mechanisms: equity, mezzanine finance or senior loans. Official investments in companies constitute a key leveraging instrument towards private sector development (business growth, economic and social impact, etc.), in particular in countries where private investors are reluctant to invest given the perceived risks. For sake of practicality and consistency, this methodology does not take into account the existing methodologies for syndicated loans and guarantees<sup>6</sup>.

Figure 3: Direct investment in companies



### KEY ASSUMPTION AND ATTRIBUTION

The general assumption is that the private sector would not have invested in a given company in a developing country without the official sector involvement. It is further assumed that **equity investors**, regardless whether they represent official or private entities, are exposed to **higher risk** than **mezzanine** and **debt investors**. In case of liquidation, quasi and senior debt investors are reimbursed with priority, shareholders only thereafter to the extent made possible by remaining liquidities.

Building on the above general assumption, it can further be assumed that:

- If official equity investors are present in the company, **official investments in mezzanine or senior debt are considered as having no mobilisation effect** on private investment from a “risk” perspective. Equity investments strengthen the company’s equity base, whereas no additional risk-related incentive for the private investors arises from the presence of a mezzanine or senior public debt investor.
- **Mezzanine and senior debt investors are assumed to be exposed to the same level of risk**, regardless of the presence of equity providers, i.e. they are assumed to have the same probability of default.

<sup>6</sup> It was highlighted in the working session with DFI experts and the WP-STAT meeting in March that the methodologies for syndicated loans and guarantees should not be taken into account in the one applying to direct investment in companies.



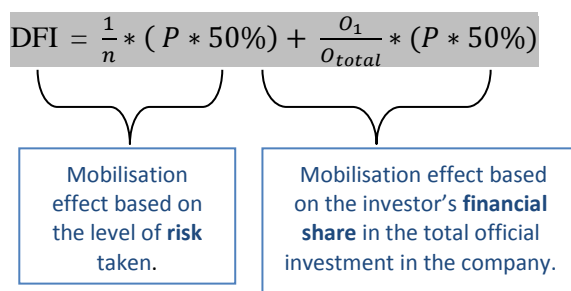
The attribution methodology proposed is the following:

- **50%** of the amounts mobilised from the private sector are attributed among official investors according to **the risk taken**, i.e. to institutions investing in equity (mezzanine/senior debt investors are considered as having no mobilisation effect on investment from a “risk” perspective).
- **The remaining 50%** are attributed among **all** official investors pro-rata to the official financiers’ share in the company, at the time when the private sector is investing, and regardless of the risk profile of the investment.<sup>7</sup>

<p><b>DFI</b> = the official institution – e.g. national or international development finance institution – investing in a company;  <b>n</b> = the number of official investors;  <b>P</b> = volume of private investment mobilised;</p>	<p><b>O</b> = volume of official investment;  <b>e</b> = equity;  <b>m</b> = mezzanine finance;  <b>d</b> = senior debt.</p>
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**Investment scenario A: all official investors take the same level of risk**

50% of the private investment mobilised is attributed equally to all official investors given that they are all exposed to the same level of risk (i.e. all investments are either equity or mezzanine/debt). The remaining 50% are attributed pro-rata to the official financiers’ share in the company. The calculation method for estimating the amounts mobilised from the private sector for all official investors would be as follows:



**Investment scenario B: official investors take different levels of risk**

In investment scenario B, official development investors invest in the equity, as well as mezzanine/debt of the company, i.e. investments have different risk levels<sup>8</sup>. Reporting will be according to the following formula:

$$DFI 1_e: \frac{1}{n_e} * (P * 50\%) + \frac{O_{1e}}{O_{total}} * (P * 50\%)$$

$$DFI 2_{m/d}: \frac{O_{2m/d}}{O_{total}} * (P * 50\%)$$

DFI 2<sub>m/d</sub> reflects the amount mobilised by the official investor through mezzanine and/or debt finance. Under this scenario, 50% of the amount mobilised from the private sector is attributed to equity investors to reflect the higher risk taken. The remaining 50% is attributed pro-rata to official financiers with shares in the company, including mezzanine and debt providers. Given the presence of other official equity investors, it is assumed that the probability of default of the public mezzanine and debt investors is limited.

<sup>7</sup> This allows acknowledging the role of small DFIs that often take an active role in a deal but invest relatively small amounts compared to other official agencies.

