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## Financing Development: Private Capital Mobilization and Institutional Investors

Georg Inderst

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The Pensions Institute
Cass Business School
City, University of London
106 Bunhill Row
London EC1Y 8TZ
UNITED KINGDOM
http://www.pensions-institute.org/

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# Financing Development:

# Private Capital Mobilization and Institutional Investors

Georg Inderst

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**Abstract**

This report discusses key issues around the mobilization of private capital for development. Investment requirements are huge, especially for infrastructure, climate and other SDG-related investments. External finance for developing countries stagnated in the years before the pandemic, followed by a major setback in 2020/2021. The focus is in particular on institutional investors, whose exposure to less-developed countries is still very low, even more so in unlisted assets and projects. There is a potential for progress as asset owners seek new diversification opportunities in growth markets. The main burden is on governments to create favourable business conditions for investable long-term assets. Policy makers, development finance institutions and investors should utilize the full spectrum of investment vehicles - commercial, impact and blended finance.

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## Executive Summary

Investment requirements are huge in emerging markets and development economies (EMDE). Development spending predominately comes from the public budgets. The private sector is facing growing calls for a stronger engagement to alleviate investment gaps in particular for infrastructure, climate and other SDG-related investments. However, external finance to EMDEs was stagnating even before the coronavirus crisis 2020-2021. The pandemic has exacerbated weaknesses on both the public and private sector side.

Key elements of the supply of private capital in EMDEs are reviewed, such as foreign direct investments (FDI), local capital markets, private equity and debt, real assets as well as public-private partnerships. Some progress has been made over the years but it is mostly concentrated in more advanced middle-income countries.

Multilateral development banks (MDB) and development finance institutions (DFI) step up their efforts to facilitate private investment. The "mobilization" of private capital in EMDEs has, so far, been small (about an annual 0.2% of GDP). Only a few billions reach low-income countries. In terms of instruments, loans and guarantees dominate while equity stakes and investment funds appear underused. The report highlights various – conceptual and empirical - issues with MDBs' private sector co-financing. "Blended finance" is not easy to scale up. In the meantime, the "China model" has become a sizeable alternative.

The focus is in particular on institutional investors, often seen as reluctant to deploy at least a fraction of their $150 trillion of assets to crucial investments in EMDEs. Most investors are keen to broaden the set of investment opportunities in growth markets but expectations need to be realistic. There are various hurdles and challenges, including investor mandates and political, regulatory and micro risks. This even more so for riskier, less liquid assets.

How to match long-term investing with development needs? In fact, institutional investors have moved into emerging markets since the 1990, mostly by buying securities of large companies *listed* on established stock exchanges, or government bonds. More investors are now gaining exposure to EMDEs via *private* equity/debt, real estate or infrastructure funds. Some large asset owners are undertaking direct investments e.g. in renewable energy. We also see tentative steps towards investing in poorer countries via *impact* funds.

Investors can build on experience gained in middle-income markets. There is scope for progress also in less developed countries when the business conditions are right for investable long-term projects. The main responsibility is with governments. The growing importance of sustainability, climate-change and SDG investing will generate new demand. EMDE *domestic* investors ought to get more involved in this, too. Policy makers, development finance institutions and investors should utilize the full spectrum of investment and co-investment vehicles - commercial, impact and blended finance.

# 1. Introduction

This report discusses key issues around "private capital mobilization" by multilateral development banks (MDB) and development finance institutions (DFI), i.e. their ability to catalyze new sources of finance in emerging markets and developing economies (EMDE). This is seen in the wider context of the role of private finance for development. The focus is in particular on institutional investors, and their perceived reluctance to get more involved.[1]

Investment requirements in are huge. Projected gaps in infrastructure, climate and other investments to achieve the Sustainable Development Goals (SDG) have reached several trillions of dollars per year. They are rising as the coronavirus crisis wears on. Development spending in EMDEs predominately comes from the public sector. State budgets are already stretched in most countries, with tax bases weakened and public debt piling up. The private sector is facing growing calls for a stronger engagement to alleviate investment gaps.

There is no shortage of opinions on what governments, DFIs and investors should do to amplify the flow of money to developing countries. They range from the technical and financial to the political and ideological. Here, the spotlight is on relevant flows of private capital, especially from international asset owners (such as pension funds, sovereign wealth funds, foundations, endowments) and asset managers (investment and insurance funds).

Chapter 2 analyzes the mobilization of private capital by MDBs and DFIs, including climate co-finance, blended finance and public capital multipliers. A brief overview on investment needs and gaps in EMDEs is given in Chapter 3. In Chapter 4, key elements of the supply of private capital in EMDEs are reviewed, such as FDI, local capital markets, unlisted/private funds and public-private partnerships. Institutional investment in emerging markets is the focus of Chapter 5, surveying in particular investment volumes in infrastructure, sustainable and impact investment as well as obstacles for a higher engagement. Finally, Chapter 6 gives conclusions and recommendations on creating new long-term investment opportunities.

# 2. Mobilization by MDBs and DFIs

How much private money can MDBs and DFIs mobilize for development and climate finance? These institutions play an important role in providing finance in various forms: grants, concessional finance, guarantees, loans and bonds, equity investment, advisory services etc. Such activities have often worked alongside governments and private sector financiers such as commercial banks, industrial corporations or institutional investors.

[1] This paper builds on earlier background analysis of private capital mobilization for development in the context of the assessment of the World Bank Group's activities by the Independent Evaluation Group (IEG) (World Bank 2020). With thanks to Raghavan Narayanan for valuable comments.

MDBs and DFIs, both international and national, are increasingly being asked to step up in their role as more active facilitators of private investment in EMDEs. The reasons given typically fall into two groups: (a) lack of sufficient public funds, and (b) efficiency gains and innovation by employing the private sector. The G20 adopted a set of general principles for crowding-in private sector finance for growth and sustainable development (G20 2017). MDBs/DFIs see their support of private finance built on two pillars:

- policy guidance to countries to build strong macroeconomic and investment climates;
- "leveraging and crowding in private investment in their capacity as innovators, intermediaries and co-investors, based on their principles of engagement." (MDB 2015, p. 13) The latter include additionality, commercial viability, market development, high governance standards (especially transparency), environmental sustainability, human rights and other SDGs.

MDBs were also asked to be more explicit in defining and quantifying private capital mobilization. Various words are being used for the function or activity of *facilitating* private capital involvement, such as *mobilize, co-finance, catalyze, crowd-in, intermediate, leverage, unlock, tap, broker or blend*. It is not always clear what is exactly meant by such terms.[2]

We now look at some key figures in this context. It is useful to put the volumes of capital into perspective of the size of the economies, population or other indicators. Here, some comparisons with the gross domestic product (GDP) of different income groups are given.[3]

***MDBs' measurement approach***

A group of MDBs formed the "MDB Task Force on Mobilization" to agree on a joint methodology to measure private investment mobilized by these institutions (MDB 2018a). Total *private mobilization* (or *co-financing* used as a synonym) is defined as the sum of private *direct*[4] and *indirect*[5] mobilization from investment and advisory services. *Catalyzation* is used as a wider term that also includes technical advice, support for policy

[2] For a discussion of definitions and methodologies around mobilization (including the terms "private", "additionality", "causality") see, e.g., Jachnik et al. (2015), Carter et al. (2018).

[3] World GDP 2019 was about $87.8 trillion (current US dollars), of which $55.1 trillion in high-income countries (HIC), $25.8 trillion in upper-middle-income countries (UMIC), $6.3 trillion in lower-middle-income countries (LMIC) and $0.5 trillion in low-income countries (LIC). LMICs are those with a gross national income (GNI) per capita between $1,036 and $4045 in 2019, UMICs between $4046 and $12,536. Developing Africa's GDP (excluding high-income) is $3.3 trillion (World Bank 2021). $ means US dollars in this paper.

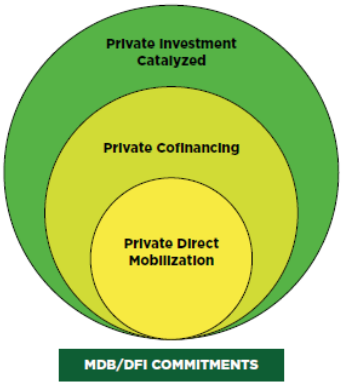
[4] Direct mobilization is "financing from a private entity on commercial terms due to the active and direct involvement of a MDB leading to commitment." It consists of loans, equity, guarantees, risk and capital market products and Islamic finance products (MDB 2018b). There is an implied causality assumption. "Private" entities include commercial banks, institutional investors but also some autonomous public institutions.

[5] Indirect mobilization is "financing from private entities provided in connection with a specific activity for which an MDB is providing financing, where no MDB is playing an active or direct role that leads to the commitment of the private entity's finance." Private indirect mobilization includes private sponsor financing. It does not imply any causality, but measures the private investment alongside the MDB financing.

reform, capacity building, demonstration effects, and other activities which trigger an investment response from private investors (Figure 1).

Summary figures have been produced annually starting in 2017 with the input of a growing list of the contributing MDBs and DFIs. The various refinements complicate comparisons over time. In 2019, long-term co-financing globally amounted to about $175 billion, i.e. about 0.2% of world GDP (MDB 2021). The largest amounts went into high-income countries (HIC) ($111 billion), dominated by the European Investment Bank (EIB) activities in Europe ($102 billion). Less than a third of total mobilization is direct ($55 billion). Short-term financing is less significant at $5 billion globally.[6]

*Figure 1: Levels of mobilization*




Source: MDB (2018a)

Since 2018, the MDBs' reports concentrate on middle-income countries (MICs) and low-income countries (LICs). Mobilization for MICs totaled $57 billion in 2019 (0.2% of GDP), of which $19 billion was private direct mobilization (Table 1). LICs and least developed countries (LDC)[7] accounted only for about $10 billion (1% of GDP), of which $4 billion direct. Nearly half of the mobilization to LICs and MICs was generated by the World Bank Group (WBG). The breakdown by continents shows some $14 billion for Africa (0.4% of GDP), of which $6 billion direct (0.2% of GDP).

For infrastructure, as a subset, $27 billion were mobilized for MICs (of which $7 billion were direct) and $4.4 billion for LICs/LDCs (of which $1.9 billion direct). *Economic* infrastructure sectors such as energy, transport, water, telecommunications and information technology dominate, while the share of *social* infrastructure is only 4% in LICs & MICs. No breakdowns by other sectors or instruments are provided by the MDB group.

[6] Long-term finance (tenors of one year or more) is essential for fixed capital investment in infrastructure and other sectors. Short-term finance represents revolving facilities such as trade finance and SME working capital facilities, and other instruments, often offered in times of crisis.

[7] LDCs are a different classification by the UN for low-income countries confronting severe structural impediments to sustainable development. There are currently 47 countries on the list of LDCs (GDP of $1.1 trillion in 2019) against the 34 LICs (GDP of $0.5 trillion), i.e. LDC is a broader measure than LIC.

