Official Development Finance for Infrastructure: With a Special Focus on Multilateral Development Banks

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Abstract

This working paper provides a broad picture of official financial flows for infrastructure development in developing countries by bilateral and multilateral development partners. Multilateral development banks are further examined in a special section. The paper offers an overview of volumes and distributions of financial flows, including those channelled to private sector operations and those mobilised from the private sector by guarantees, syndicated loans and collective investment vehicles. This report, which builds on previous work on the topic, will contribute to research and policy dialogue on filling the financial gap in infrastructure in developing countries. It will also support the monitoring of Sustainable Development Goal 9 and the discussions of the G20 on infrastructure development.

Acknowledgements

The authors would like to thank Anna Vindics for the extensive data analysis without which this paper would not have been possible; Tomas Hos for the support on the data related to amounts mobilised from the private sector; Stephanie Coic for the assistance on the graphic design of the paper; Yasmin Ahmad and Cécile Sangaré for the technical advice; and André Laboul and Raffaele Della Croce of the Directorate for Financial and Enterprise Affairs for the continuous support to promote this work in G20 discussions. Finally, the authors wish to thank the numerous officials of the bilateral and multilateral organisations for the data provided, factual checking and endorsement of the work.

ACRONYMS

AFD Agence Française de Développement

AfDB African Development Bank
ASDB Asian Development Bank

BADEA Arab Bank for Economic Development in Africa

CAF Corporación Andina de Fomento (Development Bank of Latin America)

CIV Collective Investment Vehicle
CRS Creditor Reporting System

DAC Development Assistance Committee
DFI Development Finance Institution

EBRD European Bank for Reconstruction and Development

EU European Union

FMO Financierings-Maatschappij voor Ontwikkelingslanden (Dutch Entrepeunerial Development Bank)

IADB Inter-American Development Bank

IBRD International Bank for Reconstruction and Development

IDA International Development Association
IFC International Finance Corporation
IFI International Financial Institution

ISDB Islamic Development Bank

LIC Low Income Country

LMIC Lower Middle Income Country

MDB Multilateral Development Bank

MIGA Multilateral Investment Guarantee Agency

ODA Official Development Assistance
ODF Official Development Finance

OECD Organisation for Economic Co-operation and Development

00F Other Official Flows

SDG Sustainable Development Goals
UMIC Upper Middle Income Country

UN United Nations

UNCTAD United Nations Conference on Trade and Development

UNDP United Nations Development Programme

UNECE United Nations Economic Commission for Europe

UNICEF United Nations International Children's Emergency Fund

USD United States Dollar
WBG World Bank Group



TECHNICAL NOTE

- Official Development Finance (ODF) consists of Official Development Assistance (ODA), which is concessional, and developmental
 Other Official Flows (OOF), which are non-concessional. It excludes export credit OOF as its main objective is not developmental.
- As the purpose of the report is to measure external flows of development partners to developing countries, and as the amounts spent by developing country governments for infrastructure in their own countries are not reported to the Development Assistance Committee (DAC), the latter is not part of this report¹.
- Data covered are mainly those by the 50 major bilateral and multilateral development partners² that report to the DAC at the
 activity level in a harmonised manner. Furthermore, the report provides estimates of ODF by emerging economies that do not
 report to the DAC, such as China and India.
- Recipient countries are those that are on the DAC list of ODA Recipient Countries³. Therefore, it excludes, for example, high-income
 European countries that are clients of European Investment Bank (EIB) and European Bank for Reconstruction and Development
 (EBRD).
- Infrastructure refers to the DAC 5 sectors of 140 (Water & Sanitation), 210 (Transport & Storage), 220 (Communications), and 230 (Energy Generation and Supply) in the DAC Creditor Reporting System (CRS).
- The report exclusively measures financial flows to the public and private sectors, i.e., loans, grants and equity. As a consequence, it does not take account of guarantees, which are not actual flows. However, there is an on-going discussion in the DAC on how to better capture the coverage of guarantees.
- Absolute amounts of ODF in this report are generally on a disbursement basis and not in commitments. The reason is that
 commitments are recorded in total in the particular year they are signed, i.e. once the commitment has been reported, it is not
 repeated again in subsequent years, although it may be spent over several years. Furthermore, since different projects usually
 have different years of planned disbursements, aggregates of committed amounts would be an accumulation of projects with
 different number of years of implementation. As such, disbursements are more comparable with annual expenditure figures, for
 example, national budgets, annual infrastructure spending, gross national income (GNI), and so on.

BACKGROUND AND INTRODUCTION

he 2030 Agenda and the related financing framework emphasise the need for developing countries to fill the significant infrastructure gap in order to achieve their Sustainable Development Goals. In this context, development partners are increasingly contributing to this agenda by directly providing financial assistance, helping improve the delivery of infrastructure services and mobilising resources from the private sector. Given the importance of filling the large financing gap, it is crucial to gauge the contribution from all sources to infrastructure of developing countries, including from development partners.

In this respect, the OECD Development Assistance Committee (DAC) has been collecting and analysing financial data of major bilateral and multilateral development partners to infrastructure. The aims of this work include contributing to the monitoring of the SDGs 9 on infrastructure support and providing the basis of discussions by the G20 Infrastructure Investment Working Group (IIWG). The analyses have been undertaken by: using data reported by bilateral and multilateral development partners to the DAC at the activity level; directly obtaining relevant data from institutions through correspondence; estimating official support for development co-operation of non-traditional development partners, such as China and India; and carrying out a survey on amounts mobilised from the private sector by development partners.

With this in mind, this report, which builds on previous work on the topic⁴, will contribute to research and policy dialogue on measuring finance by development partners to developing country infrastructure. While Section I will provide an overview of total ODF for infrastructure by both bilateral and multilateral partners, Section II will specifically concentrate on Multilateral Development Banks (MDBs) — in light of the renewed attention brought by the creation of new institutions, such as the Asian Infrastructure Investment Bank and the New Development Bank. In both sections, the report will measure and analyse overall finance of development partners for infrastructure, amounts related to private sector operations, and the volume mobilised from the private sector by guarantees, syndicated loans and shares in Collective Investment Vehicles (CIVs) provided through ODF interventions.

- 1. Exceptionally, Figure 3 compares different sources of infrastructure finance, including developing country government expenditures. However, this figure has been created using data from UNCTAD (2014) to place ODF in perspective.
- 2. For the list of development partners reporting to the DAC, "Creditor Reporting System: Aid activities", OECD International Development Statistics (database) DOI: http://dx.doi.org/10.1787/data-00061-en.
- 3. https://www.oecd.org/dac/stats/documentupload/DAC%20List%20of%200DA%20Recipients%202014%20final.pdf.
- 4. This report updates the OECD Working papers: Official Development Finance for Infrastructure: Support by Multilateral and Bilateral Development Partners (see Miyamoto and Chiofalo 2015); Official Support for Private Sector Participation in Developing Country Infrastructure (see Miyamoto and Biousse 2014a); and Donor Profiles at a Glance: Addendum to Official Support for Private Sector Participation in Developing Country Infrastructure (see Miyamoto and Biousse 2014b).