<sup>8</sup> At the March working session on mobilisation, experts mentioned that it is often the case that more several official investors invest directly in the same company within the same funding round through investment tranches. Hence, the methodology continues to address the different risk mobilisation effects of different types of transaction.

## TIME LIMITS

In order to take into account the fact that the private sector may wait until the company has built up a positive track record before investing, it is proposed to set a **two years** maximum fund-raising period through which official investments in companies can claim to have mobilised private investments, reflecting the fact that the private sector can wait until the company has built a positive track record before investing.

## EXAMPLES AND REPORTING INSTRUCTIONS

The two examples below aim to illustrate the methodology proposed for investment in companies.

### Example 1 - Sequence of investments from most to least risky

In October 2011, two official investors – DFI 1 and DFI 2 invest USD 4 million and USD 10 million respectively in equity stakes in a private company, which may be a crop producer in Ghana. In June 2012, a private investor 1 from the beneficiary country also invests USD 6 million in equity stakes of that company. In July 2013, an official investor (DFI 3) and a private investor 2 from a third high-income country invest in the company's mezzanine tranche USD 12 million and USD 5 million respectively. Lastly, in April 2014, a fourth official investor – DFI 4 – and a new private investor 4 invest in the company's senior debt tranche USD 8 million and USD 7 million respectively.

Table 6: Direct investment in companies, sequence of investments in a company from most to least risky

		October 2011	June 2012	July 2013	April 2014
Debt	DFI 4				8000
	<b>Private 3</b>				<b>7000</b>
Mezzanine	DFI 3			12000	
	<b>Private 2</b>			<b>5000</b>	
Equity	DFI 1	4000			
	DFI 2	10000			
	<b>Private 1</b>		<b>6000</b>		

### Reporting in 2012: The amount invested by Private investor 1 is attributable to DFIs 1 and 2.

The first half of the private finance amount is attributed equally to DFI1 and DFI2 (given that the both invested in equity), while the second half is attributed pro-rata to their financial share.

$$\text{Amounts mobilised by DFI 1} = \text{USD } 2\,357 = \frac{1}{2} * (\text{USD } 6\,000 * 50\%) + \frac{4000}{14000} * (\text{USD } 6\,000 * 50\%)$$

$$\text{Amounts mobilised by DFI 2} = \text{USD } 3\,643 = \frac{1}{2} * (\text{USD } 6\,000 * 50\%) + \frac{10000}{14000} * (\text{USD } 6\,000 * 50\%)$$

**Reporting in 2013: The amount invested by Private investor 2 is attributable to DFIs 1, 2 and 3.**

50% of the amounts mobilised in 2013 are attributed equally to DFI1 and DFI2, given that they invested in the riskiest tranche (DFI3 invested in mezzanine tranche), and 50% are attributed to the three DFIs pro-rata to their financial shares.

$$\begin{aligned} \text{Amounts mobilised by DFI 1} &= \text{USD 1 635} = \frac{1}{2} * (\text{USD 5 000} * 50\%) + \frac{4000}{26000} * (\text{USD 5 000} * 50\%) \\ \text{Amounts mobilised by DFI 2} &= \text{USD 2 212} = \frac{1}{2} * (\text{USD 5 000} * 50\%) + \frac{10000}{26000} * (\text{USD 5 000} * 50\%) \\ \text{Amounts mobilised by DFI 3} &= \text{USD 1 154} = \frac{12000}{26000} * (\text{USD 5 000} * 50\%) \end{aligned}$$

**Reporting in 2014: The amounts invested by Private investor 3 are attributable to DFIs 3 and 4.**

The amounts mobilised in 2014 are only attributed to DFI3 and DFI4, because DFI1 and DFI2 invested in 2011, i.e. beyond the time-limit of two years during which official investors can claim to have mobilised private investment. Therefore, 50% of the amounts mobilised in 2014 are attributed equally to DFI3 and DFI4 given that they invested with the same level of risk (i.e. in mezzanine and senior debt tranches; there was no new official investment in equity), and the remaining 50% in pro-rata to their financial share in the total public investment having taken place within the time-limit of two years.

