

# RETHINKING IMPACT TO FINANCE THE SDGs

A Position Paper and Call to Action prepared by the Positive Impact Initiative

November 2018

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"Previous sector-focused policy-making or a goal-by-goal approach will not achieve the 2030 Agenda for Sustainable Development or its SDGs. Stronger integrated planning, strategic thinking and policy integration will be crucial for Governments to define the best SDG implementation mix at the local level."

Repositioning the UN Development System to Deliver on the 2030 Agenda – Ensuring a Better Future for All: Report of the Secretary-General, July 2017

# **ABOUT RETHINKING IMPACT**

Rethinking Impact is a product of UNEP FI's Positive Impact Initiative. The paper reviews the scope and nature of the financing gap for sustainable development and the Sustainable Development Goals (SDGs) in order to propose new solutions for finance, business and a broader set of stakeholders. It builds on the Initiative's earlier Manifesto (2015) and Principles for Positive Impact Finance (2017), clarifying the concepts of impact-based business models, impact-based economy and holistic impact analysis. Rethinking Impact is both a position and a discussion paper. With the ideas put forward in these pages we hope to stimulate further debate and research on impacts and the opportunities that impact data, analysis and business models open up to address the pressing challenges of our times.

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We received significant public input in the process of preparing this report, including through an open consultation in summer 2018 which engaged more than 750 individuals and organizations. It was made possible thanks to the valuable input provided by many colleagues, peers and experts, all of whom we would like to thank.

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## FOREWORD: LET POSITIVE IMPACT BRING US TOGETHER

How will we deliver the SDGs? By changing how we think about impact. UNEP FI leads the way.

With Rethinking Impact to Finance the SDGs, UNEP FI's Positive Impact Initiative is proposing a major contribution to solving the sustainable development puzzle, by opening radical new avenues to addressing the SDG financing gap.

For quite some time, it has been clear that the success of the SDGs hinges on successfully channelling business and finance toward economic, environmental and social impacts.

UNCTAD told us that US\$ 5–7 trillion were needed annually to finance the SDGs, of which private finance sources would be an essential component. As the clock ticks towards 2030, we're also observing in real time that current business and financing models are unlikely to be sufficient to bridge the financing gap.

This report takes a closer look at this problem and, for the first time, shows practical ways to push the limitations of current thinking across public and private sectors.

It is a ground-breaking attempt at mapping financial flows to macroeconomic sustainable development objectives, and ultimately concludes that new tools are needed to meet financing needs, particularly in Africa, where the biggest investment needs and, as this paper suggests, the biggest opportunities are.

Residents of Huntington Beach in California will soon benefit from smart lampposts that provide wireless broadband connectivity in addition to street lighting. Such data services, or even solar panels or energy access in addition to light create revenue streams that make smart lampposts more affordable and easier to finance. Technologies and business models such as these have an under-explored capacity to deliver social outcomes, including in emerging markets. Dwellers from Mumbai to Casablanca could one day make their way home from work at night on a road lit all the way: they would be safer and faster as a result. Mobile access to traffic data could also ease congestion and make their journey healthier.

As with this practical example, the report proposes that we put impact considerations at the heart of our decision-making tools, from public tendering to business models to financial analysis. It shows that impact is a new but common language that can help align the interests of governments, businesses and capital providers, and ultimately benefit society at large.

This impact-based approach can help find ways to deliver more with less capital and public money. It can help build completely new, impact-based business models, harnessing the 4th industrial revolution for good. It can unlock investment by revealing new or hidden business opportunities.

This will require the involvement and collaboration of both private and public actors.

I'm calling on all to read this report carefully and to draw their own conclusions. Mine is clear: with SDG17 inviting us to revitalize the global partnership for sustainable development, UNEP FI's Positive Impact Initiative is showing the way forward.

## **ERIK SOLHEIM**

**Executive Director** UN Environment





# Are the Sustainable Development Goals (SDGs) beyond reach?

Investment needs for the SDGs are huge, with the bulk in developing countries and their infrastructure. The scale of current financial flows is insufficient: private finance is constrained by risk and return requirements, while public finance is in scarce supply. If the resulting financing gap remains unresolved, investment needs will grow over time because of a cumulative effect. Should we conclude that the SDGs are beyond reach? Or could business models be rethought in ways that would increase SDG serving financial flows, but also make them less risky? And could the cost of achieving the SDGs be brought down?



## The SDG financing gap is symptomatic of a business model gap. Impacts can be used as a starting point for business models and generate revenues. This can reduce costs, address certain risk issues and catalyse private sector solutions.

Impacts have an as yet under-explored potential to generate financial revenues. New, impact-based business models can be developed, where the delivery of positive impacts is a driver of business success. The two core features of an impact-based economy are to work back from impacts to come to the right investment decision, and to achieve as many impacts as possible through each investment. Impact-based business models can also serve to mitigate risk, while their digital components can help reduce costs. Altogether, these models could play a key role in bridging the financing gap for the SDGs.



# On its impact journey, the financial sector needs to embrace holistic impact analysis.

There is pressure from policy-makers and civil society on business and finance to deliver positive social, environmental and economic impacts. At the same time, positive impacts can generate new financial revenues. The finance sector has a strategic interest in understanding impacts and can play a central role in facilitating the transition to an impactful and impact-based economy. Accordingly, it needs to improve its capacity for impact analysis. The Principles for Positive Impact provide a meta-framework with a holistic definition of impact to complement and promote convergence among the growing body of impact-oriented methodologies and standards.



# A call to action: towards an impact ecosystem to accelerate positive impact and achieve the SDGs.

No one will achieve the SDGs in isolation. We need an impactfocused ecosystem involving all stakeholders – the private and financial sector, but also the public sector, academia, civil society as well as individuals and their communities. It's time for the growing impact movement to accelerate; more coordination and collaboration between stakeholders are needed to create an impact ecosystem. Key focus areas should be: consolidating finance sector impact frameworks, organising impact demand and supply, and further developing impact metrics.