*Table 1: Private capital mobilization by income group in 2019*

| | Mobilization | | | % of | | of which: Infrastructure | | | % of |
|---|---|---|---|---|---|---|---|---|---|
| $ bn | direct | indirect | total | GDP | | direct | indirect | total | GDP |
| HICs | 33.9 | 77.5 | 111.4 | 0.2% | | 2.6 | 29.9 | 32.6 | 0.1% |
| MICs | 18.7 | 38.2 | 57.0 | 0.2% | | 7.0 | 19.8 | 26.8 | 0.1% |
| LICs | 1.9 | 4.8 | 6.7 | 1.3% | | 0.6 | 2.0 | 2.6 | 0.5% |
| All | 54.6 | 120.6 | 175.2 | 0.2% | | 10.3 | 51.7 | 62.0 | 0.1% |
| *LICs/LDCs* | *3.8* | *5.9* | *9.7* | *1.0%* | | *1.9* | *2.5* | *4.4* | *0.4%* |

Source: MDB (2021), Author

***OECD statistics***

The OECD produces a somewhat different set of figures.[8] In 2018, $48 billion were mobilized in MICs and LICs (OECD 2020a). The total is $205 billion for the seven year period 2012-2018, giving an annual average of $29 billion (0.1% of GDP). In 2017-18, only 5% of private finance mobilized went to LIC/LDCs (annual average of $2.3 billion or 0.2% of GDP). Top recipient countries with sums over $1 billion (2017-2018 average) were Argentina, Turkey, Ukraine, India, Colombia, China, Egypt and Albania. Among LICs/LDCs, Uganda, Myanmar, Bangladesh, Benin, Mauritania, Cambodia, Togo, Zambia show averages above $100 million.

Three quarter of private finance were mobilized by MDBs (led by the WBG with a share of 37%), one quarter by bilateral providers such as OPIC, CDC, USAID, KfW, IFU, AFD, FMO. The two largest target sectors (energy and banking/financial services) captured well over half of the mobilized capital. Social infrastructure attracted only 4%.

OECD also gives a breakdown by *instruments*: guarantees mobilized 39% over the full period 2012-2018, syndicated loans 18%, direct investment in companies and SPVs 18%, credit lines 15%, shares in collective investment vehicles (CIV) 8% and simple co-financing arrangements 3% (standard loans and grants are not yet recorded by the OECD). Guarantees are particularly dominant in LICs/LDCs with a share over 58% in 2015-18 (OECD 2020b).

## 2.1. Climate co-finance

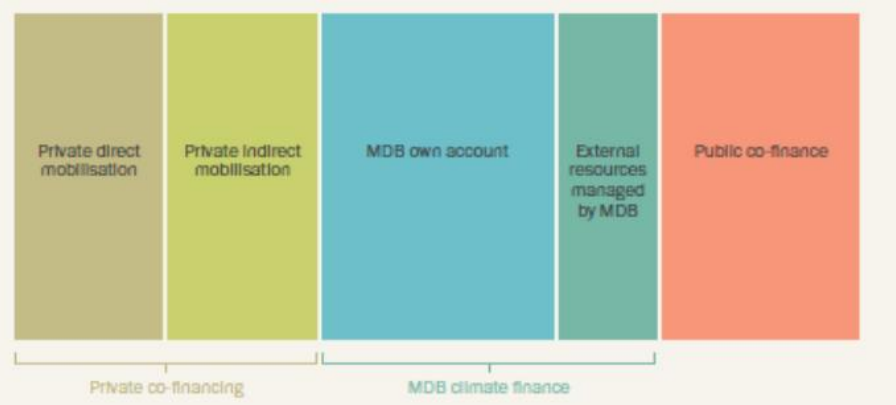
MDBs have been reporting on their own-account climate finance activities in joint reports since 2011. From 2015, the MDBs include estimates of "climate co-finance", i.e. the volume of financial resources invested by public and private external parties alongside MDBs for climate mitigation and adaptation activities (Figure 2).

In 2019, an estimated $102 billion (over 0.1% of GDP) were mobilized globally from *external sources*, of which $83 billion for mitigation and $19 billion for adaptation (the latter mostly

[8] The OECD approach is different in scope (MDBs and bilateral providers; no HICs), methodology (only direct mobilization) and definitions (e.g. of "private entities") (Benn et al. 2017, MDB 2018b).

in LICs and MICs). Public co-finance was estimated at $47 billion, of which $17 billion by international and $30 billion by domestic public institutions. Private capital co-finance flows amounted to $56 billion, of which $10 billion direct mobilization. The split by income groups shows private mobilization of $22 billion (less than 0.1%) for LICs and MICs combined, of which only $4 billion direct. No further breakdown figures for climate co-finance by income groups, regions or instruments are given.

*Figure 2: Segments of MDB climate activity finance*




Source: MDB (2020)

These figures compare to the MDBs' *own account* climate finance commitments of $62 billion, of which about three quarters for mitigation and one quarter for adaptation. Climate finance has grown over the years to 31% of total operations, with a range of 25%-39% across MDBs.[9] In terms of income groups, HICs received $20 billion, MICs & LICs $41 billion, and LDCs $7 billion. The overwhelming instrument was investment loans with a share of 72%, while other types (such as policy-based and result-based lending, grants, lines of credit, guarantees, equity, etc.) all played a much smaller role.

**In summary,** it is worth putting mobilization volumes into perspective. Some preliminary conclusion can be made from the information available:

- Private capital co-financing is overall small in comparison to GDP (0.2% for EMDEs) *Direct* mobilization is only roughly a third of total, and equates about 0.1% of GDP in MICs and 0.4% in LICs/LDCs.
- Investment requirements in EMDEs are an order of magnitude higher (over 20 times higher), especially for infrastructure, and to achieve climate goals and other SDG goals (see next chapter).
- Nearly half of mobilized capital goes into *infrastructure sectors* in MICs and LICs/LDCs (of which only roughly 5% in social infrastructure).

[9] Total MDB operations are $197 billion globally, i.e. about 0.2% of global GDP MDB (2020). Total subscribed capital of MDBs was about $1.2 trillion in 2016, paid-in capital under $100 billion (Engen and Prizzon 2018).

- The estimated $2-4 billion of direct co-finance for LIC/LDC looks small in absolute terms, especially taking into account the high population and the urgent development needs.
- Loans and guarantees are the dominant mobilization instruments especially in LICs/LDCs, while collective investment vehicles and equity stakes appear under-used.
- Climate-related private co-finance has risen to nearly a third of MDBs' mobilization activities. However, only $4 billion is mobilized directly for MICs and LICs combined.

## 2.2. Blended finance

"Blended finance" is becoming increasingly popular. There are various definitions, concepts and databases in this field. For the OECD, "blended finance is the strategic use of development finance for the mobilisation of additional finance towards sustainable development in developing countries" (OECD 2020b). This very wide - and disputed - definition includes concessional and non-concessional resources. It effectively corresponds to "private capital mobilization" as reported above (i.e. annual average of $29 billion).

Tighter definitions tend to have three key elements:

1. Additionality: catalyzing new sources of commercial capital
2. Concessionality: financing below market rates[10]
3. Impact: the intention of creating a measurable impact.

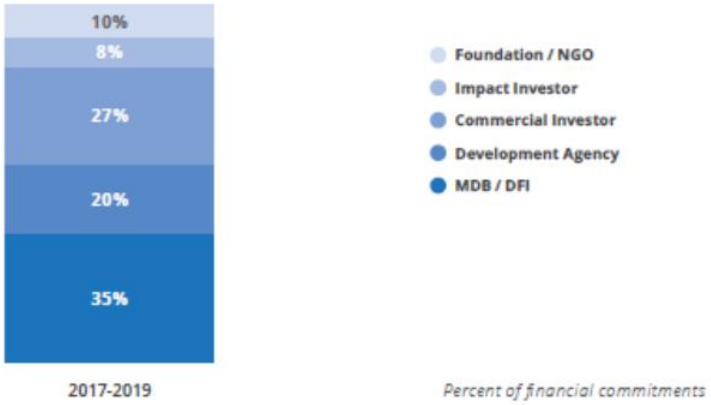
The global membership network for blended finance Convergence (2020), defines it as "the use of catalytic capital from public or philanthropic sources to increase private sector investment in sustainable development". Their database registered 600 blended finance transactions, representing $144 billion in aggregate financing. In the period 2014-2019, there were a consistent number of 45-50 annual transactions, averaging around $11 billion per year (these figures refer to total deal volumes, not just private money mobilized). In terms of country groups, 26% of transactions were targeted to LICs, 66% to LMICs, 24% to UMICs and 5% to HICs. Sub-Saharan Africa had a share of 43%.

The leading sectors in the Convergence survey are energy with 28% of transactions (80% of which in renewable energy) and 25% in financial services. Health (12%) and education (3%) played a smaller role in the past but have seen stronger fundraising in recent years, mainly via development impact bonds (DIB). In terms of instruments, funds were the most common blended finance vehicle with a share of 43% of transactions, followed by projects (23%), companies (17%), facilities (10%) and bonds/notes (8%). Commercial investors and impact

[10] Concessional financing is financing below market rates. "Concessionality can be achieved through one or a combination or the following: (i) interest rates below those available on the market; (ii) maturity, grace period, security, rank or back-weighted repayment profile that would not be accepted/extended by a commercial financial institution; and/or (iii) by providing financing to borrower/recipients not otherwise served by commercial financing." (DFI 2020) The degree of concessionality of a given instrument is measured by its "grant element". For instance, a loan offered at market terms has a grant element of 0%.

investors together provide more than third of financial commitments (Figure 3). Within the former, institutional investors (insurance companies, pension funds) have a small share of 8%, asset managers 11% and private equity/venture capital firms 8%.[11]

*Figure 3: Financial commitments by blended finance investors*




Source: Convergence (2020)

The MDBs and DFIs use a narrower definition of *"blended concessional finance"* (DFI 2020). It requires a third-party concessional element, which makes it a small subset of MDB/DFI private sector activities.[12] In 2019, DFIs financed such projects with a total volume of more than $10.4 billion (it was about $6 billion in 2018 and $8 billion in 2017). Private sector finance mobilized for these projects was $3.1 billion, concessional funds committed were $1.4 billion and DFI own-account investments in these projects $5.1 billion.

The most common concessional instrument used in DFI (2020) was senior debt (46%), followed by equity (19%) and risk sharing facilities/guarantees (16%). The predominant sectors were banking & finance (in many cases to support SMEs) and infrastructure (in many cases for climate projects). Concessional blended funds were used the most in lower-middle-income countries, and regionally in Sub-Saharan Africa and Europe & Central Asia.

**To conclude,** interest in "blended finance" has been growing in recent years. Scope, definitions and metrics vary widely. Blended finance vehicles are complex and require a patient, dedicated collaboration between the public and private side on key parameters such as returns, risks and development impact. Overall volumes are still very low, with estimates around $10 billion per annum, of which a quarter to a third mobilized from private/commercial sources.

[11] An OECD 2018 survey found $42 billion of blended facilities and $17 billion of funds. Pension funds only had blended finance investments of $0.9 billion, insurance companies $0.3 billion and commercial asset managers $0.5 billion (Basile and Dutra 2019).

[12] Definition of "blended concessional finance for private sector operations of DFIs": "Combining concessional finance from donors or third parties alongside DFIs' normal own account finance and/or commercial finance from other investors, to develop private sector markets, address the SDGs, and mobilize private resources."