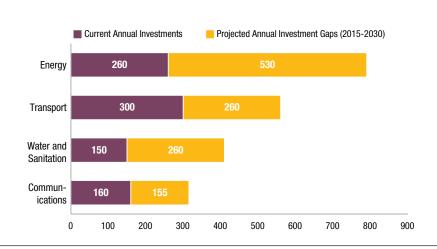
I. OVERALL PICTURE BY ALL DEVELOPMENT PARTNERS

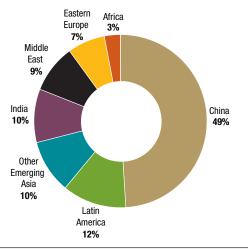
Infrastructure Needs in Developing Countries

Infrastructure is essential for developing countries to achieve inclusive and sustainable growth as well as poverty reduction, food security, and health and education objectives. In light of its importance, infrastructure is one of the top priorities of the Sustainable Development Goals, the Addis Ababa Action Agenda, and the Paris Agreement on Climate Change. At the same time, according to estimates from United Nations Conference on Trade and Development (UNCTAD), current financing is by far insufficient to meet the infrastructure needs (UNCTAD 2014). In fact, while roughly USD 1 trillion is spent on infrastructure in developing countries every year, two to three times this amount would be necessary to meet the needs up to 2030, especially in energy and water and sanitation (see Figure 1). More than two thirds of these resources are required in Asia, particularly China, which makes up half of total investment needs (see Figure 2).

Figure 1. Current Investment and Projected Gaps in Infrastructure

Figure 2. Geographical Distribution of Infrastructure Investment Needs





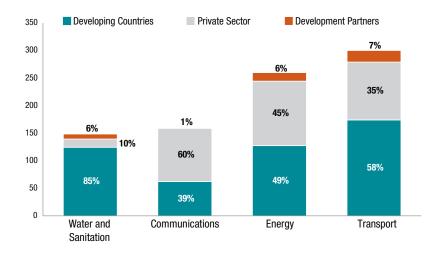
Source: Estimates based on UNCTAD (2014). **Note:** Only developing countries (2015-2030).

Source: Estimates based on McKinsey (2016) **Note:** Only developing countries (2016-2030).

Overall Infrastructure Spending by Public and Private Sectors

In terms of current infrastructure spending, most of the resources were provided by developing country governments, about a third by the private sector and only a small portion by development partners (6-7%) (see Figure 3). However, there were large differences between countries, as Low Income Countries (LICs) relied much more on the support from development partners than Middle Income Countries (MICs), due to their lower capacity to mobilise domestic and external private finance.

Figure 3. Developing Country Infrastructure by Source of Finance and by Sector



Source: Gross disbursements. UNCTAD (2014) and OECD "CRS: Aid activities", OECD International Development Statistics (database) DOI: http://dx.doi.org/10.1787/data-00061-en. It includes estimates by the authors.

Official Support to Infrastructure by Development Partners in 2014

While relatively small in overall financing, ODF for infrastructure has been growing in recent years. Data from bilateral and multilateral development partners reporting to the DAC shows that concessional and non-concessional ODF commitments for infrastructure increased at a compounded annual growth rate of 7%⁵ in the period 2005-2014. In addition, the share of infrastructure in total sector-allocable ODF⁶ by development partners also grew from 20% to 26% in the same period.

When estimated flows of development partners that do not report to the DAC are also included, total official support to infrastructure amounted to USD 60 billion (see Figure 4) in 2014. In terms of breakdown, 56% was concessional finance (i.e ODA) and 44% was non-concessional (i.e. OOF) in 2014. This amount does not include the USD 1.7 billion of commercially motivated official export credit direct loans provided by OECD Members in the same year⁷. Of the 60 billion provided by development partners, 43% was disbursed by bilateral development partners and 57% by multilaterals⁸, particularly the Multilateral Development Banks (MDBs), which together accounted for half of the total disbursements. If only flows reported to the DAC are considered, ODF for infrastructure increased by 6% – or USD 2.7 billion – when compared to 2013.

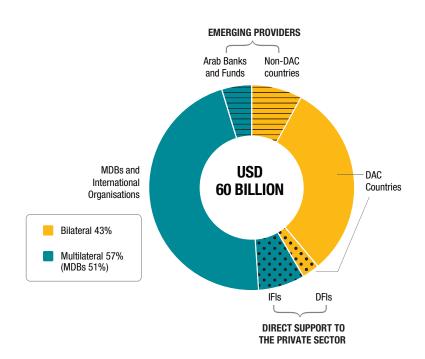


Figure 4. Total Official Support for Development Co-operation for Infrastructure

Source: Gross disbursements. OECD "CRS: Aid activities", OECD International Development Statistics (database) DOI: http://dx.doi.org/10.1787/data-00061-en. OECD (2016), "Detailed aid statistics: Official and private flows", OECD International Development Statistics (database). DOI: http://dx.doi.org/10.1787/data-00072-en. It includes estimates by the authors using data from: IFC (2014), ISDB (2014), CAF (2014), FMO (2015), JICA (2016), SCIO (2014), EIBI (2011), India MEA (2015), EIBI (2015), IDCR (2015), India MoF (2015), SFD (2014); email correspondence with Agence française de développement (AFD), African Development Bank (AfDB), Asian Development Bank (AsDB), Inter-American Development Bank (IADB) Group, EBRD, EIB.

Note: Corporación Andina de Fomento (CAF), International Finance Corporation (IFC), Islamic Development Bank (IsDB) and Dutch Development Finance Company (FMO) amounts are estimated disbursements calculated using commitments or approvals to infrastructure reported by these institutions to the DAC and/or from their respective annual reports. Disbursements from China, India and Saudi Fund for Development are estimated from the secondary sources listed above. Data on disbursements to the private sector for AFD, AfDB, ASDB, EBRD, EIB and IADB Group was collected via email correspondence with the institutions.

^{8.} Multilateral development partners include the EU, a DAC member with its own sources of financing and budgetary authority, although it has a sui generis legal nature.



^{5.} This figure is based on concessional and non-concessional commitments of development partners reporting to the DAC at the activity level. In order to use comparable figures, development partners that started reporting to the DAC after 2005 have been excluded. These include, inter alia, EBRD, IFC, Korea, Kuwait and the Climate Investment Funds.

^{6.} This includes other sectors such as health, education, agriculture, etc. Disbursements that are not targeted to a specific sector, e.g. balance-of-payments support, debt relief, emergency aid -called "non-sector allocable"- are not considered.

^{7.} If guarantees and insurance were included, the amount of commercially motivated official export credits for infrastructure projects in developing countries would be about USD 10 billion in 2014.

Official Support for Development Co-operation for Infrastructure by China and India

Aside from DAC countries and MDBs, other providers, such as China, India and the Arab development partners are also significant players in infrastructure. The sum of their disbursed amounts is estimated to be USD 4.1 billion in 2014, which accounted for 14% of the total ODF for infrastructure. Projects financed by China are particularly concentrated in low-income African countries, whereas India focuses predominately on neighbouring countries such as Bangladesh, Bhutan and Nepal (Miyamoto and Chiofalo 2015). Arab development partners allocated most of their resources to Northern Africa and Middle East countries. It is important to note that China and India are not only providers but also recipients of ODF for infrastructure (see Figure 5).