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# ARE THE SUSTAINABLE DEVELOPMENT GOALS (SDGS) BEYOND REACH?

nvestment needs for the SDGs are huge, with the bulk in developing countries and their infrastructure. The scale of current financial flows is insufficient: private finance is constrained by risk and return requirements, while public finance is in scarce supply. If the resulting financing gap remains unresolved, investment needs will grow over time because of a cumulative effect. Should we conclude that the SDGs are beyond reach? Or could business models be rethought in ways that would increase SDG serving financial flows, but also make them less risky? And could the cost of achieving the SDGs be brought down?

It is widely recognised that the bulk of the SDG investment needs, estimated at US\$ 5-7 trillion annually,<sup>1</sup> is in emerging markets and developing economies (EMDEs), much of it in infrastructure.<sup>2</sup> But what about financial flows addressing these needs?<sup>3</sup> The volume of financial flows currently serving the SDGs is difficult to establish and figures are therefore less readily available. We have sought to measure public and private financial flows based on available data to try and clarify their scope and nature. Figure 1 below illustrates the magnitude of a number of public and private annual financial flows contributing to the SDGs, in contrast with estimated annual investment needs. The appendix to this report provides a detailed review of investment needs, financing flows and the resulting financing gap, as well as more information on the methodology behind our research and estimates – only main figures are mentioned here.



Figure 1: SDG estimated annual financial flows relative to SDG investment needs<sup>4</sup>

Source: Authors based on World Bank database (2015a, 2015b), DFIs & MDBs annual reports (2015), World Bank Finance & Markets, PPIAF (2014), UNCTAD FDI/MNE database, (2015), SDGFunders/ Foundation Center, interactive database (2015), Convergence report (2017), Preqin (2017), Massolution (2015)

<sup>1.</sup> UNCTAD (2014).

<sup>2.</sup> Schmidt-Traub & Sachs (2015).

<sup>3.</sup> Please refer to the glossary at the end of the paper for definitions of key terms such as financing needs and investment gap.

<sup>4.</sup> This chart reflects most of the identifiable flows for the year 2015. While we have sought to avoid double counting as much as possible, there may be some overlap between sources. Exact numbers can be found in the annex to this paper. Numbers for Export Credit Agencies (ECAs) are not mentioned here, as associated flows come in the form of guarantees or insurances which can generally not be tracked.

Figure 1 illustrates how **financial flows towards the SDGs remain modest** relative to the scale of investment needs. Local and international public financing remain limited despite growing calls and efforts to improve domestic revenue.<sup>5</sup> For its part, the deficit in private finance stems from the lack of a bankable and investable deal pipeline, based on risk and return constraints. This is particularly visible in EMDEs, where large and long-term investments are notoriously difficult. To address this, public-private partnerships and blended financing solutions typically aim to facilitate additional investments by providing risk-sharing solutions.<sup>6</sup> For 2016, multilateral development banks (MDBs) reported mobilizing US\$ 163.6 billion in private co-financing<sup>7</sup> with high-income countries alone representing US\$ 92.5 billion (56%), middle-income countries US\$ 65.2 billion (40%) and low-income countries US\$ 5.9 billion (4%).<sup>8</sup>

Based on our review of flows, figure 2 below provides our estimate of the annual financing gap, calculated as investment needs minus public and private financial flows. We estimate the financing gap at close to US\$ 2.5 trillion for all EMDEs and US\$ 1.3 trillion specifically in Africa.



Figure 2: SDG annual financing gap - advanced vs. EMDEs vs. Africa (in US\$ trillions)<sup>7,8</sup>

Source: Authors' analysis and assumptions based on World Bank database (2015c, 2015d), OECD/ UCLG data (2016)

Based on these figures, in advanced countries, the public sector could address one third of financing needs, with the private sector covering most of the rest. In summary, nearly 90% of investment needs can be met in advanced countries under present conditions. In emerging and developing countries, public and private financial flows are of comparable magnitude, and **the share of private finance in these countries would need to double to approach that of advanced countries**. Overall, only 48% of SDG investment needs are being covered in EMDEs. For Africa, the figure drops to 15%.

7. Private financing on commercial terms due to the active and direct involvement of MDBs leading to commitment (World Bank et al. definition, 2016)

- 9. We will use "advanced" and "developed" interchangeably to identify «developed» economies as per World Economic Situation and Prospect (WESP) country classification. Emerging and developing economies include economies in transition as well as developing economies as per WESP country classification.
- 10. Please note that these numbers are rounded off for reasons of simplicity. Therefore, they might not add up in the diagram. However, the size of the financing gap is still to be understood as the difference between the sum of public and private flows and the total amount of investment needs. Exact numbers can be found in the annex to this paper.

<sup>5.</sup> UN (2015), UN (2018a)

<sup>6.</sup> OECD (2018)

<sup>8.</sup> World Bank et al. (2016)

But there is more: it is also important to understand that there are significant and rising **opportunity costs in delaying investments into the SDGs**. The 2030 Agenda for Sustainable Development established a period of 15 years to reach the SDGs starting in 2015, implicitly suggesting that as we approach the deadline, the gap must be gradually reduced. The implication is that delaying SDG investments will lead to higher annual costs, because shorter time to realise the investments needed will increase the amount of money required every year to meet the Goals. Delays also imply that environmental, social and economic pressures will continue to mount, compounding the effect. We can therefore expect higher mitigation costs to address more degraded environments and disrupted societies and economies. This is particularly true for EMDEs, since the needs are comparatively higher.

Based on the current trajectory, the SDGs therefore seem beyond reach;<sup>11</sup> despite the many economic opportunities that have been associated with the SDGs,<sup>12</sup> financing needs and risk levels are too high.

This apparent dead-end invites us to reframe our approach: to look not only at how to increase financial flows, but also at how to reduce the cost of achieving the SDGs. To consider not only how public funds can de-risk private finance, but also to seek other ways to reduce risk.

In the following pages, we explore the potential for business models to do just that. Without discounting the irrefutable importance of domestic finance, international solidarity and blended finance solutions, we ask: might the SDG financing gap be symptomatic of a business model gap?