Various facilities have been started over the years but it remains difficult to scale up volumes. There are encouraging examples of blended funds such as the Danish Climate Investment Fund, the Africa Infrastructure Fund (with the participation of pension funds) or several regional green funds. Overall, the involvement of asset owners is still meager.

## 2.3. Public capital multipliers

What is a public fund's or public scheme's ability to crowd in private capital? One way of conceptualizing this is a "public capital multiplier". It can be defined as the amount of private investment mobilized per unit of public capital deployed. Other terms used for such catalyzation effects are "leverage" or "mobilization ratio".[13] Note that such measures would not refer to the ability to operate a public fund efficiently, or to wider economic, social or environmental outcomes of its investments.

The concept of such a multiplier has been prominently used by the EU since 2012.[14] The idea is that EU budget funds, together with the financing capacity of the EIB, could be used to unlock private investment. The EU now operates with a projected total multiplier of 13.7 for the InvestEU plan (2021-2027), which is somewhat reduced from the 15 assumed for its predecessor EFSI "to focus on quality and additionality rather than volumes". Sub-multipliers vary according to financial instruments and other criteria (EIB 2018).[15]

In general, a public capital multiplier can be calculated at the fund level and at the project investment level. The combination of the two results in the total multiplier (Inderst 2016):

- fund (or investment vehicle) multiplier = total size of fund or facility / public capital
- investment multiplier = total project investment volume / fund size
- total multiplier = total investment volume / public capital.

Information on such multipliers is very limited. Only some institutions or funds use the public capital multiplier as an explicit measure of success and make it part of public

[13] A public capital multiplier should not be confused with other established concepts such as financial leverage (debt/equity), the classic (Keynesian) investment multiplier or the (economic) infrastructure investment multiplier. The latter measures the macroeconomic effects of an increase in infrastructure investment such as GDP, jobs or welfare. For example, IMF (2014) calculates an investment spending multiplier on output of 0.4 in the short term, and 1.4 in the medium term in advanced economies.

[14] The Europe 2020 Project Bond Initiative (PBCE) 2012 originally used an illustrative overall multiplier of 19. The European Fund for Strategic Investments (EFSI) 2014 assumed a multiplier effect of 1:15 as "a prudent average, based on historical experience from EU programmes and the EIB". InvestEU (2021-2027) has public guarantees of EUR 47.5 billion expected to mobilize at least EUR 650 billlion. It is worth noting that the European Court of Auditors (ECA) criticized the overstatement of the investment mobilized, questioning additionality, the multiplier achieved and its methodology, among others (ECA 2019).

[15] The methodology distinguishes multipliers along three dimensions: a) main window (including infrastructure) and SME window, b) internal (i.e. EU guarantee and EIB capital) and external multiplier, and c) equity and debt. For example, the projected external multiplier for crowding-in private capital is higher for equity investments at 15 than for senior debt at 3.

disclosure. MDB (2018a) mentions a multiplier of 8 to 12, "where it is possible to calculate a ratio of the investment catalyzed to the MDB investment". AfDB projects an ex ante multiplier of 13.3x for the "financial catalytic effect" of a specific project and instrument.

Several *green banks* report multiplier estimates in the range of 2 to 10 (Halland et al. 2021). There are also examples of *strategic investment/development funds* (SIF/SDF) with total multipliers in the range of 2 to 17. The EIB's GEEREF claims a multiplier of 50 or so via a fund-of-structure. In contrast, it is said that *multilateral climate funds* have only mobilized a limited share from private sources, implying a much smaller multiplier.

The Blended Finance Taskforce (2018) defines a "mobilization ratio" as the ratio of MDB co-financing (as reported above) and MDB own account resources. It is 0.2 for direct mobilization and 0.8 for total (direct and indirect) mobilization in 2016. The ratios would be higher (at 0.4 for direct and 1.5 for indirect) if calculated against the $40 billion segment of MDB private sector activities. In a modified approach, using more disaggregated OECD data, Attridge and Engen (2019) calculate a leverage ratio of 0.75 for MDBs/DFIs in developing countries, and an even lower one of 0.37 for LICs. The conclusions are similar: MDBs/DFIs need to increase mobilization ratios significantly.

For dedicated *blended finance* vehicles, reported and estimated multipliers tend to be higher, although with very wide ranges. The Blended Finance Taskforce (2018) finds that they typically mobilize $3 of commercial finance for every $1 of concessional capital. However, the figures for *blended concessional DFI finance* suggest lower ratios around 1.

Caveats apply in terms of definition, additionality, projections and expectations.[16] It would also be important to broaden the analysis to the full spectrum of national development banks (NDB). About 250 such institutions are estimated worldwide with combined assets of $5 trillion, i.e. three or four times more than MDBs. The China Development Bank and the Brazil's BNDES are the largest of them in EMDEs (Studart and Gallagher 2016).

**In conclusion,** there are various concepts and measures of "public capital multipliers", "mobilization ratios" or "leverage" which are not being used consistently. Multipliers vary widely across institutions, funds and facilities. MDBs/DFIs are urged to increase mobilization ratios significantly from "too low" levels. Such metrics need to be developed further, considering also different instruments, the riskiness of projects, sectors and countries as well as different types of investors.

[16] Definitions: For example, the external capital may come from other (domestic or international) public institutions, instead of the private sector. Additionality: Private investment in a company/project may occur independently of public participation, particularly when the expected financial returns are attractive. Projection: Multipliers may refer to expected rather than actual investment volumes. Expectations: Multipliers can generate mechanistic – and perhaps unrealistic - extrapolations.

## 2.4. Key issues in private capital mobilization

Much has been said about what MDBs and DFIs should do more or should do better (e.g. CEPA 2015, World Bank 2015, Lee 2017, Arezki et al. 2017, G20 2018, Gabor 2018, Humphrey 2018, and many others). Some recommendations re-emphasize the MDBs' "original" public sector role for development. Others circle around – often already existing - policies such as:

- expanding securitization
- particular capital market instruments or some sort of financial engineering
- guarantees, insurance, credit enhancement, hedging or other risk mitigation
- MDB mega-funds, investor platforms and other collaborative models.

Some of the language used in this context can sound somewhat patronizing, possibly revealing a certain lack of understanding of the private sector. There are many questions – conceptual and empirical – around private capital mobilization and catalyzation by MDBs. Here are some fundamental issues:

*Crowding-in or crowding-out*
A complete analysis would also need to take into account crowding-out effects. Commercial banks frequently complain about strong competition (if not unfair under-bidding) from public banks when it comes to attractive projects.

*Counter-cyclicality*
In bad times, private sector financiers tend to reduce the riskiness of their portfolios. This often leads to calls for higher MDB involvement even in sectors and projects previously financed by the private sector. In good times, MDBs may be less welcome.

*Incentives*
Private operators query where the incentives lie at MDBs to facilitate the private sector. Are sufficient projects - post successful development - being passed on to the private sector, e.g. via attractive securitization of loans? Is MDBs' own governance geared up for it?

*Guarantees*
Private investors will always ask governments for all sorts of guarantees and insurances against the various risks, including construction, demand, macro and political risks. However, guarantees are expensive, and there are volume limits for any MDB. How can the MDBs' international experience be best used to find the appropriate risk-sharing structure for new projects? What are potential externalities (such as excessive debt)?

*Maximizing versus optimizing*
MDBs have (different) policy objectives. It is often less clear whether the facilitation of private capital investment is a separate objective or an instrument to achieve the main

objectives. For example, the EU EFSI had a strong maximizing element, driven by the massive (cyclical and structural) shortage of public finance for investment in the EU. The WBG's *cascade approach* is an attempt to maximize finance for development. This may not necessarily lead to optimal outcomes which implies to trade-off situations (Cordella 2018). Furthermore, it needs to be defined what exactly should be "optimized" - which leads to important questions in welfare economics.

*Effectiveness*

Defining and assessing the success of mobilization efforts, including also qualitative factors, is at an early stage. EMDEs have large untapped potential (50-80%) to crowd in private capital, as a recent independent evaluation by the World Bank (2020) highlighted. It also showed the relevance of domestic investor involvement.[17] Broccolini et al. (2019) found evidence of significant positive mobilization effects of multilateral lending on deals, although less effective in less developed countries. More granular analysis would be useful.

*Development impact*

MDBs use certain development impact metrics for their own operations. Such metrics are new to most private sector investors. Public institutions and private investors could work on finding a common language in this field. It is crucial that DFIs, investors and non-governmental organizations (NGO) do not to get stuck in their own jargon.

*Debt impact*

Furthermore, are unintended consequences and externalities considered? For example, there are also questions arising around the sustainability of government and external debt levels. The debt dynamics of developing countries may lead to dependency from DFIs or "new colonialists". This issue has become more virulent since 2020.

## 3. Investment needs and gaps

How big is the demand for investment finance in the developing world? There are various estimates for infrastructure, climate change and SDG investment requirements and gaps, following the pioneering work at the OECD and World Bank in the early 2000s.

According to McKinsey (2016), from 2016 through 2030, the world needs $3.3 trillion annually (3.8% of GDP) for economic infrastructure just to support expected rates of growth. Emerging economies account for some 60% of that need. On current investment levels, there is an investment gap of $350 billion (0.4% of GDP) a year. The size of the gap

[17] "Projects with domestic investor participation had greater success (80 percent) than those with overseas investors only (60 percent) … Domestic investor participation improved project outcomes because domestic investors engaged actively in project design and implementation, bringing knowledge of the local market and regulations." (World Bank 2020)

triples if SDG goals are taken into account. Calculations by the GIH (2017) resulted in global infrastructure investment requirements of $94 trillion (3.5% of GDP) between 2016 and 2040. The investment gap would be about 0.6% of GDP under current trends, and 0.9% including SDG goals.

Developing countries needs for new infrastructure are particularly high. According to Bhattacharya et al. (2012), developing economies should have increased spending from the current $800 billion–$900 billion to about $1.8 trillion–$2.3 trillion per year by 2020 to keep pace with the demands of rapid urbanization and economic growth.

Using a new approach and new data, Rozenberg and Fay (2019) distinguish the needs for new capital investment and spending on maintenance of infrastructure for the period 2015-2030. In the core scenario, new investment needs are 4.5% of GDP and maintenance 2.7% of GDP, giving a total of 7.2% of GDP. The actual spending, as calculated by Fay et al. (2019), is about 4.1% in their central estimate, leaving a gap of 3.1% of GDP (Table 2).

*Table 2: Infrastructure investment in EMDEs*

| Region | Infrastructure investment | Infrastructure spending needs | Share of public spending |
|---|---|---|---|
| | central estimate | (capital + maintenance) preferred scenario | |
| | % of GDP | % of GDP | (in %) |
| East Asia and Pacific | 5.7 | 6.5 | 98 |
| South Asia | 4.4 | | 62 |
| Europe and Central Asia | 2.7 | 8.8 | 83 |
| Latin America and Caribbean | 2.4 | 4.3 | 75 |
| Middle East and North Africa | 4.8 | 8.2 | 94 |
| Sub-Saharan Africa | 2.5 | | 75 |
| LMIC average | 4.1 | 7.2 | 89 |

Source: Fay et al. (2019), Rozenberg and Fay (2019)

There are very large differences across regions both in terms of needs and actual spending. Latin America and Sub-Saharan Africa (SSA) invest the least. In terms of financing sources, public infrastructure spending dominates in EMDEs, especially in East Asia. The share of private capital is only about 11% on average, and it is above average in South Asia, SSA and Latin America.