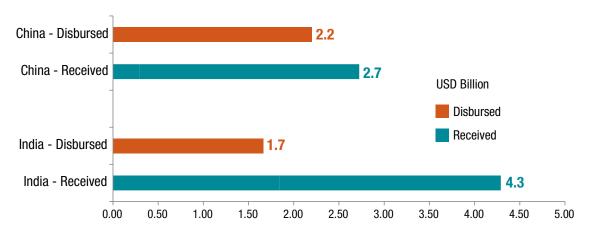


Figure 5. Official Support for Development Co-operation for Infrastructure by China and India, 2014

Source: Gross disbursements. OECD (2016), "CRS: Aid activities", OECD International Development Statistics (database) DOI: http://dx.doi.org/10.1787/data-00061-en. OECD (2016), "Detailed aid statistics: Official and private flows", OECD International Development Statistics (database). DOI: http://dx.doi.org/10.1787/data-00072-en. It includes estimates by the authors using data from: JICA (2016), SCIO (2014), EIBI (2011), India MEA (2015), EIBI (2015), IDCR (2015), India MoF (2015).

Largest Development Partners for Infrastructure in 2014

Among those that report to the DAC, the largest development partners for infrastructure in 2014 included the MDBs, G7 countries, European Union (EU) Institutions and Korea (Figure 6)⁹. In particular, financing for infrastructure is largely characterised by significant amounts by a few development partners, with the top five financing almost 55% and top 10 financing 75% of the total ODF. Furthermore, the World Bank Group (WBG), which includes the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA) and the IFC, disbursed almost a quarter of the total amount.

Compared to 2013, the disbursements for infrastructure by the WBG increased by USD 2 billion in 2014, reaching almost USD 14 billion. Disbursements by Germany also increased, approximately by USD half a billion, following an upward trend that started in 2012. On the other hand, disbursements from the EU Institutions declined by USD 1 billion (a drop of 20%) and by 1.8 billion from the United States of America (USA) (a drop of 56%), both in line with a decreasing trend that started in 2012 and 2010, respectively.

^{9.} This breakdown does not include country data from China and India as they do not report to the DAC nor Saudi Arabia as it does not report at the activity level.

WBG 13.8 6.3 Japan Concessional **AsDB** 5.5 Non-Concessional **EU Institutions** Not Available Korea 3.1 Germany 3.1 IADB Group **AfDB** 2.8 France CAF 1.4 IsDB 1.4 **United States EBRD** 1.2 Netherlands 0.9 **United Kingdom** Arab Fund 0.7 Norway 0.5 **OFID** 0.5 **United Arab Emirates** Australia 0.3 Kuwait **0.3** Switzerland 0.3 Canada 0.3 Denmark **0.2** Sweden ■ 0.2 Belgium ■ 0.2

Figure 6. Top Development Partners of ODF for Infrastructure, 2014

Source: Gross disbursements. OECD (2016), "CRS: Aid activities", OECD International Development Statistics (database) DOI: http://dx.doi.org/10.1787/data-00061-en. OECD (2016), "Detailed aid statistics: Official and private flows", OECD International Development Statistics (database). DOI: http://dx.doi.org/10.1787/data-00072-en. CAF (2014). It includes estimates by the authors.

Note: IFC and IsDB amounts are estimated disbursements that were calculated using commitments to infrastructure reported by these institutions to the DAC and their respective annual reports. IFC is included in the WBG. Inter-American Investment Co-operation is included in the IADB Group.

CIF 0.2

GEF

Finland

■ 0.2

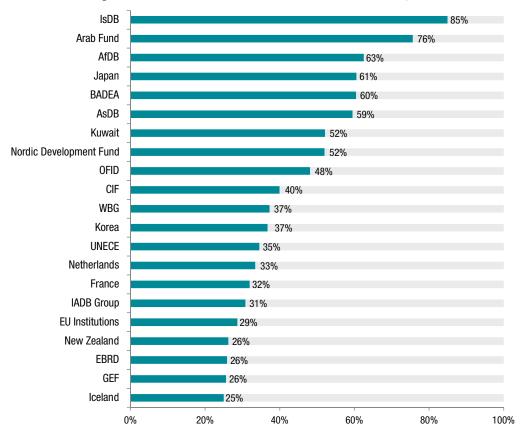
0.1

Share of Infrastructure Spending within all Sectors by Development Partners

The importance given to infrastructure within all sectors¹⁰ varied widely across development partners (see Figure 7). In particular, several Arab development partners such as the IsDB, the Arab Fund, the Arab Bank for Economic Development in Africa (BADEA), and Kuwait, as well as AfDB, AsDB, and Japan allocated more than half of their sector-allocable ODF to infrastructure. Others such as the WBG, Korea, IADB Group and France also disbursed about a third of their sector-allocable funds to infrastructure.

USD Billion

Figure 7. Share of Infrastructure in Sector-Allocable ODF, 2014



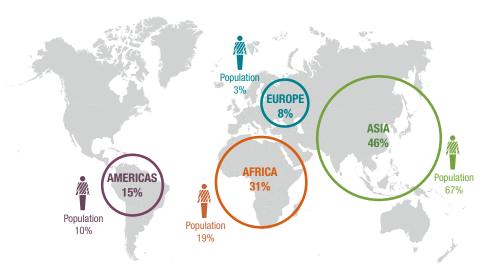
Source: Gross disbursements. See source for figure 6. It includes estimates by the authors.

Note: Share of ODF for infrastructure out of total sector allocable ODF. Ratio for IFC and IsDB is based on commitments.

Regional Distribution of ODF for Infrastructure

In terms of geographical distribution, Asia received the largest share of ODF for infrastructure with 46%, followed by Africa with 31%, Americas with 15% and finally Europe with 8%¹¹ (see Figure 8). Overall, the ODF distribution mirrored that of the population among developing countries, i.e. higher in Asia and Africa and lower in the Americas and Europe, although Asia received less than its share of the total population. In terms of the level of concessionality of ODF, while Africa received more than two thirds of infrastructure disbursements in concessional finance (i.e. ODA), the Americas received two thirds in non-concessional finance (i.e. OOF). Asia and Europe received half concessional and half non-concessional finance. Europe's concessional finance for infrastructure was mostly disbursements by the EU Institutions to Turkey, Serbia, and Bosnia and Herzegovina.

Figure 8. Regional Distribution of ODF for Infrastructure by All Development Partners, 2014



Source: Gross disbursements. See source for Figure 6. It includes estimates by the authors.

Note: See note at Figure 6.

11. The coverage of countries are those that are in the DAC list of Official Development Assistance recipients.

Income-Level Distribution of ODF for Infrastructure and Top Recipients

Disaggregating ODF for infrastructure by income levels, the distribution was more or less similar to the share of developing country population by the income groups. Lower Middle Income Countries (LMICs) received 42%, Upper Middle Income Countries (UMICs) 36%, and Low Income Countries (LICs) 22%, while their shares of the population are 42%, 40%, and 17% respectively (see Figure 9). In fact, LICs received slightly more than their share of the population. In terms of concessionality of financial flows to the different income groups, a high proportion (83%) of ODF for infrastructure to LICs was concessional, while disbursements to LMICs were mainly concessional (60%) and to UMICs mainly non-concessional (67%).