$$\begin{aligned} \text{DFI 3} &= \text{USD 3 850} = \frac{1}{2} * (\text{USD 7 000} * 50\%) + \frac{12000}{20000} * (\text{USD 7 000} * 50\%) \\ \text{DFI 4} &= \text{USD 3 150} = \frac{1}{2} * (\text{USD 7 000} * 50\%) + \frac{8000}{20000} * (\text{USD 7 000} * 50\%) \end{aligned}$$

**REPORTING INSTRUCTIONS ON EXAMPLE 1**

Table 7: Reporting instructions, direct investment in companies, sequence of investments from most to least risky

YOUR INSTITUTION IS...	DFI 1	DFI 2	DFI 3	DFI 4
<b>SURVEY FIELDS</b>				
<b>Reporting in year 2012</b>				
Field 7 - Commitment date	20/10/2011	20/10/2011		
Field 8 - Type of leveraging mechanism and role/position	7=Direct investment in companies, Equity	7=Direct investment in companies, Equity		
Field 10 - Commitment	0	0		
Field 11 - Amount mobilised from the private sector	2 357	3 643		
Field 12 - Origin of funds mobilised	3=Third OECD/high income country	3=Third OECD/high income country		
Field 27 – Total amounts invested by your institution	4 000	10 000		
Field 28 - Number of official investors in the equity tranche	2	2		
Field 29 - Number of official investors in the mezzanine/senior tranche	0	0		
Field 30 - Total official investment	14 000	14 000		
Field 31 – Private investment	6 000	6 000		

<b>Reporting in year 2013</b>				
Field 7 - Commitment date	20/10/2011	20/10/2011	01/07/2013	
Field 8 - Type of leveraging mechanism and role/position	7=Direct investment in companies, Equity	7=Direct investment in companies, Equity	8=Direct investment in companies, Mezzanine or Senior Debt	
Field 10 - Commitment	0	0	12 000	
Field 11 - Amount mobilised from the private sector	1 635	2 212	1 154	
Field 12 - Origin of funds mobilised	3=Third OECD/high income country	3=Third OECD/high income country	3=Third OECD/high income country	
Field 27 - Total amounts invested by your institution	4 000	10 000	12 000	
Field 28 - Number of official investors in the equity	2	2	2	
Field 29 - Number of official investors in the mezzanine/senior tranche	1	1	1	
Field 30 - Total official investment	26 000	26 000	26 000	
Field 31 - Private investment	5 000	5 000	5 000	
<b>Reporting in year 2014</b>				
Field 7 - Commitment date	20/10/2011	20/10/2011	01/07/2013	
Field 8 - Type of leveraging mechanism and role/position			8=Direct investment in companies, Mezzanine or Senior Debt	8=Direct investment in companies, Mezzanine or Senior Debt
Field 10 - Commitment			0	8 000
Field 11 - Amount mobilised from the private sector			3 850	3 150
Field 12 - Origin of funds mobilised			3=Third OECD/high income country	3=Third OECD/high income country
Field 27 - Total amounts invested by your institution			12 000	8 000
Field 28 - Number of official investors in the equity			0	0
Field 29 - Number of official investors in the mezzanine/senior tranche			2	2
Field 30 - Total official investment			20 000	20 000
Field 31 - Private investment			7 000	7 000

## Example 2 - Sequence of investments from least to most risky

In October 2011, two official investors provided senior debt finance to the company while in 2012 an additional private senior lender steps in. In July 2013, a consortium including an official investor and a private investor provide mezzanine funding to the corporate client. Finally, in April 2014, an official and a private investor step in and broaden the company's equity base.

Table 8: Direct investment in companies, sequence of investments in a company from least to most risky

		October 2011	June 2012	July 2013	April 2014
Debt	DFI 1	4000			
	DFI 2	10000			
	<b>Private 1</b>		<b>6000</b>		
Mezzanine	DFI 3			12000	
	<b>Private 2</b>			<b>5000</b>	
Equity	DFI 4				8000
	<b>Private 3</b>				<b>7000</b>

**Reporting in 2012:** The amount invested by Private investor 1 is attributable to DFIs 1 and 2.

The attribution calculation is therefore the following: 50% of the USD 6 million is attributed equally to DFIs 1 and 2 – in the absence of other investors in equity tranches and given the same level of risk exposed to – and 50% pro-rata to their financial shares in the total official investment in the company at the moment of the private investment.