Regional and country estimates can be more granular. As an interesting example, new ADB (2017) estimates doubled the projected infrastructure needs (including climate mitigation and adaptation) for Asia to $1.7 trillion per annum, i.e. 5.9% of GDP.

The estimation of investment needs to achieve wider SDG goals is less developed so far. UNCTAD (2014) undertook a comprehensive analysis of global investment needs in key SDG sectors over the period 2015-2030. It resulted in a midpoint estimate of about $6 trillion per

year, of which $3.9 trillion in developing countries. Current investment in EMDEs is around $1.4 trillion, implying an annual investment gap of between $2.5 trillion, i.e. 9% of GDP.

Breaking down the SDG investment needs, economic infrastructure in EMDEs adds up to about $2.5 trillion, and social infrastructure (health and education) to over $0.5 trillion. Climate change mitigation and adaption would need another $0.8 trillion, food security/agriculture $0.5 trillion and eco-systems $150 billion. UNCTAD also tried to estimate current levels of private sector participation in these SDG sectors. In relation to infrastructure in EMDEs, they range from a midpoint 60% in telecommunications, 45% in power, 35% in transport to 15-20% in social infrastructure and 10% in water/sanitation.

IMF (2019) provides an alternative estimate of additional spending required to meet the SDG agenda in 2030: $2.1 trillion for emerging market economies (4% of GDP) and $0.5 trillion for low-income developing countries (15% of GDP). Estimates for SDG investment gaps are rising as the COVID-19 crisis wears on. OECD (2020c) adds an additional $1 trillion for recovery spending in developing countries, and another $700 billion for the drop of external financing to developing countries in 2020.

It is important to note that there is a high degree of dispersion around such core estimates across regions, countries and sectors. Furthermore, these figures cannot capture how well the money is invested and do not reflect potential efficiency improvements in the use and construction of infrastructure. Finally, they would need to be complemented by other measures of economic outcomes and social/ecological impact (Inderst 2013).

**In conclusion,** new projections for economic infrastructure in EMDEs show annual investment requirements of 6-8% of GDP, leaving a spending gap of 3-3.5% of GDP. Investment in social infrastructure, and to achieve green targets require additional resources. Estimates for wider SDG investment gaps are substantially higher. The contribution of the private sector to infrastructure investment is significantly lower in emerging markets than in developed countries.

# 4. Supply of private capital for development

We now review some key elements of the supply of private capital in EMDEs. What is the size of capital markets in emerging economies? How relevant have private equity and debt funds become? How significant are public-private partnerships in infrastructure?

## 4.1. External sources of finance

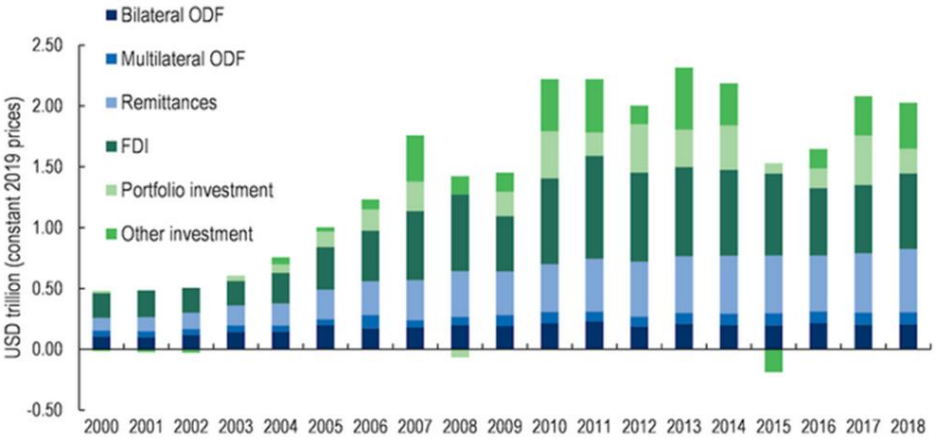
What is the size and potential of private sources of finance? Finance for development can be provided by public sources (domestic and international) private finance (domestic and international). “The most substantial development spending happens at the national level in

the form of public resources, while the largest potential is from private sector business, finance and investment." (MDB 2015, p. 1) Tax revenue is the primary source to fund public goods and services, provide social protection systems, and invest in public infrastructure. In 2017, total tax revenue in EMDEs amounted to $5.3 trillion, more than twice the sum of total external inflows (OECD 2020c).

External private sources of finance (remittances, foreign direct investment (FDI), portfolio and other investments) grew strongly in the first decade of the millennium but stagnated in the second decade around the level of $2 trillion (Figure 4).[18] In 2018, FDI (31%) and remittances (26%) accounted for more than half of this volume, followed by other investment (19%), ODF (15%) and portfolio investment (10%).[19] FDI was lower in 2018 than in 2013. Official development finance (ODF), however, was stable while remittances continued to increase before the coronavirus crisis.

On average for the five years 2013-2017, external finance equaled 6% of GDP in developing economies, of which FDI 2.3%, portfolio investments 1.1%, loans 0.5%, remittances 1.4% and ODA 0.6% of GDP (UNCTAD 2018).

*Figure 4: External finances to ODA-eligible countries*




Source: OECD (2020c)

Lower income countries are more dependent on external finance inflows. For the LDCs, ODF is the most significant source of external finance, followed by remittances. In contrast, debt-related flows and portfolio investments are highly volatile in EMDEs. The latter play an

[18] The DAC List of ODA Recipients shows all countries eligible to receive official development assistance (ODA). These consist of all LICs and MICs as published by the World Bank, with the exception of G8 and EU members. The list includes all of the Least Developed Countries (LDCs) as defined by the UN.

[19] Foreign direct investment (FDI) is defined as an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in another economy. The most important components of FDI are mergers and acquisitions (M&A) and (new) greenfield FDI projects. Portfolio investments are investments in financial assets (stocks and bonds) rather than in fixed capital.

insignificant role in LDCs where capital markets are less developed. Over the period 2013-2017, external finance equaled 12.4% of GDP in LDCs, of which FDI 2.6%, portfolio investments 0.1%, loans 1.8%, remittances 3.4% and ODA 4.5% of GDP.

FDI, portfolio investments, and to an extent also loans, contribute to the development of the productive capacity of the economy. Remittances predominately go into household consumption and ODA into direct budgetary support. Remittances and ODA do not generally create a liability for the recipient country, unlike foreign debt. FDI and portfolio equity require relatively high rates of returns. FDI returns have fallen in recent years in both developed and developing economies (UNCTAD 2018).

Focusing on FDI *greenfield projects*, fDi (2020) reports 15558 cross border transactions with a value of $796 billion worldwide in 2019 (of which, Africa/Middle East $115 billion, Latin America $108 billion, Asia Pacific $256 billion). There are various notions and estimates of "green FDI", ranging from $40 billion to $200 billion per annum (GreenInvest 2017).

FDI flows to economic *infrastructure* sectors in developing economies remain "consistently small" at about $40 billion per year, i.e. 0.1-0.2% of GDP (UNCTAD 2016). Roughly 40% of that goes to electricity/gas/water, 30% to transport/storage and 30% to information/communication. Social infrastructure and other SDG sectors attracted little FDI.

**Overall,** private external finance for EMDE was stagnating in the years before the pandemic, followed by a major setback of external private sources, including remittances, in 2020. FDI and remittances are the most substantial external source of finance in EMDEs. Portfolio investments are highly volatile and play an insignificant role in LDCs where capital markets are less developed, and where the contribution of official assistance remains crucial.

***The China model***

South-South cooperation is said to be growing but volumes are still comparatively low, with an estimated $26 billion in 2015 (UN 2018). Much of this is public money and includes regional initiatives. Of particular importance are China's activities in developing countries that have already grown to substantial levels. China has steadily expanded its role in FDI, infrastructure investment and development finance in many countries on all continents.

The "Chinese model" can be characterized in various ways, with an emphasis on government-level negotiations, turnkey projects and accompanying debt arrangements with Chinese public institutions/banks (e.g. CEPA 2015). Chinese companies (construction, industrial and services) are often backed by export credits (e.g. Exim Bank), China Development Bank, or other government-controlled banks (e.g. ICBC, Bank of China). New initiatives and international institutions have been established over the last decade:

- China's major global development project, the "Belt and Road Initiative" (BRI) was announced in 2013. The projected size is often reported as $1 trillion over an

unspecified period but other estimates go much higher (Hillman 2018). Actual investment volumes are unclear; estimates are in the low hundreds of billions so far.

- The $40 billion "Silk Road Fund", a development fund, started in 2014.
- The China-led Asian Infrastructure Investment Bank (AIIB) was formed in 2016. It has now committed capital of $100 billion and over 100 member states (notably USA and Japan are not members). As at end 2019, 63 projects with a total volume of $12 billion had been approved, and private capital of $1.9 billion mobilized.
- The BRICS countries' New Development Bank (NDB) was established in 2015 with a subscribed capital of $50 billion. At the end of 2019, it had built a lending volume of $15 billion, and approved 51 infrastructure and sustainable development projects.

Instead of pursuing PPPs or collaborations with Western investors, an alternative route is now available for EMDEs (but also cash-strapped developed countries). For example, China sourced 15% of infrastructure finance in Africa between 2012 and 2016, twice as much as the private sector (AfDB 2018). China has become the largest source (i.e. roughly half) of loans to governments of low-income countries with high debt levels, according to Callan et al. (2019). However, other bilateral institutions and MDBs, led by the WBG, are also substantial creditors while commercial lenders have a share of less than 10%.

China impressive actions have already changed the infrastructure landscape in EMDEs, including Pakistan, Venezuela, Angola and many others. However, criticism has grown against China's lending policies that may generate excessive debt burden for countries in all regions, including Europe, frequently leading to debt renegotiations. Also, there has been a political backlash against China-led projects and other involvements in places like Malaysia, Sri Lanka, the Maldives and elsewhere, fearing a loss of independence.

"The elephant in the room" in the mobilization debate is China. It will be important to integrate China's activities and institutions to get a full picture of the development finance and private capital mobilization. Interestingly, both the AIIB and the NDB put co-investments with private investors and sovereign wealth funds (SWF) high on the agenda.[20]

## 4.2. Emerging capital markets

As a next step, we look at the size and structure of EMDE capital markets. For *listed equities*, the market capitalization of the MSCI emerging market index with 1380 constituents is about $8 trillion at the end of 2020. The MSCI frontier markets index amounts to $174 billion. All these EMDE markets add up to about 14% of the total market capitalization of global (large and small) equities of $59 trillion (MSCI 2021).

[20] AAIB's "long-term aim is to position itself as a 'go-to' institution for providing infrastructure financing solutions in and to client countries. Our vision is that: The Bank will be the champion and leading institution to catalyze private capital for infrastructure investment in the region …" (AIIB 2018)

However, there is a high degree of concentration in major emerging markets. The top 5 countries (now led by China with 40%, South Korea, Taiwan, India and Brazil) constitute over three quarters of the MSCI emerging markets index. Similarly, the Philippines, Vietnam, Peru, Colombia and Morocco dominate the frontier index.