Distribution by Income Group

Population by Income Group

LICs LMICs 36%

Population by Income Group 17%

LMICs UMICs 42%

LMICs 42%

LMICs 42%

40%

40%

Figure 9. Income Level Distribution of ODF for Infrastructure by All Development Partners, 2014

Source: Gross disbursements. See source for Figure 6. It includes estimates by the authors. Note: See note at Figure 6.

20%

0%

In general, there is a high concentration of ODF for infrastructure in a few countries especially large and industrialised emerging economies. In 2014, almost 40% of total ODF to infrastructure was disbursed to the top 10 recipients, which are mostly large emerging economies of LMICs and UMICs, with India, Viet Nam, and China being the top three (see Figure 10)¹². Given that the supply side is also concentrated, as explained above, the broad picture is that a few large development partners are supporting a few large emerging economies. For instance, disbursements by the top 5 development partners to the top 5 recipients consisted of a fifth (21%) of total ODF for infrastructure and disbursements by the top 10 development partners to the top 10 recipients consisted of 35%.

60%

80%

100%

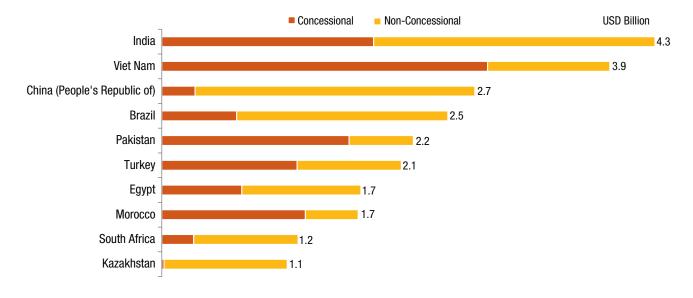


Figure 10. Top Recipient of ODF for Infrastructure by All Development Partners, 2014

Source: Gross disbursements. See source for Figure 6. It includes estimates by the authors.

Note: See note for Figure 6.

^{12.} As mentioned above, India and China are also significant providers of development co-operation in infrastructure to other developing countries (see Figure 5).



Sectoral Distribution of ODF for Infrastructure

In terms of sectoral distribution, transport received the largest share of total ODF disbursements for infrastructure, followed by energy, water and sanitation and finally communications (see Figure 11). Within transport, roads received about half, followed by rail transport. By looking at energy, half of the support was for electric transmission and technical assistance for policy and institutional reforms. Within the remaining half, which is for power generation, 54% was allocated to renewable sources (solar, wind, hydro, geothermal, biomass and ocean) and 45% to non-renewables (coal, gas and oil).

Despite the higher amount going to transport, the sectoral distribution of total investment gaps up to 2030 explained above shows that the proportion of needs are the greatest in energy (with 44%) rather than transport (with 22%). At the same time, since development partner support to infrastructure can barely meet the estimated total investment gap of USD 1.2 trillion, this comparison should be taken with caution. On the other hand, while small at the aggregate level, ODF disbursed by development partners is particularly important for aid-dependent poorer countries and sectors where developing country governments and the private sector are providing insufficient resources.

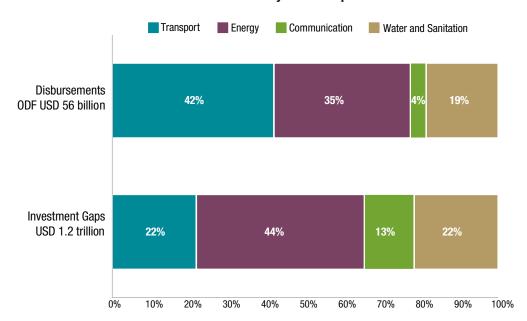


Figure 11. Sectoral Distribution of ODF for Infrastructure by All Development Partners in 2014 and Investment Gaps

Source: Gross disbursements. See source for Figure 6 and UNCTAD (2014). It includes estimates by the authors. **Note:** See note for Figure 6.

ODF for Infrastructure for the Enabling Environment

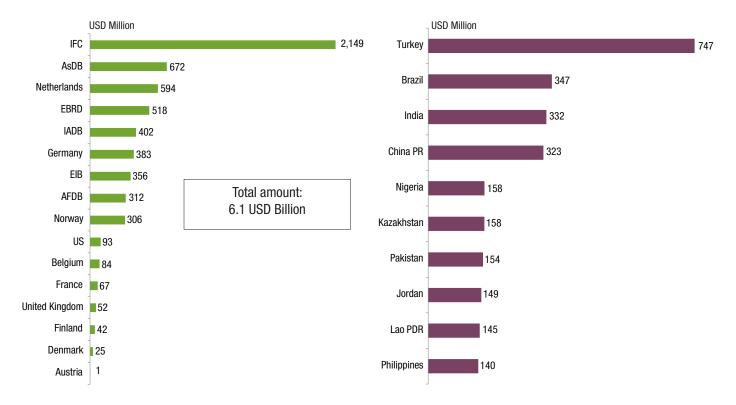
Aside from supporting physical infrastructure, development partners contributed to improving the policy framework and other non-physical aspects related to infrastructure. Examples include: strengthening regulatory authorities in the telecommunication, transport, and energy sectors; financial and operational restructuring of State Owned Enterprises; and capacity building of municipalities in sustainable use and management of water resources. Almost 20% of ODF to infrastructure was allocated to the policy framework and other non-physical aspects related to infrastructure sectors in 2014, particularly for energy. Main projects here included technical assistance and capacity building for relevant ministries in power sector policy and regulatory reforms, especially for renewable energy.

ODF for Infrastructure Disbursed to Private Sector Companies

Furthermore, in addition to assisting developing country governments, development partners directly support the private sector by using financial instruments such as guarantees, equity and loans with the aim of mobilising additional financing for infrastructure. While this support is mainly provided through Development Finance Institutions (DFIs) and International Financial Institutions (IFIs), traditional development agencies also engage the private sector directly. As shown in Figure 3 above, direct support to the private sector represented 10% of total official developmental flows to infrastructure in 2014, although this amount did not include guarantees as they are not actual flows. Here, the largest donors were the MDBs—particularly the IFC which was by far the largest, disbursing almost USD 2.2 billion (see figure 12).

Figure 12. Support to the Private Sector for Infrastructure by provider, 2014

Figure 13. Support to the Private Sector for Infrastructure by Recipient, 2014



Source: Gross disbursements. OECD (2016), "Creditor Reporting System: Aid activities", OECD International Development Statistics (database)
DOI: http://dx.doi.org/10.1787/data-00061-en. Email correspondence with AfDB, AsDB, IADB Group, EBRD, and EIB. IFC (2014). It includes estimates by the authors.