<sup>11.</sup> UN (2018b)

The Business and Sustainable Development Commission estimated that sustainable business models can unlock US\$ 12 trillion of economic opportunities by 2030 (The Business and Sustainable Development Commission, 2017)



mpacts have an as yet under-explored potential to generate financial revenues. New, impact-based business models can be developed, where the delivery of positive impacts is a driver of business success. The two core features of an impact-based economy are to work back from impacts to come to the right investment decision, and to achieve as many impacts as possible through each investment. Impact-based business models can also serve to mitigate risk, while their digital components can help reduce costs. Altogether, these models could play a key role in bridging the financing gap for the SDGs.

What are the SDGs? Simply put, they invite the fulfilment of people's needs (the social dimension), within the physical boundaries of our planet (the environmental dimension), recognising that business and jobs are key to achieving this (the economic dimension). In short: the SDGs are about achieving a series of positive impacts and avoiding a set of negative ones.

In many instances, these positive or negative impacts are externalities to business models: they fall outside of the economic and financial valuation of goods and services in our economy. As a result, there is growing interest in economic valuation, or assigning monetary value to externalities, as a means to ensure that impacts are duly addressed. Carbon pricing is the most well-known example.

Less has been done to investigate whether externalities can translate into direct financial revenues, that is, whether impacts can generate revenues. This would effectively amount to an internalization of the externalities.

We believe this is possible. Our proposal is to develop an impact-based economy that is articulated around two core principles. First, to work back from the desired impact to build the right solution, organizing the economy along «impact value chains». Second, to look for multi-impact solutions. This approach delivers two key results:

- Lower cost to impact. An organized value chain where contributors to a solution are coordinated is more effective and will therefore bring down the cost to impact ratio. Pursuing more than one impact via a single investment provides more revenues and therefore also reduces cost to impact.
- Risk Enhancement. Impact-based business models and their financing are backed by the revenues generated by the impacts the businesses deliver. Unlike traditional models, where the risk lies with the buyer of the goods or services that provide impacts, with impact-based business models the risk lies with the beneficiaries of the impacts. In other words, they can be a source of risk enhancement.

Current trends in business suggest that this impact-based approach is a promising avenue.

First, traditional business models are facing multiple challenges, as illustrated by the automotive sector. The growing focus on electric vehicles, and soon on autonomous vehicles, not only raises technical and supply chain questions, but also calls for very different support infrastructure (i.e. road system and energy supply). Simultaneously, customers are increasingly looking for mobility services and solutions, as opposed to owning (expensive) cars. Faced with this reality, automobile manufacturers need to rethink their products and services, and reinvent their business models. Major manufacturers are now investing in renewable energy and energy efficiency solutions (Tesla), multimodal solutions (Ford), or "pay as a service" urban electric cars (Peugeot, Renault).

The significant implication of this evolution is that improved mobility, which is relevant for several SDGs, is not just a matter of improved public transportation but also of new business models. Similar and related transformations are underway for other areas or industries that are critical for the delivery of the SDGs, from energy and cities to healthcare and education. In the context of a digitalized economy, healthcare may increasingly rely on remote and digital solutions. The same applies to education. This does not mean that hospitals or schools could or should cease to exist, but that their combination with digitalized solutions can help us go further in delivering impacts and achieving the SDGs.

Second, we are witnessing another trend where business models are based on the delivery of a flexible combination of paid and free services. As figure 3 illustrates, these rely on the collection of data, which form the basis for understanding customer needs and hence developing the service and solution mix that will best secure and grow the client base. These models are interesting for their capacity to deliver "free services", as this opens the possibility of delivering impacts that cannot provide revenues. Data protection and secure usage are of course crucial considerations with these business models.

Figure 3: Business models combining paid and free services

#### Traditional business model: Individual product/service strategy



New business model: Multi-service strategy



#### Source: Authors

What these trends collectively suggest is that financial flows or business models can be created around many human needs, meaning that a greater number of positive impacts can be financed.

Below, we illustrate the mechanics of potential impact-based business models in more detail.

## IDENTIFYING AND INTEGRATING IMPACT VALUE CHAINS

By working backward from impacts, we can identify impact value chains. These chains map relevant economic actors and their respective roles in the delivery of impacts via goods and services. Analysis can help us understand who could play an integrative role in the chain: both the public sector and end beneficiaries can coordinate with a private "chain leader", whose own business interest is to optimize technical solutions and bring down overall cost to impact.

Energy efficiency and emission reductions in private households provide a good illustration. A classic, "investment driven" approach is to start by identifying types of retrofit that would provide energy savings. The next step is to convince homeowners to make investments that will result in energy savings. Since the return on such investments is not immediate, some countries extend tax, cash or credit incentives to do so. To justify these incentives, they create controls at investment and credit levels, with significant administrative costs. Multiple economic actors then step in to offer their solution: change the windows, the roof, the boiler, opt for active energy efficiency solutions (smart meters, Internet of Things, etc.). Unfortunately, most homeowners are not energy efficiency experts, so they are neither equipped to make the best choices nor in a position of strength to negotiate prices. Bad technical decisions and a lack of negotiating power result in high costs to impacts, or even no retrofit (and no impact) at all if the homeowners cannot afford them.

In an alternative impact-based business model, the global service provider of an "impact value chain" pays for the physical investments (active and passive energy efficiency) and is repaid on-bill through the effective energy savings. As per figure 4 below, there are multiple sub-sectors and businesses within each sector who participate in delivering energy efficiency; the role of the hypothetical "global service company" of this impact value chain would be to apply expertise to ensure implementation of the optimal technical solution. As a result, costs to impacts would be scaled down, thanks not only to the optimization of the solution, but also to the bargaining power brought by the global service provider (much like it is a good idea to hire an architect when building a house, to ensure the construction is sound and costly delays are avoided).

Traditional business models foster a vicious circle: product and service providers have no financial interest in the actual energy efficiency, because it does not drive their respective profitability. Typical strategies to address this problem involve an energy service company (ESCO), or public sector interventions in the form of incentives or deterrents. These strategies are limited: ESCOs behave much like insurance providers, and public sector intervention comes at a cost. Neither resolves the business problem efficiently.

Conversely, impact-based business models create a virtuous circle because the goal of the global service provider is to maximize the impact and minimize the costs in order to maximize its profit.