Moving on to *bonds*, as at end of 2019, the global bond market reached a size of $118 trillion (Dehn 2020). Nearly half are government bonds. The corporate bonds market consists of $45 trillion of bonds issued by financial sector corporates and $17 trillion issued by non-financial corporates (Table 3). The emerging markets (EM) fixed income universe of $30 trillion includes $13 trillion of government bonds and $17 trillion of corporate bonds, of which $11 trillion of securities issued by financial corporates and $6 trillion issued by non-financial corporates. 82% of the EM fixed income universe is now in local currency.

*Table 3: Regional distribution of emerging markets bonds (as of end 2019)*

| Region | Government bonds | | | | Corporate bonds | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Local | | External | | Local | | External | | | |
| | USD trn | Share (%) | USD trn | Share (%) | USD trn | Share (%) | USD trn | Share (%) | USD trn | Share (%) |
| Asia and Pacific | 8.1 | 70% | 0.2 | 13% | 10.9 | 87% | 1.7 | 41% | 20.8 | 70% |
| *o/w China* | *5.4* | *47%* | *0.0* | *2%* | *8.8* | *70%* | *1.2* | *28%* | *15.4* | *52%* |
| *Asia ex-China* | *2.7* | *23%* | *0.2* | *11%* | *2.1* | *17%* | *0.5* | *12%* | *5.5* | *18%* |
| Latin America and Caribbean | 2.2 | 19% | 0.5 | 33% | 1.0 | 8% | 1.4 | 33% | 5.0 | 17% |
| Eastern Europe and former Soviet Union | 0.8 | 7% | 0.5 | 35% | 0.2 | 2% | 0.8 | 19% | 2.2 | 7% |
| Middle East and Africa | 0.6 | 5% | 0.3 | 19% | 0.5 | 4% | 0.3 | 8% | 1.6 | 5% |
| All Emerging Markets | 11.6 | 100% | 1.4 | 100% | 12.5 | 100% | 4.1 | 100% | 29.6 | 100% |

Source: Ashmore, BIS, IMF. Data as at end 2019.

Source: Dehn (2020)

There are large regional differences across EM in terms of size and composition of bond markets. Asia dominates the EM fixed income world. China stands out as the largest fixed income market in EM by some margin, although it has only recently been accepted in main global bond indices such as JP Morgan or FTSE. It is important to note that a large part of the universe is of low liquidity or not easily investable. Lazard (2017) estimates the volume of liquid emerging bond markets at $6 trillion, i.e. about 10% of the $56 trillion (liquid) world bond market as captured by mainstream bond indices.

Default rates are higher in emerging markets but credit quality converged somewhat over time (Moody's 2019). Revenue-resilient infrastructure and regulated electric and gas power securities in EMDEs experienced relatively low default rates. However, the picture deteriorated in the course of 2020-2021.

Emerging capital markets include a range of *infrastructure* companies, e.g. shares or bonds of large quoted energy, utility and telecommunications companies that may have been (partly or fully) privatized, especially in Latin America. They play already a significant role in

local indices as well as in portfolios of both national and international investors. Their investment activities on the ground are often overlooked.

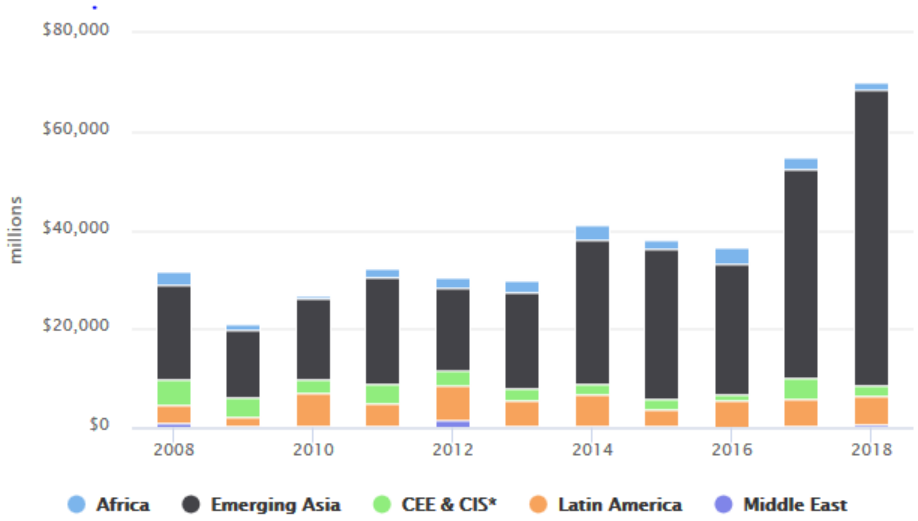
**Summing up,** capital markets in emerging markets have been growing over the years, resulting in an index weighting of about 14% for equities and 25% for bonds. However, there is a high degree of concentration of capital in the most advanced emerging markets, even more so with the growing inclusion of Chinese securities in major equity and debt indices.

### 4.3. Private equity, debt and infrastructure funds

Unlisted or private investments have become increasingly popular with investors since the 1980s. Such investments are predominately made through private equity funds. More recently, private debt funds and dedicated infrastructure funds have also been growing.

EMPEA (2019) reports emerging markets fundraising for private/unlisted funds (i.e. private equity, private credit, private infrastructure, real assets funds) of $90 billion and investment of $70 billion in 2018 (0.2% of GDP). Emerging markets captured 23% of global fundraising and 11% of investment volumes. The majority goes to China, India and other Asia; Africa had annual investments of around $2 billion, i.e. less than 0.1% of GDP (Figure 5).

*Figure 5: Emerging markets investment of private funds by region*




Source: EMPEA (2019)

According to Preqin (2018), emerging market-focused *private equity* funds had total assets under management of about $900 billion, with a dry powder of about $275 billion in 2018. Such vehicles raised about $100 billion p.a. in recent years. However, capital goes overwhelmingly to emerging Asia while Africa only receives a very small fraction. The annual deal volume of buyout funds in Africa has ranged from $1 - $5 billion in recent years (i.e. around 0.1% of GDP); for venture capital funds it has been less than $500 million per year.

*Private debt* funds grew strongly to a volume of about $800 billion worldwide in 2019, according to Preqin. Only a small proportion of funds (roughly 10%) targeted Asia and the rest of the World in the past. Investor intention surveys usually point to a rising interest in emerging markets private debt for the future.

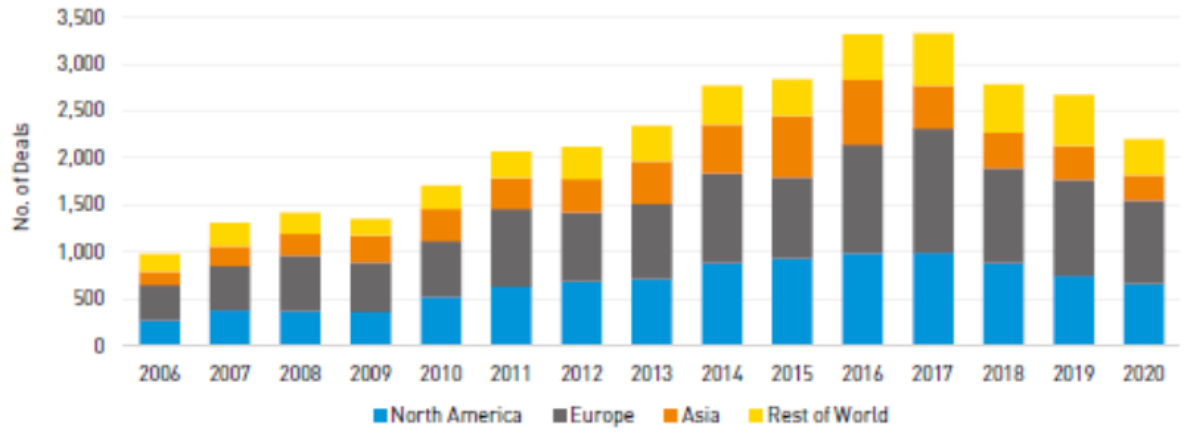
Dedicated *infrastructure funds* became popular in the 1990s in Australia and in the mid-2000s in Canada and Europe. They vary in terms of vehicles (closed-end and open-ended), sectors, geography, types of projects (e.g. greenfield, brownfield, secondary market), arrangement (regulated, contracted, merchant), and other criteria.

Unlisted/private infrastructure assets under management have grown to over $600 billion globally (Preqin 2021). Annual fundraising averaged about $100 billion over the last three years. Most infrastructure funds keep a main focus on equity in developed markets. However, infrastructure debt funds have gained in popularity and have reached a share of 13% in infrastructure assets under management. Roughly 40% of capital committed to infrastructure is "dry powder" waiting to be invested.

Some global infrastructure funds have a small exposure also to EMDEs. In addition, there are specialist emerging markets funds, including global, regional and country funds. For example, about $5 billion of infrastructure assets are run by fund managers in India. In Africa, only 24 funds have closed over the last 10 years, raising around $5 billion of capital.

About 2000-3000 deals made annually by infrastructure funds are reported before 2020, with a deal volume of $400-500 billion, i.e. about 0.5% of global GDP (Figure 6). Interestingly, most of the capital flows to renewable energy, followed by transport, other energy, utilities and telecom. About 70% of deals are in Europe and North America. For Africa, e.g., the annual deal value is estimated at around $15 billion in recent years on average. The bulk of deals are in solar, wind, hydro, other energy and utilities (Preqin 2016).

*Figure 6: Infrastructure deals by region, 2006 - 2020*




Source: Preqin (2021)

**In conclusion,** private investments, especially private equity funds, have a certain presence in emerging markets, although rather concentrated in a small number of countries. Private debt has been growing strongly in recent years, as have dedicated infrastructure funds, driven in particular by renewable energy. However, overall deal volumes are still limited in EMDEs, especially outside Asia. High levels of "dry powder" indicate the potential for a much wider deal activity in future – possibly also in developing countries.

## 4.4. Public-private partnerships

How significant is the private sector in financing infrastructure projects in EMDEs, and what is the involvement of institutional investors? Infrastructure development in emerging countries is dominated by the public sector, with over 80% of project sponsored by the public sector or via state-owned entities (SOE), according to World Bank (2019).

The World Bank's PPIAF has taken a measure of the private participation in infrastructure (PPI) investment in LICs and MICs since 1984. It records around 400 projects annually with a volume of about $100 billion over the last seven years (PPIAF 2020). This is about 0.3% of GDP.[21] PPI investment in IDA countries in 2019 was only $8.7 billion (0.4% of GDP).[22] Using different data sources, GIH (2020) found $106 billion private infrastructure investment globally, of which $15 billion in HMICs, $9 billion in LMICs and $0.1 billion in LICs.

Following the PPIAF figures, the regional distribution has shifted quite considerably over the years, with East Asia Pacific becoming the strongest region. China, Brazil, India, Vietnam and Russia lead the country ranking. China's private investment commitments surpassed $10 billion for the first time in 2016 and peaked at $33 billion in 2018. About three quarters are concentrated in the transport sector.