The sectoral distribution of disbursements to the private sector for infrastructure was 61% to energy, 22% to transport, 14% to communications, and 3% to water and sanitation. By comparing these to the distribution of ODF for infrastructure to the public sector, leveraging efforts were made more in energy and communications and less so in transport and water and sanitation, possibly due to the commercial viability of the two former sectors. Furthermore, the majority (55%) of the direct support to the private sector went to UMICs, about a third (32%) to LMICs, and a smaller share (12%) to LICs. While the proportion for UMICs is still relatively high, there may be a shift in support to the private sector from upper to lower income countries, as in 2013 the proportion allocated to UMICs was two thirds. Top recipient countries were Turkey, Brazil, India and China (see Figure 13).

Private Finance Mobilised through Guarantees, Syndicated Loans, and Shares in CIVs

Based on a survey carried out by the DAC Secretariat among DFIs, IFIs and other agencies that are trying to leverage resources from the private sector, USD 5.9 billion was mobilised in 2014 for infrastructure through the use of guarantees, syndicated loans, and shares in collective investment vehicles (CIVs)¹³. Specifically, guarantees and syndicated loans respectively mobilised 41-43% of the total, while shares in CIVs mobilised about 16% (Figure 14). In terms of sectors, about two thirds (65%) of private sector resources mobilised were in energy (predominantly renewables), followed by transport with roughly a fifth (22%), while smaller proportions were mobilised in communication (8%) and water and sanitation (5%). These proportions are not entirely comparable with the sectoral distribution of disbursements to the private sector mentioned above because the types of instruments covered here are only a subset of those used to measure direct private sector support¹⁴. Moreover, guarantees are not captured in the disbursements to the private sector as they are not flows.

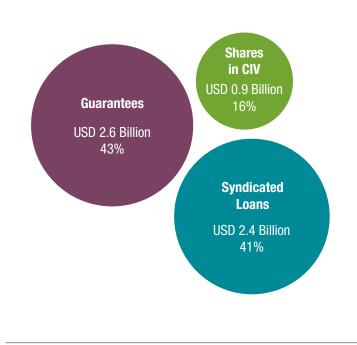
^{14.} These include other private sector instruments such as standard loans, credit lines, direct investments in companies and structured finance.

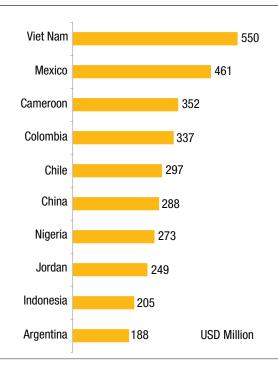


^{13.} OECD/DAC Survey on Amounts Mobilised from the Private Sector by ODF Interventions, available at https://public.tableau.com/views/Mobilisation3/Dashboard1?:embed=y&:display_count=yes&:showTabs=y&:toolbar=no?&:showVizHome=no.

Figure 14. Private Finance Mobilised through guarantees, shares in CIV and syndicated loans, loans, instrument, 2014

Figure 15. Private Finance Mobilised through guarantees shares in CIV and Syndicated by recipient, 2014





Source: OECD/DAC Survey on Amounts Mobilised from the Private Sector by ODF Interventions.

Note: Data used to calculate in these graphs are related to amounts mobilised from the private sector by only the following development partners: AFD, AfDB, AsDB, BIO, CAF, United Kingdom (UK)'s Commonwealth Development Corporation, UK's Department of Energy & Climate Change, UK's Department for International Development, Emerging Infrastructure Fund, EBRD, IFC, Finance Canada, Finnfund, FMO, Guarantco, IADB Group, Infrastructure Crisis Facility — Debt Pool, Denmark's Investment Fund for Developing Countries, Spain's Ministerio de Asuntos Exteriores y de Cooperación - Fondo para la Promoción del Desarrollo, Multilateral Investment Guarantee Agency (MIGA), Norfund, United States (US)' Overseas Private Investment Corporation, Proparco, Swedish International Development Co-operation Agency, Swiss Investment Fund for Emerging Markets, Sociedade para o Financiamento do Desenvolvimento, and US Agency for International Development.

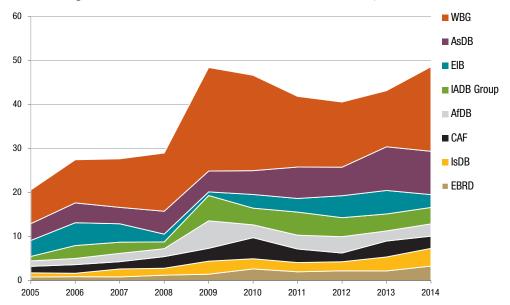
II. SPECIAL FOCUS ON MULTILATERAL DEVELOPMENT BANKS

To better capture infrastructure finance by MDBs to developing countries, this section focuses on ODF by AfDB, AsDB, CAF, EBRD, EIB, IADB Group, IsDB, and the WBG. The data used mainly include disbursements and commitments reported by the MDBs to the DAC, as well data provided by them to the authors. In a few cases, estimations have been carried out by using data retrieved from annual reports of the MDBs.

Trend of MDB Financing for Infrastructure in Developing Countries

In terms of trends, the volume of financing committed by the MDBs to infrastructure more than doubled between 2005 and 2014 at a compounded annual growth rate of 10%. In particular, between 2008 and 2009, ODF for infrastructure by MDBs rose by 67%, driven mostly by the WBG, in order to counter the financial crisis (see Figure 16). Following 2009, aggregate financing from the MDBs slowly and constantly decreased up to 2014, but nevertheless remained at higher levels than the pre-crisis period. The EIB—whose financing to developing countries is only a small portion of its total operations¹⁵—is the only MDB that reduced its financing to developing country infrastructure in the period 2005-2014.

Figure 16. Trend of MDB Commitments to Infrastructure, 2005-2014



Source: Commitments (deflated). OECD (2016), "CRS: Aid activities", OECD International Development Statistics (database) DOI: http://dx.doi.org/10.1787/data-00061-en. OECD (2016), "Detailed aid statistics: Official and private flows", OECD International Development Statistics (database). DOI: http://dx.doi.org/10.1787/data-00072-en. It includes estimates by the authors.

Note: IFC and CAF amounts are estimated commitments or approvals from annual reports. EBRD and EIB amounts are calculated by using data provided to the authors.

Largest MDBs Financing Infrastructure in Developing Countries

In terms of actual disbursements to infrastructure, the MDBs collectively spent USD 31 billion in 2014, which corresponded to half of total ODF for infrastructure by bilateral and multilateral development partners¹⁶. The top MDB by far was the WBG, which alone accounted for 43%, i.e. USD 14 billion (see Figure 17). This figure includes amounts from IBRD, IDA and IFC, but excludes those of Multilateral Investment Guarantee Agency, as guarantees are not actual flows. The AsDB was the second largest with USD 5.4 billion. Unlike bilateral development partners, which provide the vast majority (81%) of their financing at concessional terms, most of the financing from the MDBs examined was non-concessional (65%). In particular, the IsDB and EBRD financing was exclusively at non-concessional terms. In contrast, the EIB was the only institution that provided practically all its finance at concessional terms (97%).