6 Passive Energy Efficiency	5 Active Energy Efficiency	<b>4</b> Public Utility	3 Telecom Company	2 Internet Business	Global Service Company
Company	Company		Company	Dusiness	Company
<ul> <li>Manufacture</li> <li>Distribution</li> <li>Installation</li> <li>ESCO Services</li> </ul>	<ul> <li>Artificial Intelligence</li> <li>Connected Objects</li> <li>Big Data Crunching</li> <li>ESCO Services</li> </ul>	<ul><li>Energy Supply</li><li>Client Databases</li></ul>	<ul><li>Telephone Services</li><li>Client Databases</li><li>Billing</li></ul>	<ul><li>Internet Services</li><li>Client Databases</li><li>Billing</li></ul>	<ul> <li>Global Integration of Services: 2, 3, 4, 5 &amp; 6</li> </ul>

Figure 4: Impact value chains: energy efficiency

Source: Authors

In addition to this approach, cost to impact improvements can also be achieved by bringing suppliers and clients closer together to elaborate solutions. This has been explored to some extent – for instance to improve rural livelihoods, by involving downstream stakeholders such as food processing companies and commodity traders to back investments into seeds or machinery.

### **FAVOURING MULTI-IMPACT SOLUTIONS**

Focusing on impacts also means identifying opportunities to develop investment or business solutions that can address more than one impact, reducing cost to impact ratios in the process. Further benefits accrue from shifting from the delivery of products to the delivery of a set of service contracts, as this raises the adaptability and hence scalability of the business solution.

Public lighting provides a good example of an investment solution that can address multiple impacts and generate revenue from these. Figure 5 illustrates the many impact areas a lamppost can contribute to, including energy efficiency, personal safety, mobility, access to energy, and air quality.

#### Figure 5: The multi-impact lamppost



Source: Authors

It is common for public authorities to issue separate tenders to address different needs: installing LED technology to meet energy saving targets, installing cameras for traffic and safety monitoring, and so on. This is comparatively expensive and often results in installing less infrastructure than required due to limited budgets.

Tendering for multi-function devices that deliver multiple impacts is a first step in bringing down cost to impacts, leading to an increased efficiency in public investment programmes. But budget constraints may still have a limiting effect on impact delivery, simply because limited resources mean fewer lamposts.

Here, an impact-based business model makes a step change possible. In this configuration the lamppost producer shifts from selling lampposts with multiple functionalities to selling the outcomes or impacts that result from additional functionalities: the lamppost is offered for free and is repaid via a number of service contracts (e.g. for solar energy, traffic or air quality monitoring, advertising space, etc.).

### TOWARDS AN IMPACT-BASED ECONOMY

Both these examples demonstrate the potential of a shift towards business models that are driven more directly by the satisfaction of consumers' needs and the achievement of positive impacts.

The power of impact-based business models is that the **delivery of positive impacts is no longer a nice-to-have, but a condition of success**: the lamppost builder cannot afford to deliver a sub-standard product or the service contracts associated to the lamppost will fail to materialize. The global energy efficiency service company must deliver energy savings to be profitable.

In summary, where current or traditional models are caught in a vicious circle and positive impacts simply are not part of the equation, new impact-based business models can create virtuous circles.

While these models do not come without their own share of concerns and required checks and balances (data protection for example), they hint at so far underexploited opportunities to promote private sector solutions and finance for the SDGs. Traditional business models, with 'impact enhancements', might suffice to cover many SDG gaps in advanced economies, where basic development and social needs are mostly addressed, and financing is more available. For EMDEs, however, impact-based business models are paramount. Emerging markets, combining both so many of the SDG needs but also many strengths such as large populations, strong economies and financial sectors, have a critical role to play and can lead the way for less developed economies.

# ON ITS IMPACT JOURNEY, THE FINANCIAL SECTOR NEEDS TO EMBRACE HOLISTIC IMPACT ANALYSIS

here is pressure from policy-makers and civil society on business and finance to deliver positive social, environmental and economic impacts. At the same time, positive impacts can generate new financial revenues. The finance sector has a strategic interest in understanding impacts and can play a central role in facilitating the transition to an impactful and impact-based economy. Accordingly, it needs to improve its capacity for impact analysis. The Principles for Positive Impact provide a meta-framework with a holistic definition of impact to complement and promote convergence among the growing body of impact-oriented methodologies and standards.

The previous chapter makes clear that the drivers for positive impact are not only policy evolution and stakeholder expectations: there are also compelling financial and business drivers. The financial sector therefore needs to develop a critical capacity to understand impact in order to take advantage of these drivers and play its part in bridging the SDG financing gap.

Where are we now? The finance sector is progressing along an impact journey, moving from no consideration of impacts to an increasingly sophisticated understanding, avoiding negative impacts and actively pursuing positive ones.

For **negative impacts**, strategies such as exclusion lists and safeguard policies (e.g. Equator Principles for project finance) are being complemented with scenario-based approaches that seek to ensure alignment with international targets, such as the Paris Agreement to keep climate change within a 2°C increase.<sup>13</sup>

The pursuit of **positive impacts** is being conducted in different ways. One approach is via taxonomies and certification systems, as illustrated by policy developments such as the EU Action Plan<sup>14</sup> and its green taxonomy, as well as by market developments, such as the Green Bond Principles.<sup>15</sup> Reporting frameworks like the Global Reporting Initiative (GRI)<sup>16</sup> and the International Integrated Reporting Council (IIRC)<sup>17</sup> are working to align with the SDGs, as are newer initiatives, such as the World Benchmarking Alliance (WBA).<sup>18</sup> The Global Impact Investing Network (GIIN) hosts IRIS,<sup>19</sup> a catalogue of generally accepted performance metrics that help investors measure and manage impact. These frameworks and tools are complemented by financing strategies such as blended finance and pay-for-success approaches.<sup>20</sup>

This growing impact movement needs to be further consolidated. Impact analysis and management need to become both more holistic and more mainstream, not only to be prepared for further policy developments and respond to stakeholder expectations, but also to reap the potentially huge benefits of the emerging impact-based economy.