Most international project sponsors were from high-income countries with the exception of China, with a volume of $10 billion in 2019.[23] In terms of sectors, transport (especially roads) and energy (predominately renewable) are the largest sectors, whereas information and communications technology (ICT), water/sewerage and solid waste are comparatively small. Outside telecoms, there is little "pure" private provision (without public sector involvement) of infrastructure in EMDEs.

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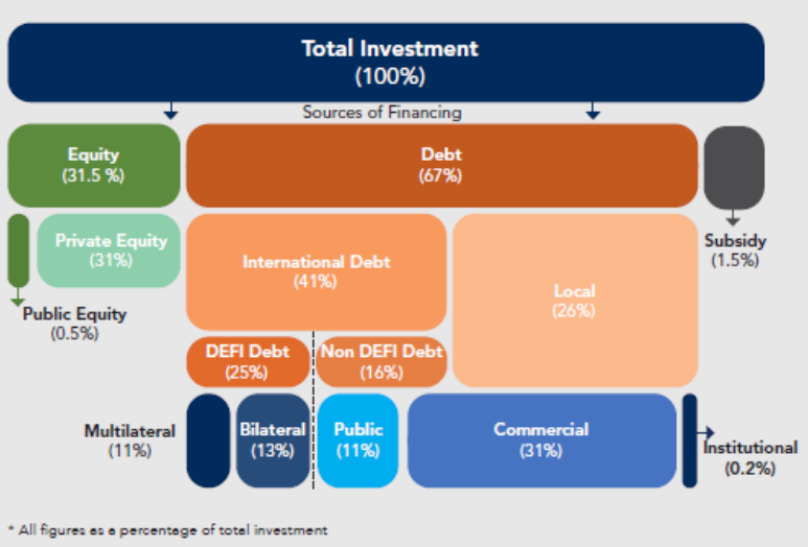
[21] The database classifies private infrastructure projects into four categories: management/lease contracts, greenfield projects, brownfield, and divestitures (privatizations). Projects have "private participation" if a private company or investor is at least partially responsible for the operating costs and associated risks. Tracked projects have over 20% private equity or in the case of divestitures, over 5% private equity.

[22] IDA countries are countries that are eligible for support from the International Development Association, the part of the World Bank that helps the world's poorest countries. 74 countries are on the list as of February 2021 with a GDP of about $2.3 trillion.

[23] China's role as a sponsor of infrastructure projects abroad was noteworthy in 2019. For example, the largest electricity transmission project (Pakistan), port project (Nigeria), and railway project (Laos) were sponsored by Chinese entities in 2019.

Interesting information is available on the financing mix of a subset of investment commitments (i.e. $50 billion, but none for the 142 projects in China). Approximately 13% of finance came from public sources, 25% from DFIs (of which 11% from MDBs), and 62% from private sources. Figure 7 shows a breakdown by equity and debt with respective sources. Of the $16 billion equity provided in 2019 in total, financing mostly came from the private sector (98%). Of the $33 billion debt, less than half came from commercial sources, and only 0.2% came from institutional investors. However, there are wide differences across countries. 2020 has seen a considerable dip in PPI activity worldwide.

*Figure 7: Source of financing for PPI projects in EMDEs in 2019*




Source: PPIAF (2020)

To what extent are institutional investors involved in PPIs? In the period from 2011 to H1 2017, only 41 projects received contributions from 25 different institutional investors, mostly in the form of equity (World Bank 2018a). The core interest was in 26 renewable energy projects, of which 13 wind farms in South Africa and Brazil. Seven projects were in IDA countries. Simple conclusion, the contribution of institutional investment is minuscule at only 0.7% of the global PPI investment (comprising 0.4% of debt and 1.3% of equity).

Public private partnerships (PPP or P3) have been introduced also in emerging markets as an alternative to spending by governments or privatizing infrastructure companies. Some countries (e.g. India, China, Turkey, several Latin America states) have seen considerable activity over certain periods. However, the overall volume is still very low (about 0.1% of GDP globally), and many developing countries make very little or no use of PPPs.

PPPs are particularly delicate risk-sharing mechanisms, requiring a stable legal and institutional framework. Opinions over their usefulness differ widely even in developed countries. The demise of the private finance initiative (PFI) in the UK – long deemed a successful prototype for other countries – is an instructive example. There are successful

examples in EMDEs but, following the earlier analysis, it is difficult to see PPPs as a major contributor to developing and infrastructure finance also in future.

**Overall,** before the coronavirus pandemic, infrastructure projects with private participation amounted to roughly $100 billion (0.3% of GDP) in EMDEs. Poorer countries received less than $10 billion. The main private sector sources are commercial lending and private equity. Only a few EMDE countries have substantial PPP arrangements. The institutional investor involvement is still miniscule – this after a decade of extensive talks on the subject.

## 5. Institutional investment in emerging markets

Institutional investors are facing growing calls from various sides for stronger engagement in infrastructure investment, climate finance, SDG-related investments and other development finance. The general understanding of their actions and potential has improved over the years. Nonetheless, there is still a necessity to stress some key features.

***Growing asset volumes***

Financial assets are estimated at $379 trillion globally, of which $190 trillion controlled by institutional investors, $148 trillion by commercial and investment banks, $30 trillion by central banks and $17 trillion by other public financial institutions (OECD 2020c). 81% of assets are held in developed countries, 15% in China and only 4% in other ODA countries. The EMDE asset base is also small compared to the size of the economy. For example, pension funds' assets amount to less than 20% of GDP in developing countries, insurance companies less than 15%. This compares to nearly 45% and 40% respectively in HICs.

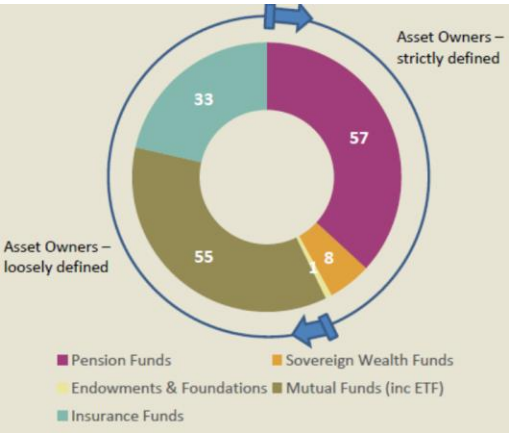
In a somewhat different database, institutional assets have grown to $154 trillion (Willis Towers Watson 2021). This includes asset owners (such as pension funds, SWFs, foundations) as well as asset managers (investment and insurance funds) (Figure 8). About 10% of institutional assets are in EMDEs, of which only 1% in Africa (although growing fast).

Looking closer at assets under professional management, a rise to $89 trillion globally in 2019 is noted, up from $31 trillion in 2003 (BCG 2020a). 21% are passively managed and 16% are alternative assets. The three largest alternative subsectors are private/unlisted equity, real estate, and hedge funds. Smaller subsectors include private debt, commodities, infrastructure (volume of about $700 billion), land/timber/forestry, and others. Emerging regions accounted for 16% ($7.3 billion in China, $3.9 billion in Asia/Pacific (ex China, Japan, Australia), $1.9 billion in Latin America and $1.4 billion in Middle East and Africa).

Personal financial wealth (including pensions and life insurance) amounted to $226 trillion globally in 2019, according to BCG (2020b). The share of "growth markets" (i.e. outside Japan, North America, Oceania and Western Europe) has risen to 25% in 2019 from 9% in 1999 (Asia ex Japan held $42 trillion, Latin America $6 trillion, Eastern Europe/Central Asia

$4 trillion, Middle East $4 trillion and Africa $2 trillion). Pro capita wealth is lowest in Africa with about $3000 against the global average of $40000.

*Figure 8: Institutional assets*




Source: Willis Towers Watson (2021)

***Varying investment objectives***

Institutional investors are not a homogeneous group. There are substantial differences not only in terms of their type and geography but in terms of objectives, strategies, governance, regulation, fiduciary duties and investment culture. Liquidity requirements vary widely, as so does the availability of funds with long tenors. Financing development is typically not a primary objective, but here are some important points relevant in that respect:

- Fiduciaries: Asset owners usually have fiduciary duties, while asset managers are being paid for maximizing financial returns.
- *Pension funds'* primary objective is to pay pensions according to laws and rules. The exact combination of return requirements, risk tolerance, time horizons etc. differ substantially across plans and countries, depending, among others, on the liability profile of members and the regulatory framework.
- As an important example, there has been a shift from defined benefit (DB) to defined contribution (DC) pension systems. DC assets now constitute over half of pension assets in the large markets, up from a third 20 years ago. Many developing countries are going down the DC route as well, especially in Eastern Europe or Latin America (Garcia-Kilroy and Rudolph 2017). There are liquidity risks as well as member switching and cost issues that can be detrimental to longer-term investment strategies in DC.
- *Insurance companies* tend to be under tight solvency regulation. This often implies conservative investment strategies, leaving little room for alternative assets or sub-investment grade debt.
- There are various categories of *sovereign wealth funds (SWF*) with very different objectives (e.g. reserve, stabilization or strategic investment funds). They may provide capital for financial, strategic political or development motives.

***Current investment trends***

Consequently, the asset allocation of institutional investors varies enormously, i.e. the allocation to listed (or public) equities, bonds, cash/money market and less liquid alternative assets. In recent years, various investment trends have been evolving in parallel:

- international investment, especially in emerging markets
- passive investment style (following established investment indices)
- factor investing (exploiting risk factors that drive equity returns such as value or size)
- "real assets" such as real estate, infrastructure, forestry (Binkley et al. 2020)
- liability-driven investment (to match longer-term pensions/insurance liabilities)
- long-term investing
- sustainable investment (green, climate, social investing)
- impact and SDG investing
- dis-intermediation, direct investing in assets and projects
- collaborative investment models (syndication, JVs, direct co-investment platforms etc.).

For example, the share of alternative assets has grown from 7% to 26% of pension fund portfolios over the last 20 years at the expense of domestic equities and bonds (Willis Towers Watson 2021). Driving forces include changing market conditions (especially low interest rates), competitive/client/public pressures and new academic/industry research. Of particular relevance here are long-term, impact investing as well as real, unlisted assets.

***Asset allocation to emerging markets***

Institutional investors have actually increased their allocations to emerging markets since the 1990s. The first moves were typically in listed equities, followed by sovereign and corporate bonds in major currencies and then in local denominations. More investors appreciate the potential of EMDEs, including a wider investment opportunity set, higher longer-term growth potential and broader diversification.

As an example, Mercer (2020) reports that 43% of European pension funds have an asset allocation to emerging markets with an average weighting of 4%. Emerging debt has caught up strongly over the last decade with 28% of investors now involved with an average allocation of 5%. Nonetheless, international institutional investors still tend to be under-allocated to emerging markets, i.e. there is a structural potential for more.

## 5.1. Allocations to infrastructure

How much development finance can institutional investors be expected to provide? We take a closer look at infrastructure where their interest has been growing in recent years. Infrastructure's stylized investment characteristics (such as long-term, stable cash flows, downside resilience, low correlation to business cycles, partial inflation-hedge) look

attractive to investment boards (Inderst 2010). Low interest rates have been fueling the drive into real assets for more than a decade, primarily for lower-risk, brownfield assets in OECD markets.