Figure 17. Top MDBs of ODF for Infrastructure, 2014 WBG 13.7 **AsDB IADB** Group **AfDB** ODA 2.3 **EIB** 00F CAF Not Available **IsDB EBRD USD** Billion

Source: Gross disbursements. See source for Figure 6. It includes estimates by the authors

Note: See note at Figure 6.

^{16.} Multilaterals include MDBs, the European Commission and multilateral banks and funds outside the definition of MDB used in this report.



Share of Infrastructure Spending within all Sectors by Development Partners

To gauge the importance of infrastructure in the portfolios, the share of infrastructure financing within all sector activities (i.e. sector-allocable ODF, which excludes general budget support and non-programmable operations¹⁷) was calculated. Among the MDBs, IsDB, AfDB and AsDB allocated more than half of their sector-allocable ODF to infrastructure in 2014, whereas the rest allocated between 26% and 40% (see Figure 18). This suggests that while the WBG was the top MDB in absolute terms, its focus on infrastructure was less than some other institutions, such as IsDB, AfDB and AsDB.

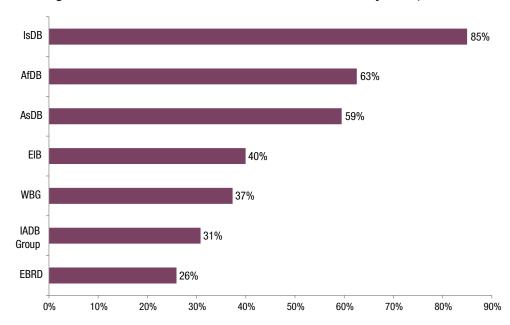


Figure 18. Share of Infrastructure in Sector-Allocable ODF by MDBs, 2014

Source: Gross disbursements. See source for Figure 6. It includes estimates by the authors.

Note: See note at Figure 6.

Regional Distribution of ODF for Infrastructure by MDBs

In terms of regional distribution of infrastructure ODF by MDBs in 2014, Asia was the continent with the highest proportion (42%), with Africa, Americas and developing Europe following with 30%, 18% and 10%, respectively (see Figure 19). However, Asia received less ODF per capita than the other regions.

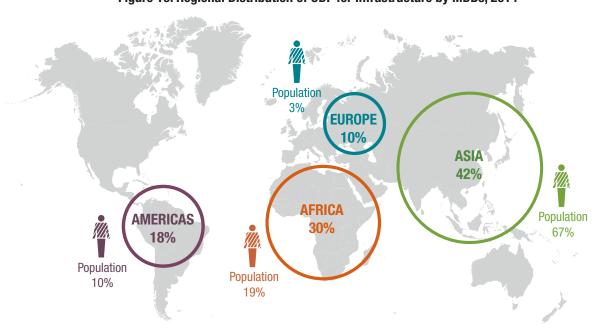


Figure 19. Regional Distribution of ODF for Infrastructure by MDBs, 2014

Source: Gross disbursements. See source for Figure 6. It includes estimates by the authors.

Note: See note at Figure 6.

17. See footnote 6 above.

Income-Level Distribution and Top Recipients of ODF for Infrastructure by MDBs

In contrast, the income level distribution of ODF by MDBs for infrastructure was almost proportional to the share of developing country population by income group (see Figure 20). For example, the LICs received 19% of total amount, somewhat commensurate to its population of 17%. At the same time, when examining the country breakdown, disbursements were extremely concentrated in a few countries. In fact, the top five recipient countries received almost a third (31%) of the total amount, the top 10 received half (49%) and the top 20 more than two thirds (68%). These top recipients were large emerging economies and more industrialised developing countries such as, China, India, Brazil, Pakistan, Viet Nam and Turkey (see Figure 21). Among the top ten recipients, Pakistan, Viet Nam and Turkey received a balanced mixture of ODA and OOF whereas the others received mainly or exclusively non-concessional finance.

LMICs Distribution by LICs **UMICs** 43% 38% Income Group 19% Population by LICs **LMICs UMICs** Income Group 42% 17% 40% 100% 0% 20% 40% 60% 80%

Figure 20. Income Level Distribution of ODF for Infrastructure by MDBs, 2014

Source: Gross disbursements. See source for Figure 6. It includes estimates by the authors.

Note: See note at Figure 6.

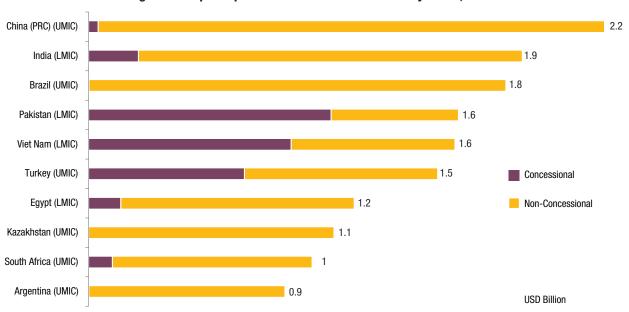


Figure 21. Top Recipients of ODF for Infrastructure by MDBs, 2014

Source: Gross disbursements. See source for figure 6. It includes estimates by the authors. **Note:** See note at figure 6.



Sectoral Distribution of ODF for Infrastructure by MDBs

Regarding the sectoral allocation, transport received 43% of total amount, followed by energy at 38%, then water and sanitation at 15% and finally communications at 3% (see Figure 22). This distribution shows that MDB allocation of ODF to transport was almost double the proportion of total investment gap in these sectors which are based on UNCTAD estimates. Conversely, MDBs have allocated smaller shares of their ODF to communications and water and sanitation compared to the investment gaps in these sectors.

Transport Energy Communication Water and Sanitation **ODF Disbursement** 43% 38% USD 30 billion **3**% **Investment Gaps** 22% 44% USD 1.2 trillion 0% 20% 40% 60% 80% 100%

Figure 22. Sectoral distribution of ODF for infrastructure by MDBs and Investment Gaps, 2014

Source: Gross disbursements. See source for Figure 6 and UNCTAD (2014). It includes estimates by the authors. **Note:** See note at Figure 6.

ODF for the Enabling Environment for Infrastructure by MDBs

In terms of support for the policy framework and other non-physical aspects of infrastructure, MDB financing amounted to 20% of total disbursements to infrastructure, which was more than the average of bilaterals at 15%. As mentioned earlier in the report, this support is related to improving policies and institutions in infrastructure sectors, including activities concerning environmental management. EBRD and IADB Group allocated proportionally more than the average, while EIB allocated only 8% (see Figure 23).

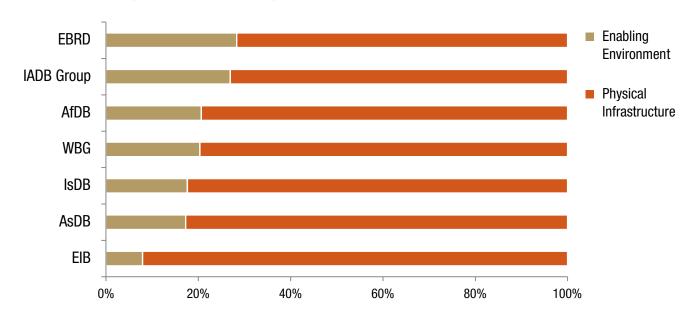


Figure 23. Share of Enabling Environment in MDB's ODF to Infrastructure, 2014

Source: Gross disbursements. See source for Figure 6. It includes estimates by the authors. **Note:** See note at Figure 6.