To be clear, positive impact is not absent in today's economy. Some businesses, activities and sectors can be seen as primarily carrying positive impacts, for instance renewable energy. Others are often viewed as carrying negative impacts. The vast majority sit in between: agri-business, construction, transportation and technology, to name a few. In fact, all human and business activity comprises both positive and negative impacts.

This is broadly recognised and increasingly acknowledged, including in standards. For instance, the EU taxonomy makes explicit the need to avoid negative impacts alongside stated environmental objectives and the need to comply with International Labour

- 15. ICMA (2018)
- 16. GRI (2018)
- 17. IIRC (2018)
- 18. WBA (2018)
- 19. GIIN (2018)
- 20. More on these topics in the glossary

<sup>13.</sup> As recommended by TCFD (2018)

<sup>14.</sup> European Commission (2018)

Organization (ILO) standards. The Impact Management Project (2018) proposes an analytical framework to assess the multiple dimensions of impact.

In fact, the purpose of impact analysis is not so much to single out areas for inclusion or exclusion, but to move the whole economy forward. Understanding both the positive and negative impacts of business activity allows actors to manage or remediate negative impacts, as well as to step up or encourage positive ones.

Going further, more familiarity with, and a refined understanding of impacts will make their value as business model drivers more apparent, helping business opportunities for the SDGs to materialise. While an impact-based economy, made up of new impact-based business models, will complement rather than replace the current economy, it should, by virtue of its very nature, reach considerable scale.

Whether improving current business models or creating new ones, impact is the critical organizing concept that can help achieve the SDGs, and **a holistic approach is needed** to maximise results. Figure 6 illustrates the finance sector's impact journey and the critical role of impact analysis in financing the SDGs.

Figure 6: The Impact Journey



Source: Authors

## THE PRINCIPLES FOR POSITIVE IMPACT FINANCE

As noted, there are a number of initiatives and standards that consider impacts in the context of finance. Some are sector or theme focused, others established to meet the specific needs of certain stakeholders and market actors.

We believe that a holistic understanding and appraisal of impacts is a cornerstone to unlocking finance for an impactful and impact-based economy.

On this basis, the Principles for Positive Impact Finance (see below) were devised by the Positive Impact Initiative to promote holistic impact analysis, and to do so across the spectrum of finance sector players and business lines. As such, the Principles are a 'meta-framework' intended for use by financial institutions and their service providers across asset classes and financial instruments.<sup>21</sup>



#### **PRINCIPLE ONE: Definition**

Positive Impact Finance is that which serves to finance Positive Impact Business. It is that which serves to deliver a positive contribution to one or more of the three pillars of sustainable development (economic, environmental and social), once any potential negative impacts to any of the pillars have been duly identified and mitigated. By virtue of this holistic appraisal of sustainability issues, Positive Impact Finance constitutes a direct response to the challenge of financing the Sustainable Development Goals (SDGs).

#### **PRINCIPLE TWO: Frameworks**

To promote the delivery of Positive Impact Finance, entities (financial or non financial) need adequate processes, methodologies, and tools, to identify and monitor the positive impact of the activities, projects, programmes, and/or entities to be financed or invested in.

#### **PRINCIPLE THREE: Transparency**

Entities (financial or non financial) providing Positive Impact Finance should provide transparency and disclosure on:

The activities, projects, programs, and/or entities financed considered Positive Impact, the intended positive impacts thereof (as per Principle 1);

The processes they have in place to determine eligibility, and to monitor and to verify impacts (as per Principle 2); The impacts achieved by the activities, projects, programs, and/or entities financed (as per Principle 4).

#### **PRINCIPLE FOUR: Assessment**

The assessment<sup>22</sup> of Positive Impact Finance delivered by entities (financial or non financial), should be based on the actual impacts achieved.

United Nations Environment Programme – Finance Initiative (2018)
 Understood as rating.

The PI Initiative has also developed **Model Frameworks** and an **Impact Radar** as practical guidance for banks and investors. The purpose of the Models is to help them develop appropriate frameworks or adapt their existing frameworks to implement holistic impact analysis: for decision-making, for the development of financial products, and for the overall review of portfolios. Meanwhile, the Impact Radar, illustrated in figure 7 below, provides a taxonomy of impacts and impact definitions against which to accomplish these tasks. Both have been designed as live tools to be trialled and tested for ongoing refinement and update as our understanding and accounting of impacts improves over time.

Together with the tools and standards developed by other initiatives, these tools will help finance sustainable development and achieve the SDGs, because understanding and managing impacts is critical to achieve this. In the next section, we explore how the finance sector is one of several stakeholder groups currently on the impact journey. We emphasize the need for collaboration, and the development of an ecosystem, where all have distinctive yet complementary roles.

#### Figure 7: The Impact Radar



Source: Authors

# A CALL TO ACTION: TOWARDS AN IMPACT ECOSYSTEM TO ACCELERATE POSITIVE IMPACT AND ACHIEVE THE SDGS

o one will achieve the SDGs in isolation. We need an impact-focused ecosystem involving all stakeholders – the private and financial sector, but also the public sector, academia, civil society as well as individuals and their communities. It's time for the growing impact movement to accelerate; more coordination and collaboration between stakeholders are needed to create an impact ecosystem. Key focus areas should be: consolidating finance sector impact frameworks, organising impact demand and supply, and further developing impact metrics.

Our paper highlights two fundamental shifts that can help bridge the SDG funding gap: impact-based business models that can generate new revenues, reduce costs and improve risk, and holistic impact analysis for the financial sector to uncover and address impacts. We also need a better impact data and metrics. And we need new forms of interaction between the public and private sector to deliver positive impact.

The previous section shows efforts underway by **financial institutions** to understand and manage impacts. It is fitting given the preeminent place of the financial sector in the economy. Banks and investors will need **financial industry service providers** to support them with services such as methodologies, metrics, consulting, assessment, verification and second opinions.

We have seen that **business** also plays a central role. Incumbent and new businesses need to explore the relevance of new impact-based approaches to their business models in recognition of fast technological changes, evolving customer demands and the potential to open new markets, particularly in EMDEs. For business, impacts will be a growth strategy in the 21<sup>st</sup> century.