$$\text{DFI 1} = \text{USD 2 357} = \frac{1}{2} * (\text{USD 6 000} * 50\%) + \frac{4000}{14000} * (\text{USD 6 000} * 50\%)$$

$$\text{DFI 2} = \text{USD 3 643} = \frac{1}{2} * (\text{USD 6 000} * 50\%) + \frac{10000}{14000} * (\text{USD 6 000} * 50\%)$$

**Reporting in 2013:** The amount of private investment is attributable to DFIs 1, 2 and 3.

50% of the amounts mobilised from Private investor 2 is attributed equally to DFIs 1, 2 and 3 given the same level of risk taken<sup>9</sup> and 50% to DFIs 1, 2 and 3 according to their respective financial shares in the total official investment at the moment of the private investment.

$$\text{DFI 1} = \text{USD 1 218} = \frac{1}{3} * (\text{USD 5 000} * 50\%) + \frac{4000}{26000} * (\text{USD 5 000} * 50\%)$$

$$\text{DFI 2} = \text{USD 1 795} = \frac{1}{3} * (\text{USD 5 000} * 50\%) + \frac{10000}{26000} * (\text{USD 5 000} * 50\%)$$

$$\text{DFI 3} = \text{USD 1 987} = \frac{1}{3} * (\text{USD 5 000} * 50\%) + \frac{12000}{26000} * (\text{USD 5 000} * 50\%)$$

**Reporting in 2014:** The amount of private investment is attributable to DFIs 3 and 4; the risk mobilisation effect is attributed to DFI3 only.

50% of the amount invested by Private investor 3 is attributed to DFI 4 only (reflecting the higher risk taken by investing in the equity tranche), and 50% to DFIs 3 and 4 pro-rata to their financial shares in the total official investment at the moment of the private investment. As in example 1, the limitation of the mobilisation period to two years excludes DFIs 1 and 2 in the attribution.

$$\text{DFI 3} = \text{USD 2 100} = \frac{12000}{20000} * (\text{USD 7 000} * 50\%)$$

$$\text{DFI 4} = \text{USD 4 900} = (\text{USD 7 000} * 50\%) + \frac{8000}{20000} * (\text{USD 7 000} * 50\%)$$

<sup>9</sup> The basic assumption is that the official senior debt investors, DFI 1 and 2, have the same risk mobilisation effect as the official mezzanine investor, DFI3.

## REPORTING INSTRUCTIONS ON EXAMPLE 2

Table 9: Reporting instructions, direct investment in companies, sequence from least to most risky

<b>YOUR INSTITUTION IS...</b> <b>SURVEY FIELDS</b>	<b>DFI 1</b>	<b>DFI 2</b>	<b>DFI 3</b>	<b>DFI 4</b>
<b>Reporting in year 2012</b>				
Field 7 - Commitment date	01/10/2011	01/10/2011		
Field 8 - Type of leveraging mechanism and role/position	8=Direct investment in companies, Mezzanine or Senior Debt	8=Direct investment in companies, Mezzanine or Senior Debt		
Field 10 - Commitment	0	0		
Field 11 - Amount mobilised from the private sector	2 357	3 643		
Field 12 - Origin of funds mobilised	3=Third OECD/high income country	3=Third OECD/high income country		
Field 27 - Total amounts invested by your institution	4 000	10 000		
Field 28 - Number of official investors in the equity tranche	0	0		
Field 29 - Number of official investors in the mezzanine/senior tranche	2	2		
Field 30 - Total official investment	14 000	14 000		
Field 31 - Private investment	6 000	6 000		
<b>Reporting in year 2013</b>				
Field 7 - Commitment date	01/10/2011	01/10/2011	20/07/2013	
Field 8 - Type of leveraging mechanism and role/position	8=Direct investment in companies, Mezzanine or Senior Debt	8=Direct investment in companies, Mezzanine or Senior Debt	8=Direct investment in companies, Mezzanine or Senior Debt	
Field 10 - Commitment	0	0	12 000	
Field 11 - Amount mobilised from the private sector	1 218	1 795	1 987	
Field 12 - Origin of funds mobilised	3=Third OECD/high income country	3=Third OECD/high income country	3=Third OECD/high income country	
Field 27 - Total amounts invested by your institution	4 000	10 000	12 000	
Field 28 - Number of official investors in the equity tranche	0	0	0	
Field 29 - Number of official investors in the mezzanine/senior tranche	3	3	3	
Field 30 - Total official investment	26 000	26 000	26 000	
Field 31 - Private investment	5 000	5 000	5 000	