ODF for Infrastructure Disbursed to Private Sector Companies by MDBs

As with bilateral DFIs, MDBs provide financial support and advisory services to private companies and financial institutions investing in infrastructure. Private sector operations of MDBs are either concentrated in specialised institutions, such as the IFC and IIC, or in separate arms within the same MDB as in the case of AfDB and AsDB. Total financing disbursed directly to the private sector by MDBs amounted to USD 4.4 billion in 2014, which corresponded to 2/3 of the total ODF for infrastructure disbursed to the private sector by all development partners. Of this USD 4.4 billion, IFC provided half¹⁸ and AsDB disbursed USD 0.7 billion, for example (see Figure 24).

Figure 24. Private Sector instruments for Infrastructure (Providers), 2014

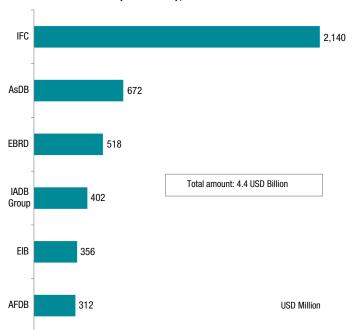
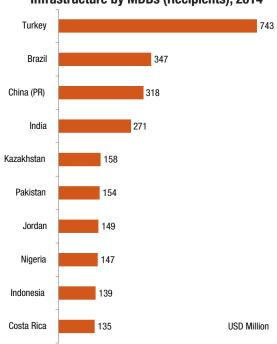


Figure 25. Private Sector instruments for Infrastructure by MDBs (Recipients), 2014



Source: Gross disbursements. See source for Figure 12. It includes estimates by the authors.

By looking at the sectoral distribution of MDB disbursements to the private sector for infrastructure, energy received the biggest share with 57% of total, followed by transport (25%), communications (15%) and water and sanitation (3%). As mentioned above in the paragraph related to private sector instruments by all development partners, this distribution points to a stronger effort of MDBs on energy and communication in private sector operations compared to the sectoral distribution of their ODF to public institutions, probably because of higher investments by private companies in these two sectors.

In terms of geographical distribution, Asia received 40%, Americas 24%, Europe 22% and Africa 14%. If compared to the distribution of ODF to infrastructure for public sector operations, Europe received significantly more. This is due to the significant amounts disbursed by IFC, EBRD and EIB to Turkey, which is the top recipient country of infrastructure ODF to the private sector with USD 743 million (see Figure 25). This is followed by Brazil (USD 347 million), China (USD 318 million) and India (USD 271 million). In general, UMICs received 61% of infrastructure ODF to the private sector by the MDBs, while LMICs received 30% and LICs only 9%. Compared to bilateral DFIs, MDBs channelled their ODF to the private sector somewhat more towards higher income groups.

Private Finance Mobilised through Guarantees, Syndicated Loans, and Shares in CIVs by MDBs

Based on data from the Survey mentioned above¹⁹, MDBs mobilised USD 3.1 billion in 2014. As noted before in the report, these are only a subset of the instruments used by MDBs. Therefore, amounts mobilised by these institutions through all private sector instruments are much higher²⁰. The majority of the USD 3.3 billion was mobilised by syndicated loans (60%), while one third was by guarantees (see Figure 26), and 9% by shares in CIVs. In terms of sectoral allocation of mobilised amounts from the private sector, half was in energy (51%), while 35% was in transport. Water and sanitation and communication mobilised 8% and 6%, respectively. Top recipient countries were Viet Nam, Cameroon, China, Jordan, Mexico and Indonesia (see Figure 27).

^{20.} In January 2016 the MDBs convened a Task Force to develop a joint framework and methodology to measure private investment catalysed by the MDBs to advance the commitment of mobilising/catalysing larger amounts of private investment to support the financing of the Sustainable Development Goals.



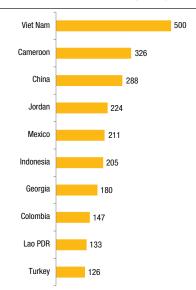
^{18.} As mentioned earlier, these figures do not include guarantees as they are not flows. However, amounts mobilised from the private sector for infrastructure captured below include those leveraged by guarantees.

^{19.} See footnote 13.

Figure 26. Private Finance Mobilised through guarantees shares in CIV and syndicated loans by MDBs, instrument (2014)

Figure 27. Private Finance Mobilised through guarantees, shares in CIVs and syndicated loans by MDBs, recipient (2014)





Source: See source for figure 13.

Note: Data used to calculate this figure is related to amounts mobilised from the private sector by the following MDBs: AfDB, AsDB, CAF, EBRD, IADB Group, IFC and MIGA.

MDBs' Joint Declaration of Aspirations on Actions to Support Infrastructure Investment

As MDBs are key players in providing ODF for infrastructure in developing countries, including in directly supporting the private sector, the G20 Investment and Infrastructure Working Group, particularly under the Chinese Presidency, reiterated the importance of scaling up MDB financing for infrastructure. As a response, the MDBs issued a joint Declaration of Aspiration on Actions to support infrastructure which laid out their quantitative ambitions to increase infrastructure finance in the coming years (see Figure 28).

Figure 28. Summary of MDBs' Joint Declaration of Aspirations on Actions to Support Infrastructure Investment

AfDB	Infrastructure lending from all windows (i.e. public and private) will be USD 7.3 billion in 2016, USD 9.5 billion in 2017, and USD 6.0 billion in 2018
AsDB	Resources allocated to infrastructure will be about USD 70 billion throughout the period 2016-2020, accounting for 70% of total anticipated lending.
AIIB ²¹	Financing of infrastructure will amount to up to USD 1.2 billion in fiscal years 2016, USD 2.5 billion in 2017, and USD 3.5 billion in 2018.
CAF	Approvals to infrastructure and social development projects were USD 4.7 billion in 2015. Approvals to these sectors are expected to grow by 3-7 % annually.
EBRD	USD 4.9 billion was spent on infrastructure in 2015. Over the period 2016-2018, investment levels are expected to rise by up to 20 % compared to 2015.
EIB	Financing of economic, environmental and social infrastructure will amount to between USD 40 billion and USD 50 billion annually in the period 2016-2018, equivalent to 50-60% of total lending.
IADB Group	Lending in energy, transport, water and sanitation, and ICT are expected to account for 30-50% of total lending.
IsDB	Financing to economic and social infrastructure is expected to be between USD 15 and 16 billion during fiscal years 2016-2018, which is equivalent to USD 5 to 5.3 billion annually and will account for 90% of its total project financing.
NDB ²²	USD 1.5 - 2 billion in 2016, USD2 –USD 2.5 billion in 2017, and USD 4-5 billion in 2018.
WBG	Lending in energy, transport, water and sanitation, and ICT are expected to account for 30-50% of total lending. IFC aspires to achieve 5-10 % annual growth over the period between fiscal years 2017 and 2019 from the 2015 commitment level of USD 5.5 billion.