But it will take more to bridge the SDG financing gap. What is needed is an impact ecosystem, as illustrated by figure 8, that will involve the public sector and civil society, in addition to business and finance.

Consider the public sector: governments and municipalities are generally responsible for the environmental, social and economic wellbeing of their populations. They are, by proxy, the primary source of demand for impacts. We have seen that impact-based business models have the potential to decrease the cost of impact delivery (or cost to impact ratio). This creates a stake for public authorities to stimulate the emergence and application of these business models, since they can help meet impact goals at a cheaper cost. In practice, they could use impact analysis to issue impact-based requests for proposals. The latter could be used as a tool to challenge the private sector to deliver solutions with the best cost to impact ratios and stimulate competition on impact that would drive the emergence of multi-impact solutions (such as the smart lamppost example) and accelerate the emergence of service companies that take integrated approaches to issues such as energy efficiency and mobility. Finally, these could crowd in private investors which might increasingly step in to take a share of the risk or investment load from the public sector, as it becomes compellingly clear that the prosperity and well-being of communities is the best way to grow markets and remain competitive.

Meanwhile, by virtue of their business relationships with both public and private sectors, **Multilateral and Development Financial Institutions** (MDBs and DFIs) could play a catalytic role in promoting such impact-based requests for proposals.

There are also significant information and data gaps that the impact ecosystem should address. **International organizations and standard-setters** can pursue their work, research and stakeholder convening to help establish clear targets and frameworks against which contextually specific baselines can be set. Such organizations should also play a key role in collecting and managing data. Data is currently scattered across documents, sites and databases – these need to be aggregated and organized in ways that will support different user needs in the public and private sector. Academia can be a proactive force in developing our understanding of impacts, for example by working on impact definitions, indicators and predictive models.

**Civil society and NGOs** for their part, can advocate for the emergence of the impact economy. Finally, and crucially, while human needs are the starting point of this research, **individuals** can also become active as agents of impact in their demand for and engagement with the public and private providers of positive impact products and services. They are the agents, but also the ultimate guarantors of the delivery of impacts and the integrity of business models.





## Governments & municipalities

- Collect impact data and set local targets
- Issue impact-based requests for proposals

### Business

- Develop impactful and impact-based business models
- Issue impact bids

#### Financial Institutions and associated Service Providers

- Build capacity for impact analysis and measurement
- Develop PI products & advisory services

Source: Authors

## CALL TO ACTION

The rise of impact as an organizing concept in our society is possibly our single biggest opportunity to achieve the SDGs. Will we seize it? While the road to achieving the Goals is still long, we are not starting from scratch in this great transition to impact. Many pieces of the ecosystem are being built, and as a reader you are probably already involved. But at this stage, enough maturity exists to start coordinating efforts as we come to terms with the substantive meaning of impact.

Indeed, the next step is to connect the dots. We believe that the two key concepts we bring to the table—impact-based business, and holistic appraisal of impacts—can help to do just that, and that the following areas in particular require attention:

- Impact Frameworks for the Finance Sector: a number of frameworks and related guidance are now available or under development, from the Green Bond Principles to the UNGC roadmap on SDG bonds and corporate finance to the Equator Principles, the OECD Due Diligence Guidance for Responsible Business Conduct and the model frameworks issued by the PI Initiative; all stakeholders would benefit from a deliberate process of joint testing and from clarifications on their practical linkages. This could be further extended to existing and nascent industry standards and reporting frameworks such as the Principles for Responsible Investment, the Principles for Responsible Banking, the Global Reporting Initiative and the International Integrated Reporting Council.
- Impact Demand & Supply: this report has argued that the key to success is to work back from impacts. This means not just measuring impacts but in fact planning for them. Impacts need to become the starting point for designing public sector programmes and requests for proposals (demand), as well as for the development of business models that can respond to these requests (supply). This should be a participatory process.
- Impact Metrics: it is critical to enhance our capacity to measure and forecast impacts. Here also a more coordinated approach is needed to build on the work of the IMP, GIIN, and of several multilateral and academic institutions. Equally important is the definition of appropriate targets and contextually relevant baselines by international organisations, national and local governments.

It is a matter of urgency to bring these components together and build the ecosystem. This will be the core focus of the Positive Impact Initiative going forward..



## APPENDIX: SDG INVESTMENT NEEDS, FINANCIALS FLOWS AND THE FINANCING GAP

### INTRODUCTION

What do we really know about Sustainable Development Goal (SDG) investment needs? What is the status of public and private financial flows? What is the nature and scope of the financing needs?

For the purposes of this report, we review existing data to better understand present trends, and what is needed to bridge the financing gap. Our aim is not to revise or challenge existing figures; rather it is to make sense of them at an aggregate level. Existing reviews tend to have a narrow focus, and we lack an aggregate view of needs, flows and gaps.

This is for good reason: there is only partial data, some macroeconomic and some microeconomic, some measured in stock and some in flows. The more granular the data we seek, the less accurate it becomes. But we believe understanding the data landscape is a necessary exercise to better understand the data gaps and, in their wake, the SDG financing gap.

Because of the gaps, we had to make several hypotheses, assumptions and extrapolations. All our assumptions are open to discussion and challenge – they are made to trigger debate and further research on the data we really need to finance the SDGs.

We first focus on SDG investment needs; we then turn to actual or committed public and private SDG financial flows, to then infer the financing gap.

The SDG financing gap is defined here as the difference between the investments needed to meet the SDGs (SDG investment needs) and the associated level of financing (SDG financial flows). Investment needs should not be confused with financing gaps: not all SDG-related investments face a financing dilemma. This simple distinction is important if the task at hand is to mobilise finance towards the gap, not just towards the SDGs writ large.

We sought to distinguish between Advanced Economies and Emerging Markets and Developing Economies (EMDE), with a specific focus on Africa: this is because data consistently shows that this is the continent of greatest need.

All data comes from public sources. There are further methodological insights below, including the different assumptions and hypotheses we made.

# I. SDG INVESTMENT NEEDS

Based on a review of available data, this paper estimates worldwide SDG investment needs to be US\$ 6 trillion per year on average. Of this, advanced countries represent US\$ 1.5 trillion per year while emerging markets and developing economies (EMDEs) represent US\$ 4.5 trillion. Africa alone represents one third or US\$ 1.5 trillion of the EMDEs' investment needs.