Reporting in year 2014				
Field 7 - Commitment date			20/07/2013	13/04/2014
Field 8 - Type of leveraging mechanism and role/position			8=Direct investment in companies, Mezzanine or Senior Debt	7=Direct investment in companies, Equity
Field 10 - Commitment			0	8 000
Field 11 - Amount mobilised from the private sector			2 100	4 900
Field 12 - Origin of funds mobilised			3=Third OECD/high income country	3=Third OECD/high income country
Field 27 - Total amounts invested by your institution			12 000	8 000
Field 28 - Number of official investors in the equity tranche			1	1
Field 29 - Number of official investors in the mezzanine/senior tranche			1	1
Field 30 - Total official investment			20 000	20 000
Field 31 - Private investment			7 000	7 000

## 5. CREDIT LINES

*-in a piloting phase -*

### DESCRIPTION

In this Survey, a credit line is a standing credit amount extended to a local financial institution (LFI) in a developing country with the aim of increasing SMEs' access to finance. A credit line may be co-financed by several actors (in general documented in the credit line contract).

A credit line can be drawn upon at any time, up to a specific amount (credit limit) and within a limited period of time. Borrowers (LFIs) decide how much of the agreed funding they wish to draw down and interest is paid only on the amount which is actually borrowed and not on the amount made available.

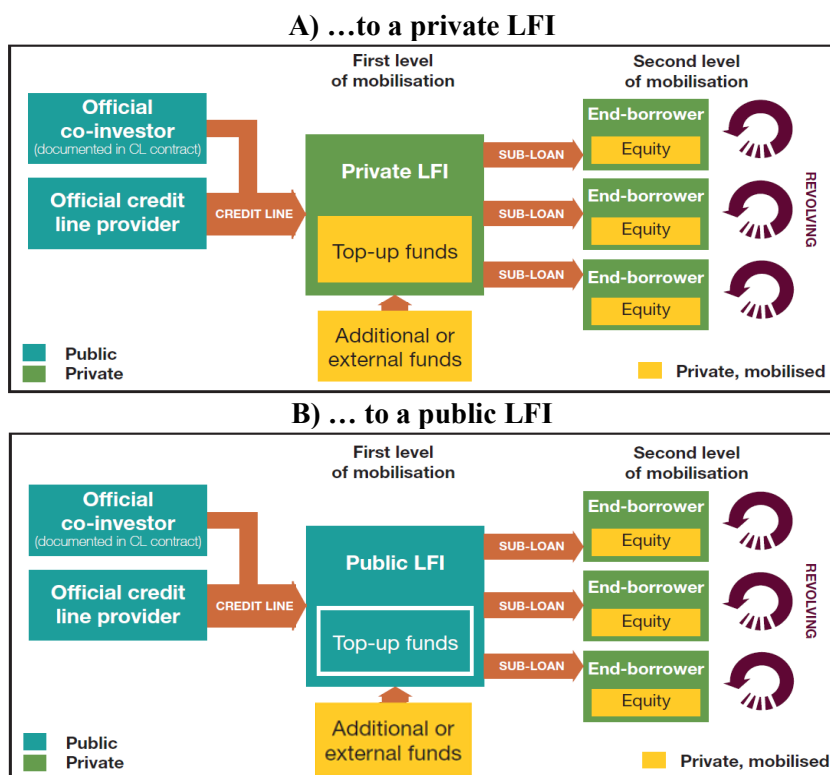
The tenor of the official credit line is usually longer than that of the individual sub-loans extended by the LFI to its clients, allowing the LFIs to on-lend to local end-borrowers (companies, project developers, etc.) **on a revolving basis** during the lifetime of a credit line.

The credit line agreement usually specifies the type of projects eligible for funding by the LFI (sub-loans) and may also require other actors to take on some risks along with the official credit line provider (to align interests of the different investing institutions). The agreement can in particular request:

- LFIs to co-finance each sub-loan by providing top-up funds (LFIs may provide additional funding with respect to what is required by the credit line contract and/or locally raise additional funds in order to increase funds or asset class available to finance the sub-loans) → *first level of mobilisation*
- end-borrowers to invest on top of the LFI's sub-loans, through either cash or equity. → *second level of mobilisation*

NB: For sake of simplicity, this note does not take into consideration co-financing by the LFI or end-borrowers not documented in the credit line contract, as causality would be more difficult to prove. Technical assistance provided to the LFI or end-borrowers is also beyond the scope of this methodology.