Overall, unlisted/private infrastructure assets still constitute only 1-2% of institutional portfolios, even when including direct investments. OECD figures show an average allocation of just over 1% for large pension funds worldwide (OECD 2019). Allocations well above average of 7-10% were achieved by three Australian, four Canadian and one British pension fund. Few investors report actual greenfield investments (with construction risks) although more funds to move in that direction in future.

Furthermore, there is an enormous dispersion: While some investors, especially in Australia and Canada have shifted asset allocations targets to over 10%, a majority of smaller ones is still out of unlisted infrastructure. As an example, only 10% of European pension funds invest in unlisted infrastructure (we can assume almost all in developed markets) with an average asset allocation of 3%. 14% invest in listed infrastructure with an allocation of 3% (Mercer 2020).

An interesting case is the Australian superannuation system. It shows that it is not impossible to combine a DC system with substantial investments in less liquid, alternative and real assets, often using open-ended funds. It does require a stable consensus among the key partners (employers, members, politicians etc.) and strong plan governance (Inderst and Della Croce 2013).

A few investors have recently started to venture into developing countries, mostly via international or regional infrastructure funds. Overall, the exposure to infrastructure in emerging markets is still very low. For example, no large pension fund in the OECD survey reported infrastructure investments in Africa. With a few exceptions, very little investment was reported in Asia (ex Japan and Korea), Latin America and Eastern Europe.[24]

It is noteworthy that the majority of funds based in non-OECD countries do not invest in *unlisted* infrastructure equity at all, or only tiny amounts. There are some exceptions such as South Africa's public pension fund GEPF. Furthermore, SWFs (such as Singapore's Temasek) and SIFs (such as Senegal's Fonsis) have increased their exposure to international and domestic infrastructure.

In future, domestic investors in developing economies will be under more scrutiny. The growth of institutional assets in EMDEs has not yet been followed by extensive domestic or

[24] The New Zealand Superannuation Fund, the Netherlands' ABP and PFZW, and the Quebec Pension Plan, reported exposure to infrastructure in emerging Asian countries. Three Canadian funds (CPPIB, AIMCo, and LAPP), reported noteworthy allocations in Latin America. CPPIB maintains global offices, including in São Paulo, Mumbai, and Hong Kong. Other funds with EMDE holdings include Sweden's AP1, the UK BBC Pension Scheme, and the Canadian OMERS and OTPP (outside the OUECD survey).

regional infrastructure, climate or other SDG-related investments. Even in Asia, bank loans dominate private infrastructure finance, while the asset allocation to infrastructure by domestic investors is overall still very low (Inderst 2018).

***Institutional investor potential***

Why are private investors reluctant to get more involved in development finance? The expectations on institutional investment to close the infrastructure gaps are often overplayed. Inderst and Stewart (2014) provide a discussion of the potential contribution of international and domestic institutional investment to infrastructure in EMDEs. On a very rough estimate, a substantial asset allocation shift from 1% to 3% or 5% over ten years could provide potential annual investment flows of $30-60 billion. This would be about 0.1-0.2% of GDP of low-income and lower-middle-income countries. This could certainly help fill the EMDE infrastructure financing gap though not sufficient to solve the problem alone. Four "leadership models" are presented of how international and domestic institutions can spearhead investments in EMDEs with appropriate funds, bonds or other instruments:

- the leading public pension reserve fund / social security fund
- the innovative private-sector investor
- the new capital market instrument
- the regional fund model.

**To conclude,** institutional assets have been growing to over $150 trillion. Institutional investors' objectives and asset allocations vary widely. International investors still tend to be under-allocated to developing economies in general. They have strongly increased "alternative assets", including an average 1-2% of assets in unlisted/private infrastructure investments. However, the exposure to EMDE infrastructure is still extremely low. There is a potential for more over time but expectations need to be realistic.

## 5.2. Barriers and challenges

The barriers for channeling private capital for development have been analyzed and reported on many occasions, and don't need to be repeated (e.g. OECD 2018, UN 2018, World Bank 2018b, Lee and Cardenas 2020). Macroeconomic, legal and regulatory risks feature high. Here we focus on institutional investors who still tend to be under-allocated to emerging markets. There are a number of reasons for that, including:

- *Home bias:* traditional investor preference for domestic or OECD markets.
- *Risk preference:* higher actual or perceived riskiness of emerging markets
- *Regulatory constraints*
- *Macro risks:* Many investors fear augmented risks in EMDEs, including political instability, legal uncertainty and poor governance.

- *Currency risk:* A main concern to international investors as hedging is difficult or expensive in developing markets.
- *Capacity and costs:* Smaller investors in particular struggle with own resource constraints as well as high costs in dealing with micro risks of projects in those markets.

International capital is notoriously fickle. Listed assets and currencies of EMDEs tend to be comparatively volatile. Private commitments need to be longer term, and are therefore less popular among investors with higher risk aversion and high liquidity requirements - this even more so in emerging markets.

***Regulatory constraints***

*Banking regulation*
Tighter bank regulations were introduced post financial crisis with various capital, liquidity and other requirements (Basel III and IV). This led banks to focus on recapitalizing their balance sheet, often reducing lending for risky projects and tenors over seven years or so. There may well be unintended consequences on development finance by financial regulation, also given that EMDEs rely heavily on bank loans and cross-border loans for infrastructure finance. However, FSB (2018) finds little hard evidence on this.

*Investor regulation*
Institutional investors in different constituencies are subject to more or less strict legal regimes. Three sets of regulation on the investor side can be very relevant for infrastructure investment: accounting, solvency and investment rules. In addition, there is also other regulation of asset owners and asset managers with side effects in this context (e.g. EU MIFID II; sectoral regulations).

Fair value IFRS accounting rules for financial institutions are seen as a potential obstacle to infrastructure investments, as they could induce de-risking and shorter-term investment behavior. Risk-based solvency rules for insurance companies and pension funds potentially also lead to pro-cyclical investment patterns. For example, in the European Solvency II regime for insurers, capital charges are higher for less liquid assets, and bonds with longer maturities and lower credit ratings. The EU has in the meantime introduced some “discounts” on capital requirements for lower risk infrastructure investments (project and corporate debt as well listed and unlisted equity).

The situation is mixed for pension funds given they are primarily subject to national regulation. Anglo-American pension systems typically follow the “prudent person principle”, and refrain from specific numeric investment prescriptions. Pension funds in many other countries face some sort of quantitative and/or qualitative investment restrictions.

OECD (2020d) gives an annual overview of constraints on unlisted/private equity and debt, credit ratings, direct investments, infrastructure funds, foreign currency and others. They

may affect different routes to infrastructure investments. In practice, they may be more binding in some countries (especially emerging markets) than in others. Such legal constraints may often have good justifications, such as the lack of transparency, the containment of excessive risks or liquidity requirements. However, regulators should review investment constraints in light of their effect on long-term performance and the economy.

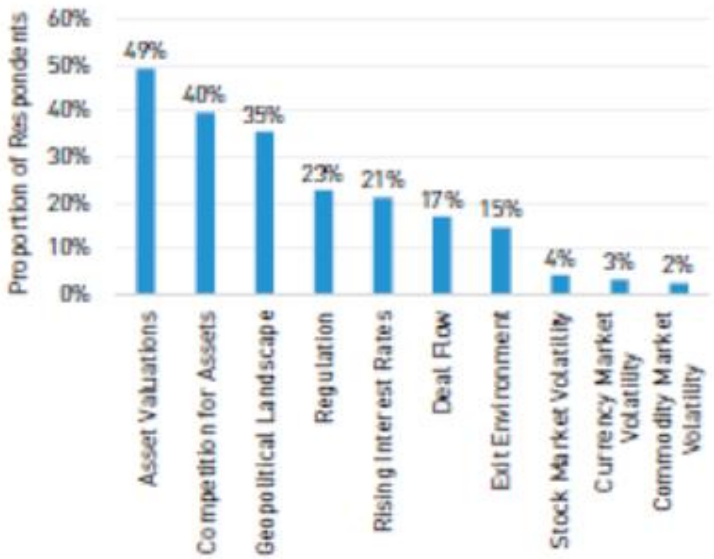
**In short,** investment constraints and solvency regulations in relation to certain assets (e.g. unlisted, less liquid) or markets (foreign, non-OECD) are still widespread. For other groups of investors, they tend to have only second-order effects on activities in EMDEs.

***Obstacles in infrastructure investment***

Issues and barriers for higher investor activity in infrastructure have been flagged in the past, not the least in G20 and MDB sessions. Many recommendations have been made been made over the years (e.g., IDFC 2014, Bhattacharya et al. 2016, WEF 2016, Gurara et al. 2017, Tyson 2018, OECD 2020e).

There are constraints on the supply side (e.g. lack of suitable projects, poor procurement processes, instable infrastructure policies), the demand side (e.g. investor resources, capability, size, portfolio concentration risk), as well as in the intermediation process and market structure (e.g. inappropriate investment vehicles, high fees, lack of secondary markets). Issues for investors change over time. Figure 9 provides a snapshot that confirms the current concerns over high prices, shortage of suitable assets and geopolitics.

*Figure 9: Key challenges for infrastructure investors*




Source: Preqin (2021)

Post financial crisis, governments one-by-one come out with grandiose new infrastructure plans, institutions and initiatives, not the least to “mobilize” institutional assets especially

for new, greenfield projects. Unfortunately, these efforts have not been very effective, at least so far. Here are some critical points:

- *Risk preference mismatch:* Most asset owners prefer lower-risk operating companies while most money is needed in higher risk greenfield projects. This even more so in emerging markets where some see infrastructure projects as "risk to the square".
- *Substituting bank lending:* Insurance companies, pension funds and debt funds have been getting more involved in private credit in developed markets. However, there is little evidence of substitution of bank lending in emerging markets.
- *Funding and financing:* The difference between *"financing" and "funding"* is often overlooked. Institutional investors can provide upfront capital to finance projects, this as long as this fits into their objectives. Ultimately, however, the funding revenue can only come from two sources: users/consumers or taxpayers. Credible funding models are what investors need most.
- *Investability:* Bankers, but also public officials, tend to be immersed in a "transaction culture" with the emphasis on the "bankability" of projects. In contrast, investors' key challenge is long-term "investability", i.e. managing assets over years and decades.

***Inherently political***

Investors are increasingly realizing that infrastructure investments are inherently political, whether they are regulated utilities, PPPs, or other contractual forms. This involves key political, legal and reputational risks. There is room for improvement for most governments in terms of turning infrastructure needs into investable projects.

Many proposals have been made with the help of international organizations as well as the private sector. One of them is "asset recycling' (i.e. privatization of operational assets, using proceeds for new, initially more risky projects). Another is "value capture", a mechanism for the public sector to regain some of the indirect benefits of building infrastructure.[25]

However, not many states are currently planning major waves of privatizations. Instead, in some places, the pendulum seems to be swinging back towards nationalizations/municipalization of water, railways, roads etc. Furthermore, several countries have started to protect "critical" or "strategic sectors" from foreigners, including seaports and airports, energy networks or digital/high tech infrastructure.