## **BASIC CONCEPTS, METHODS AND CAVEATS**

We draw a distinction between total and incremental annual SDG investment needs. The latter are the additional effort on top of the current annual level of investments to reach the SDGs. The former combines the current (existing) annual level of investments with the incremental annual investment needs.<sup>23</sup>

Existing efforts to quantify SDG investment needs rely mostly on economic frameworks that describe in which sectors money needs to be invested but assessing SDG investment needs is a more complex matter. SDG investment needs are not sector-aligned, because each SDG goal can be addressed by a multitude of impacts across different sectors. Interdependencies, synergies as well as trade-offs across different economic sectors contributing to sustainable development affect the assessment of SDG investment needs and lead to double counting, difficulties in assessing cross-sector impacts, potential omissions, etc.<sup>24</sup>

Most studies will refer to economic infrastructure (energy, transport, telecommunications, water and sanitation...) and social infrastructure (health, education) as the key to achieving the SDGs. Equally relevant is the assessment of many cross-cutting issues such as poverty, safety, humanitarian relief, gender equality, climate change adaptation and mitigation, and their implication in terms of investments.<sup>25</sup> Furthermore, it should be noted that some of these cross-cutting issues might be more relevant to certain countries or regions than others, for instance with poverty. Finally, cross-cutting issues are not well covered by existing estimates.

We focus here on assessing indicative figures of total SDG investment needs. To analyse the SDG investment needs by region or country group, we considered global aggregated figures. Several country classifications exist: the World Bank classifies countries either by region or by income group. The UN classifies countries either as developed or developing. According to the UN, "the distinction is intended for statistical convenience and does not express a judgement about the stage reached by a particular country or area in the development process. And it remains relevant to the SDGs which currently uses for global reporting the definition used in the final report of the Millennium Development Goals (MDGs)".

For our purposes, we classify countries as either Advanced Countries or Developed Economies,<sup>26</sup> or EMDEs, as defined by the World Economic Situation and Prospects (WESP).

Nearly one third of the countries in the EMDE groups are African. Almost all low-income countries are African, and Africa represents nearly half of the Developing Countries. Most research reports tend to agree that much effort will be needed for low- and lower middle-income countries to achieve the SDGs. Africa still lags in terms of efforts to reach the SDGs. In 2016, Africa's average SDG index score was 44.23 while EMDEs group average score was 53 and advanced countries average score was 75. If we isolate Africa from the EMDE score, the average increases to around 58.65. Therefore, we focus specifically on Africa

<sup>23.</sup> Schmidt-Traub & Sachs (2015)

<sup>24.</sup> UNTT (2013)

<sup>25.</sup> Schmidt-Traub (2015)

<sup>26.</sup> In this paper, we will use interchangeably advanced or developed.

within the EMDE groups. The SDG Index is published by the Bertelsmann Stiftung and the Sustainable Development Solutions Network (SDSN) on where each country stands regarding the achievement of the SDGs.<sup>27</sup>

#### ASSESSING SDG INVESTMENT NEEDS

In a first attempt at quantification, the United Nations Conference on Trade and Development (UNCTAD, 2014) estimated total SDG investment needs at US\$ 5-7 trillion per year at the global level. As per table 1, UNCTAD (2014) provided a breakdown per sector for developing countries leading to an estimated US\$ 3.3-4.5 trillion per year to achieve the SDGs by 2030, with developing countries representing at least 64% of total investment needs.

Table 1: Estimate of SDG investment needs in developing countries

	Annualized US\$ billion 2015-2030
Power	630–950
Transport	350–770
Telecommunications	230–400
Water and sanitation	~410
Food security and agriculture	~480
Climate change mitigation	550–850
Climate change adaptation	80-120
Health	~210
Education	~330
TOTAL	3270–4520

#### UNCTAD TOTAL INVESTMENT REQUIRED IN DEVELOPING COUNTRIES

Source: Authors' analysis based on UNCTAD (2014)

Other relevant studies from New Climate Economy (NCEC, 2014), McKinsey (2013), or the World Economic Forum (WEF, 2013) focus on assessing infrastructure investment needs, widely believed to be the largest component of SDG investment needs. As can be seen in table 2, WEF (2013) estimates that US\$ 5 trillion of annual investments in infrastructure will be needed on a business-as-usual scenario to achieve the SDGs, and an additional US\$ 0.7 trillion under a 2°C scenario. Similarly, McKinsey (2013) reports that the world will need to invest about US\$ 3.3 trillion per year in economic infrastructure, or a total investment of US\$ 57 trillion, equivalent to 3.5% of gross domestic product (GDP), from 2015 to 2030. NCEC (2014) estimates that on average the world will need around US\$ 3.3 trillion per year, or a total of US\$ 89 trillion, from 2015 to 2030. The estimate grows by an additional US\$ 4 trillion under a low carbon scenario.

27. SDSN (2018)

#### Table 2: Global infrastructure investment needs

	WORLD ECONOM AVERAGE US\$ BIL		MCKINSEY (2013) AVERAGE	NCEC (2014) AVERAGE US\$ BILLION 2015–2030	
	Business as usual scenario	2°C scenario	US\$ BILLION 2013–2030		
Energy / Power	619	758	718	3097*	
Buildings & industry**	613	944			
Transport & associated infrastructure***	1650	1837	1400	911	
Telecom	600	600?	559	476	
Water	1320	1320?	688	1422****	
Agriculture	125	125?			
Forestry	64	104			
Adaptation (not collated with other sector)	Not estimated	85-121			
TOTAL	4991	5773–5809	3365	5906****	

Source: Authors' analysis based on WEF (2013), McKinsey (2013) and NCEC (2014)

\* Energy investment needs include power generation, transmission & distribution, fossil fuels, energy use for transport, buildings and Industry

\*\* Primarily energy efficiency

\*\*\* Transport & associated infrastructures include rail, road, ports and airports. WEF data includes transport vehicles. In the WEF 2°C scenario, the same figures are used for road, rail, port and airport infrastructures.