Figure 4: Typical sources of financing in an official credit line...



**In a nutshell, typical sources of financing in a credit line are the following:**



- Credit extended by the official credit line provider (e.g. development bank);
- Credit extended by official co-investors (documented in the credit line contract);
- LFI top-up funds requested in the credit line contract or/and any additional funds from or raised by the LFI;
- End-borrowers' equity.

## KEY ASSUMPTIONS

The analysis of the causality for credit lines may be complex due to the number of actors potentially involved and the difficulty to access all the information, especially at the level of LFIs and end-borrowers.

Given that the main objective of credit lines is to support the private sector through the intermediation of the LFI, it is assumed that the private sector (i.e. top-up financing by private LFIs, whether originating from their own resources or raised from the market, as well as private end-borrowers' equity) would not have invested without the credit line provided by the official sector.

Based on the assumptions above, the **total private finance mobilised** consists of:

- **top-up funds from the LFI** (in the case of a private LFI), including additional/external private funds raised by the LFI, and
- **equity investments** by the private end-borrowers.

**End-borrowers' equity investment** can be calculated as the average end-borrowers' equity multiplied by the revolving factor (see below). If it is not possible to use the average end-borrowers' equity because of data availability issues, a conservative view could be to use the minimum end-borrowers' equity required by the credit line contract, if any.

**The revolving factor (RF)** should reflect the longer tenor of the credit line with respect to the average tenor of the sub-loans as well as the average use of the credit line by the LFI. It is also suggested to calculate the RF as:

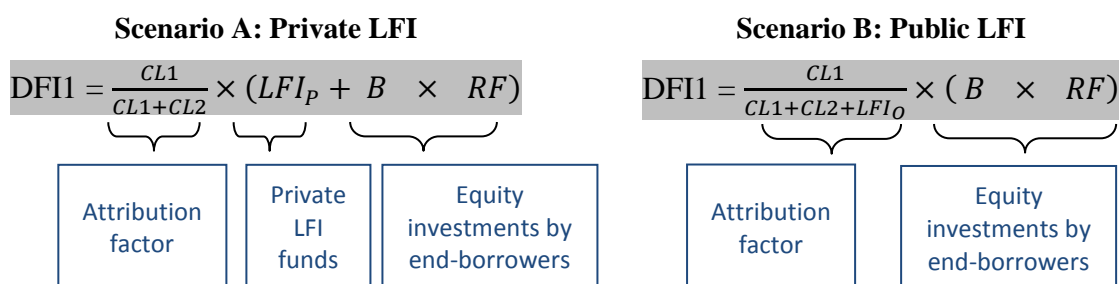
- the tenor of the credit line multiplied by the (estimated average) use of the credit line (as a %) and divided by the tenor of the sub-loans; or
- the tenor of the credit line (minus grace period) divided by the average tenor of the sub-loans.

If the RF cannot be calculated for each credit line, it is suggested to estimate one RF according to the recipient country and/or the sector. If the estimation is not possible because of data availability issues, a conservative view could be to use the minimum RF value observed among the institutions reporting to the DAC on amounts mobilised through official credit lines. This value is, at present, 1.25.

## ATTRIBUTION METHODOLOGY

The total private finance mobilised through the credit line is attributed pro-rata to the financial share of the official credit line provider (taking into consideration the official co-investors documented in the credit line contract and the case where the LFI is public).

<i>DFI1, DFI2 = amounts mobilised by official institutions providing the credit line;</i> <i>CL1, CL2 = credit extended by official institutions providing the credit line;</i> <i>LFI<sub>P</sub> = top-up/additional/external funds by private LFI;</i>	<i>LFI<sub>O</sub> = top-up/additional/external funds by public LFI;</i> <i>B = Average end-borrowers' equity;</i> <i>RF = revolving factor.</i>
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## GENERIC CALCULATION

It is assumed that for each credit line there is only one LFI, which can be either public or private. This allows the derivation of the following formula:

$$DFI1 = \frac{CL1}{CL1+CL2+LFI_O} \times (LFI_P + B \times RF)$$

Attribution factor

Private LFI funds

Equity investments by end-borrowers

## POINT OF MEASUREMENT

The reporting of the amounts mobilised is done ex-ante, i.e. when the credit line is committed by the official sector.