***Sustainability challenge***

Connected to this, investors need to rise to a new challenge: the quest for "sustainable" infrastructure. This looks not too difficult, given its natural connotation with social

[25] A project can generate value directly (e.g. ability to charge usage fees) and indirectly (e.g. land value increases in adjacent areas). Some (local) governments have started to capture a portion of this "unearned value" to help fund and finance current or future projects.

objectives (e.g. hospitals) or green objectives (e.g. public transport, clean energy, water & sewage systems, flood defenses). However, infrastructure projects are also notoriously prone to wasteful decisions, complex financial engineering, excessive bureaucracy and poor governance, if not corruption.

Infrastructure provides essential public services, implying a social function that goes beyond that of, e.g., a real estate development or a commercial company in fully competitive markets. Awareness of "green-washing" or "sustainability-washing" is rising. Consumers, shareholders and supervisors will insist on visible efficiency gains and service improvements - this even more so from private owners and operators of public infrastructure in EMDEs. Finally, the coronavirus crisis has highlighted the need for "resilient" infrastructure.

**To summarize,** the obstacles for higher institutional investments in EMDEs fall into three main categories: a) issues with investing in less developed markets in general, b) regulatory constraints, c) hurdles to investing in infrastructure and other less liquid assets. As a result, many much-needed infrastructure projects are effectively outside the spectrum of institutional investors, and will therefore remain in the public sector domain.

## 5.3. Sustainable, impact, SDG investing

Sustainable investment is gaining traction in mainstream financial markets. Institutional investors are increasingly asked to focus also on non-financial aspects and externalities of investments. Overwhelmingly, this means the integration of environmental, social and governance (ESG) factors in the usual investment management process (analysis, portfolio management, reporting etc.).

Other common terms in this context include responsible investing (RI) and socially responsible investing (SRI). There are related investment strategies with a somewhat different focus (such as long-term investing, universal ownership), or strategies that concentrate on a particular aspect of ESG (such as green, climate change, social, ethical, religious, Sukuk investing).

The primary focus is still on the financial return while managing ESG-related "risks", including the "resilience" of assets at times of ecological and/or social crises. Increasingly, investors stress also the new opportunities arising, e.g. in climate or social investing. "Impact investing", coined in 2007, aims to generate a measurable, beneficial social or environmental result alongside a financial (market or below-market) return. The newly developing "SDG investing" takes considerations of issues beyond traditional ESG.

***ESG assets***

Sustainable investments grew strongly in recent years to $31 trillion globally, according to the GSIA (2019). This equates to around a third of "professionally managed" assets globally.

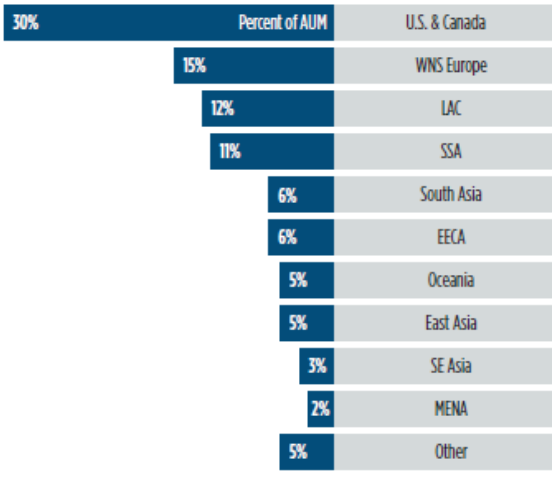
Approximately three-quarters of these assets are held by institutional and one-quarter by retail investors. ESG assets managed in emerging markets are still small.[26] The UN Principles of Responsible Investment (PRI), launched in 2006, had over 3000 signatories with assets over $100 trillion globally in 2020 (PRI 2020). They include over 500 asset owners (with assets of $24 trillion) as well as fund managers, consultants and other organizations. 12% of signatories are headquartered in emerging markets.

***Impact investing***

Interest in impact investing has been growing in recent times. There are different approaches. The early developments were more in the way of "community investing", i.e. investments by specialist funds to help fund smaller social or environmental projects in municipalities/regions. As a new development, there are attempts to "mainstream" impact investing. More investors wish to measure the "impact" of their portfolios, listing some sort of beneficial non-financial outcome, even if they not mandated to give up financial return.

Impact investing covers all asset classes, including equity, fixed income, real estate, private equity and debt, and infrastructure. The estimated investment volumes very much depend on the (narrow or wider) definition of "impact investing" used. GIIN (2020) estimates the size of the global impact market at $715 billion from 1729 organizations at the end of 2019. The largest groups are asset managers (54% of assets) and DFIs (30%). About 20% of impact investors are based in emerging markets (5% in Sub-Saharan Africa, 4% are in Latin America, 3% in each of East, South East and South Asia, 2% in other developing regions).

*Figure 10: Impact asset allocations by geography of investment*




Source: GIIN (2020)

[26] In terms of regions, Europe leads with about $14.1 trillion, followed by North America ($13.7 trillion), Japan ($2.2 trillion) Australia/New Zealand ($0.7 trillion). GSIA tracks professionally managed funds that use responsible investing criteria. This includes ESG integration, positive and negative screening, corporate engagement/shareholder activism, norm-based investing and impact investment ($444 billion).

A more detailed survey analyzed 294 respondent companies managing $404 billion of impact assets (GIIN 2020). A remarkable 40% of assets were allocated to emerging markets (Figure 10). Two thirds of respondents expect risk-adjusted market-rate returns, one third accept below-market returns. Interestingly here, DFIs think about impact investing in quite diverse ways. Some consider only a small portion of their development finance as "impact investing", others define everything they do as such.

***SDG investing***

A driver for impact investing has been the publishing of the SDGs in 2015. The SDGs (with 17 goals and 169 individual targets) were not primarily made for investors although recognizing the importance of the private sector contribution. It is less clear how such contribution should look like for such a broad range of targets. The industry analysis currently focuses on "mapping" investors corporate holdings to a selection of the SDG.

One of the commonly stated obstacles is the challenge of impact measurement. Several organizations are working on investor-relevant SDG impact indicators and metrics. New research is being undertaken in this field. Other investors seek investment innovations associated with SDGs. One area to be reconsidered is social infrastructure (Inderst 2020).

***Green, social, SDG bonds***

Thematic or labelled bonds are bonds with proceeds earmarked to specific themes, sectors or projects such as green, climate, social or SDG bonds. Green bonds have since 2012 grown to a volume of $300 billion in 2020 (Environmental Finance 2021). The COVID-19 crisis spurred a big jump in social and sustainable bond issues in 2020 to reach an issuance volume of $165 billion and $139 billion, respectively. Europe remains by far the leading region. A number of Asian and Latin American states have started to issue such bonds (Refinitiv 2021).

The creation of *indices* for green bonds is another attempt at mainstreaming impact investing. For example, the Solactive UBS Global MDB Bond Index is made to appeal to passive investors seeking high-grade bonds with positive sustainability impacts (Solactive 2018). Fund managers also offer thematic green or social bond fund vehicles (e.g. the IFC/Amundi Planet Emerging Green One bond fund for emerging markets). Finally, there is a small market for social impact bonds, i.e. outcomes-based, "pay-for-success" contracts.

**Summing up,** sustainable and impact investing are gaining traction as investment boards are trying to raise their ESG and SDG profiles. The expansion of green and social bonds should gain momentum also in emerging markets. Intentions, definitions and metrics differ for impact investing. Surprisingly, nearly half of impact investors target EMDEs. This is an opportunity for development finance although it is not easy for investors to scale up with sizeable impact projects.

## 6. Conclusion: Creating long-term investment opportunities

Most of the funding of development work will remain with the public sector in future, especially in less developed countries. The private sector is already involved to a much differentiated degree – more in certain countries, sectors and types of projects than in others – and this for good reasons. There is certainly room for more private finance in economic and social infrastructure, climate and other SDG-related investments.

Some of the new investment trends are, in principle, favorable to a stronger commitment of institutional investors. Most investors are indeed keen to broaden the set of investment opportunities in growth markets, even more so at times of low interest rates. There are various hurdles and challenges to investing in less liquid assets and projects in developing countries, including regulatory, political and micro risks.

***Asset owners' contribution to development finance***

How to bridge the apparent mismatch between investors' and development needs? It is never a bad idea to look at what has worked in the past. In fact, exposures to emerging markets have been gradually built up since the 1990, in some cases very significantly so.

- Such allocations to emerging markets predominately go to securities of large companies *listed* on established stock exchanges (such as financials, telecoms, industrial and energy companies), or *government bonds*. Funds and indices for emerging markets, and even "frontier markets", have mushroomed over the years.
- Increasingly, investors are gaining exposure to alternative assets in EMDEs via *private* equity and credit, venture capital, real estate and infrastructure funds. They are often concentrated on the 5-10 most attractive markets.
- Institutional investors' interest in *infrastructure* investment has been growing in recent years. More investors have recently started to venture into developing countries, mostly via funds operating on a national, regional or global basis.
- Several large pension funds from Canada, Australia, the Netherlands and other countries are undertaking *direct* investments in selected EMDEs, e.g. in renewable energy. A few have opened offices in Asia or Latin America, in addition to working with local partners.
- We see tentative steps towards investing in poorer countries via *impact funds,* e.g. in microfinance or water, housing and other community projects.
- Various *blended finance* funds and facilities have been started over the years but it remains difficult to scale up volumes. There are a few encouraging examples involving asset owners.

In short, investors can build on experience gained in middle-income markets. There is scope for progress also in less developed countries when the conditions are right and

opportunities arise. The success depends primarily on the attractiveness of underlying projects and acceptable business conditions. The main burden is on governments.

***Matching long-term investing with development needs***

*1. Investment environment.* Good governance in a reasonably stable legal and political environment is paramount. The less developed a country, the more public institutions must be up to the task, not the least with structural reforms and good "Ordnungspolitik". Maturing local capital markets would be favourable.

*2. Investable assets*. Governments need to work out a pipeline of assets that are suitable for private sector investors. Clarity on the underlying, long-term funding will facilitate financing and investing.

3. *MDBs:* Many international investors find co-investing alongside MDBs a good way of entry into "more difficult" countries - for reasons of experience, risk mitigation, local knowledge and political clout.

*4. Co-investment vehicles*
Equity co-investment instruments for riskier countries and sectors are still underdeveloped. Surely, appropriate commercial (bonds, funds, etc.) and blended finance vehicles targeting investors of different size and with different risk appetite can be expanded by much.

*5. Role of domestic investors*
Leadership can be taken by various sides on spearheading investments in EMDEs: foreign and local institutional investors, DFIs, public initiatives. As their asset base grows, domestic investors in EMDEs can play an increasing role not only in domestic and regional investments, but also help crowding in international asset owners.

*6. Sustainability and impact investing*
The inclusion of ESG considerations has enhanced the investors' sensitivity to environmental and social factors. The increasing focus on SDG targets and impact measurement could be an opportunity to boost flows into less developed economies – to a limited extent.

Matching long-term investing with development requirements is not easy. Expectations should be realistic on the potential of institutional investors as financiers of infrastructure and development needs, especially in less-developed countries. More asset owners will look to benefit from new sources of return and diversification opportunities in a global economy.

More and better action is possible from all sides. Policy makers, DFIs and investors should utilize the full spectrum of investment routes for private capital – not just a few headline policy instruments. Whether commercial, impact or blended or other co-investment vehicles - for people in developing countries, even small re-allocations of capital can have a big impact on the ground. □

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