Source: MDBs' Joint Declaration of Aspirations on Actions to Support Infrastructure Investment.

Note: Aspirations exclusively for social infrastructure were excluded. Figures for EIB, EBRD, ISDB, NDB and WBG are presumably for all countries, i.e. both ODA-eligible countries and other more advanced economies.

- 21. Asian Infrastructure Investment Bank.
- 22. New Development Bank.

While these aspirations indicate that MDBs will continue to be key players in supporting infrastructure in the near future, quantifying the exact contribution of each institution would need to be harmonised:

- First, the scope of infrastructure needs to be clearly defined, as some MDBs include social infrastructure in their targets
 while others do not. Furthermore, even within economic infrastructure, some include sub-sectors, such as natural resource
 extraction and municipal services, while others do not.
- Second, while most of the MDBs mainly support ODA-eligible countries, some provide significant amounts to more advanced
 economies in Europe (i.e. EBRD, EIB). In this regard, it would be important to be able to distinguish the range of countries
 that the aspirations cover, particularly since infrastructure financing needs in developing countries exceeds those of the
 more advanced economies (McKinsey 2016).
- Third, the unit of measurement of the aspirations should be consistently set as there is divergence in the way quantitative
 ambitions are set, with some MDBs indicating absolute amounts, others percentages of annual increase in lending, and
 others still pointing to the future share of infrastructure financing among total lending. This is problematic as without a
 common yardstick among MDBs it is not possible to understand the exact amount that the institution is aspiring for and
 compare these amounts across the institutions.
- Finally, the aspirations expressed through the Declaration may need to be approved by the respective boards of the MDBs for it to be binding.

In addition to harmonisation of data on the coverage of sectors and countries as well as the parameters of the commitments, the establishment of a mechanism to monitor the extent to which the declarations are actually achieved would be useful. The OECD/DAC, as a non-operational and neutral body that collects statistics, could be well placed to contribute to this monitoring function.

SUMMARY AND CONCLUSIONS

While relatively small in comparison to the financing needs of developing countries, ODF for infrastructure has been growing significantly in the last decade in both absolute terms and as a share of development partners' portfolios. In 2014, total ODF to infrastructure amounted to USD 61 billion, 56% of which was concessional financing. In terms of providers, MDBs disbursed about half of all ODF for infrastructure, while other large providers were G7 countries, EU Institutions and Korea.

In general, there was a high concentration of ODF for infrastructure in a few countries, especially large and industrialised emerging economies, such as India, Vietnam, China and Brazil. Given that the supply side was also characterised by significant financing by a few major development partners, the broad picture is that a few large development partners were supporting a few large emerging economies. In terms of sectors, disbursements were mainly in transport and energy.

Direct support to the private sector represented 10% of total ODF to infrastructure in 2014, mainly in energy and for UMICs. Furthermore, amounts mobilised by development partners from the private sector through guarantees, syndicated loans and shares in CIVs were also concentrated in energy. This shows that the development partners and private sector collaborated most in the energy sector, probably due to the commercial viability of energy projects.

This report also focused on ODF to developing country infrastructure by the MDBs. In terms of trends, the volume of financing committed to infrastructure by the MDBs doubled between 2005 and 2014. Unlike bilateral development partners, which provided the vast majority of their financing at concessional terms, most of the financing from the MDBs was non-concessional. In terms of direct financing to the private sector, MDBs disbursed 2/3 of total ODF for infrastructure to the private sector in 2014, half of which was provided by IFC.







BIBLIOGRAPHY

CAF (2015), Annual Report 2014, https://www.caf.com/media/2977965/caf annual report 2014.pdf.

EIBI (Export Import Bank of India) (2011), *Indian Lines of Credit: an Instrument to Enhance Indian-African Partnership*, http://www.indiainbusiness.nic.in/trade/presentation_loc/exim.pdf.

FMO (2015), FMO Full Annual Report 2014. http://annualreport.fmo.nl/l/en/library/download/urn:uuid:cca4d883-ed36-4477-85f4-a3424051694d/fmo+annual+report+2014.pdf?format=save_to_disk&ext=.pdf.

IDCR (Indian Development Cooperation Research) (2015), *Trends in Indian Development Assistance in the Energy Sector*, News Brief no. 4, 1st February, 2015. http://idcr.cprindia.org/blog/trends-indian-development-assistance-energy-sector.

IFC (2014) Annual Report 2014. http://www.ifc.org/wps/wcm/ connect/0edb7a004572ddb38bb6bb9916182e35/ AR2014_Report.pdf?MOD=AJPERES

India MEA (Ministry of External Affairs, Government of India) (2015), *Outcome Budget 2014-2015*. http://mea.gov.in/Uploads/PublicationDocs/23954 MEA Outcome Budget ENG 2014-15.pdf.

India MoF (Ministry of Finance, Government of India) (2015). *Outcome Budget 2014-2015*. http://finmin.nic.in/reports/OutcomeBudget2014 15.pdf.

IsDB (2014), Annual Report 1435H (2014). http://www.isdb.org/irj/go/km/docs/documents/IDBDevelopments/Internet/English/IDB/CM/Publications/Annual Reports/40th/IDB Annual Report 1435H English.pdf.

JICA-RI (Japan International Cooperation Agency Research Institute) (2016), *Estimating China's Foreign* Aid II. 2014 update. https://www.jica.go.jp/jica-ri/publication/workingpaper/jrft3q00000063rt-att/JICA-RI WP No.131.pdf.

McKinsey (2016) *Bridging Global Infrastructure Gaps*, http://www.mckinsey.com/industries/infrastructure/our-insights/bridging-global-infrastructure-gaps.

Miyamoto, K. and Chiofalo, E. (2015), *Official Development Finance for Infrastructure: Support by Multilateral and Bilateral Development Partners,* OECD Development Co-operation Working Papers, No. 25, OECD Publishing, Paris. http://dx.doi.org/10.1787/5jrs3sbcrvzx-en.

Miyamoto, K. and Biousse, K. (2014a), *Official Support for Private Sector Participation in Developing Country Infrastructure*, OECD Development Co-operation Working Papers, No. 19, OECD Publishing, Paris. http://dx.doi.org/10.1787/5jz14cd40nf0-en.

Miyamoto, K. and Biousse, K. (2014b), *Donors*Profiles at a Glance. Addendum to Official Support
for Private Sector Participation in Developing Country
Infrastructure. http://www.oecd.org/dac/stats/documentupload/DonorProfilesInfra.pdf.

SCIO (The People's Republic of China State Council Information Office) (2014), *China's Foreign Aid (2014)*, July 2014, Beijing. http://news.xinhuanet.com/english/china/2014-07/10/c 133474011.htm.

SDF (Saudi Fund for Development) (2013). *Annual Report 2013*. http://www.sfd.gov.sa/cs/groups/public/documents/document/mdaw/ndyx/~edisp/121-document-461968.pdf.

UNCTAD (2014) *World Investment Report*, United Nations Publications. http://unctad.org/en/ PublicationsLibrary/wir2014 en.pdf.