The reporting on amounts mobilised through official credit lines may however depend on the estimation of the revolving factor and end-borrowers' equity on the basis of historical data (e.g. credit lines extended in the past).

## EXAMPLES AND REPORTING INSTRUCTIONS

### a) Example 1 - LFI is private

In 2014, an official development bank (DFI1) extends a 90 000 USD credit line (CL1) to a private financial institution based in a developing country. An international financial institution (DFI2) decides to also invest in the credit line and contributes to an additional 10 000 USD (CL2).

The credit line has a tenor of **20 years** and requires the LFI to top up the loan by at least 10% (10% \* 100 000 = 10 000 USD).

Finally, the LFI invests 18 000 USD and raises 2 000 USD locally, for a total of USD 20 000 (LFI<sub>P</sub>): the funds available for sub-loans therefore amount to 120 000 USD (100 000 + 20 000).

The LFI extends loans to end-borrowers (SMEs/project developers) in the developing country with an average tenor of **5 years**. However, based on credit lines extended in the past, they are not fully utilised during all their life and it is estimated that the average utilisation of credit lines reaches **55%**. The credit line contract also requires additional investment by the end-borrowers in the form of equity. The development bank does not have information on the average end-borrowers' equity investment but it is known that the minimum own-equity ratio of end-borrowers corresponds to 20% of the credit line.

### Reporting in 2014 (USD thousand)

$$\text{Revolving factor} = 2.2 = \frac{20}{5} \times 55\%$$

$$\text{Average end-borrower equity} = \text{USD } 24 = (120 \times 20\%)$$

$$DFI1 = \text{USD } 65.5 = \frac{90}{90+10} \times (\text{USD } 20 + \text{USD } 24 \times 2.2)$$

$$DFI2 = \text{USD } 7.3 = \frac{10}{90+10} \times (\text{USD } 20 + \text{USD } 24 \times 2.2)$$

Table 10: Reporting instructions, credit lines, LFI is a private entity

YOUR INSTITUTION IS...	DFI1	DFI2
<b>REPORTING FIELDS</b>		
Field 8 – Leveraging mechanism	9=Credit line	9=Credit line
Field 10 – Commitment	90 000	10 000
Field 11 - Amounts mobilised from the private sector	65 520	7 280
Field 12 – Origin of funds mobilised	2=Beneficiary country	2=Beneficiary country
Field 32 – Total official investment in the credit line	100 000	100 000
Field 33 – Private top-up funds	20 000	20 000
Field 34 – Revolving factor	2.2	2.2
Field 35 – End-borrowers' equity	24 000	24 000

### b) Example 2 - LFI is public

Let Scenario A still apply with only one difference: the LFI is a public institution. Amounts attributed to the developing country's LFI are calculated regardless of whether this latter reports to the DAC.

#### Reporting in 2014

$$\text{DFI1} = \text{USD } 39.6 = \frac{90}{90+10+20} \times (\text{USD } 24 \times 2.2)$$

$$\text{DFI2} = \text{USD } 4.4 = \frac{10}{90+10+20} \times (\text{USD } 24 \times 2.2)$$

$$\text{LFI} = \text{USD } 8.8 = \frac{20}{90+10+20} \times (\text{USD } 24 \times 2.2)$$

Table 11: Reporting instructions, credit lines, LFI is public entity

YOUR INSTITUTION IS...	DFI1	DFI2
<b>SURVEY FIELDS</b>		
Field 8 – Leveraging mechanism	9=Credit line	9=Credit line
Field 10 – Commitment	90 000	10 000
Field 11 - Amounts mobilised from the private sector	39 600	4 400
Field 12 – Origin of funds mobilised	2=Beneficiary country	2=Beneficiary country
Field 32 – Total official investment in the credit line	120 000	120 000
Field 33 – Private top-up funds	0	0
Field 34 – Revolving factor	2.2	2.2
Field 35 – End-borrowers' equity	24 000	24 000