\*\*\*\* Water & waste included

\*\*\*\*\* Low carbon scenario result in average US\$ 5471 billion per year

Having reviewed the different studies and research reports, we retain the oft-cited UNCTAD figures as our starting assumption in our attempt to assess the global SDG investment needs, keeping in mind the different challenges and issues inherent to the figures.

Hence, we assume the **total needs** to be **US\$ 6 trillion**, the average range from UNCTAD estimates (table 3). We retain the upper range of the estimate i.e. **US\$ 4.5 trillion** as our assumption of **EMDE SDG investment needs**.

Considering the efforts required to achieve the SDGs, we assume **Africa** to weigh one third of total global investment needs, or **US\$ 1.5 trillion**. Assumptions about African investment needs vary from one study to another. Schmidt-Traub & Sachs (2015) estimates US\$ 614 – 638 billion annual incremental financing needs related to the SDGs. Chinzana et al. (2015) estimate that Africa will require a GDP growth rate of 16.6% over 2015 -2030 to realize the SDGs, equivalent to an investment-GDP ratio of 87.5% per year, or US\$ 1.7 trillion (UNCTAD, 2016).<sup>28</sup> These figures provide an insight on the remaining potential gap or incremental SDG investment needs, but not on total SDG investment needs in Africa.

Table 3: Estimates of SDG investment needs per geography

DEFINED SCOPE	SDG INVESTMENT NEEDS
Advanced countries	1.5
Emerging and developing countries	4.5
of which, Africa	1.5
TOTAL	6

Source: Authors' assumption based on UNCTAD (2014), UNCTAD (2016).

### CONCLUSIONS

So, what does the review reveal in terms of what we do and do not properly understand about SDG investment needs, and what are the implications?

Firstly, although data is particularly scarce in EMDEs, what we can be most confident about is the "where" question: the gap is in EMDEs, with most countries in Africa. It should be a priority to understand regional data needs and to collect the data.<sup>29</sup>

Secondly, the "what" question is more difficult to establish. The SDGs are impact-oriented and do not always translate directly into economic sectors, yet most estimates are typically established at a sector level, reflecting the current construct of the economy. Indeed, while this data is ill suited to the job, it remains the best available proxy. Going forward identifying and collecting impact data is therefore also a priority.

Finally, there is the "how much" question: methodological and data gaps leave us with a fair amount of uncertainty.

On the one hand, the misalignment between investment areas and impact areas implies that the magnitude of the needs may well be misrepresented, as non-sector related investments, such as energy resource efficiency, gender equality or biodiversity are omitted. Other sectors run the risk of being double counted when they address multiple SDGs.

On the other hand, estimates rely on historical data and hence tend to ignore the type, volume and sequencing of required investments, which is likely to vary depending on sector, country or goal. As we also know, past investments are a poor predictor of the future, since they won't reflect structural changes in the economy, technological disruptions, and other evolutions.

Figures are therefore indicative. There is a critical need for impact data. It is also important to consider the potential costs reductions that can be brought about by harnessing digital and AI powered business models in the context of the fourth industrial revolution that is underway.

<sup>29.</sup> Some of the studies reviewed for this paper use proxies to reflect global or regional figures. For instance, the 2013 McKinsey report on infrastructure investment needs considers 84 countries representing nearly 90% of the world's GDP. There are gaps even among those 84 countries, with fewer than half supplying data on the different asset classes over a ten-year period, data for low-income countries being the most difficult to find. Figures on education, health or even agriculture are often limited to developing countries.

# 2. SDG FINANCIAL FLOWS

Based on a review of available research and data, this paper estimates worldwide SDG financial flows at US\$ 3.5 trillion per year on average. Of these flows, we estimate that US\$ 1.6 trillion come from public sources, and US\$ 1.9 trillion come from private sources.

Developed countries already receive US\$ 1.4 trillion per year, so the remaining gap to address is of less than 10%. Emerging markets and developing countries receive US\$ 2 trillion, with the remaining gap at US\$ 2.5 trillion per year. Africa receives US\$ 221 billion, and a gap of US\$ 1.3 trillion per year remains.

## **BASIC CONCEPTS, METHODS AND CAVEATS**

In assessing financing flows, we identified and made distinctions between the main sources of flows, their channels, intermediaries or asset pools, as well as the financial instruments employed. This effectively combines top down and bottom up approaches for existing flows. We looked at both public and private financial flows, with a special focus on combined flows (e.g. blended finance). As figure 9 shows, figures become harder to track the more specific one tries to get.



Figure 9: Sources, channels and instruments of financial flows (in US\$ billions)

#### Source: Authors

We focused on flows, as opposed to stocks, because it is the flows that are critical to achieving the SDGs. This is of course challenging because available data tends to reflect "accumulated finance" i.e. assets under management (AUM) or balance sheet data (outstanding loans), as opposed to flows. In our attempt to infer the annual flows from AUM data, we assumed the average life of investments to be 10 years, therefore positing that annual flows would represent one tenth of AUM.

We further estimated that portion of annual flows dedicated to SDG financing as consistent with the current percentage of investments into infrastructure.

We also attempted to determine the proportion of existing and identifiable flows that can meet SDG investment needs, mainly by considering the objects of the financing. While those assumptions are far from being accurate, we considered them to be good enough proxies. That being noted, there is a lack of data on annual public and private flows serving the SDGs: these are not being tracked. We therefore made many strong assumptions to estimate the flows and how they serve SDG investments. We focused on country level, as opposed to regional data, also leading data gaps (mainly in emerging and developing countries). The exercise could well under- or overestimate the figures.

Throughout this paper the reference year is 2015 with a focus on yearly financing flows unless specified otherwise.<sup>30</sup>

All data has been converted to US\$ for consistency. When available, we used Forex (FX) rates from the multilateral development banks and development financial institutions (MDBs & DFIs) annual reports. Otherwise we referred to public information as of December 31<sup>st</sup> 2015 (table 4).

Table 4: Forex exchange rates

	EUR	GBP	DKK	NOK	SEK	AED	JPY	UA	CHF	EU(SDR)
Per US\$	0.9185	0.6783	6.8727	8.8603	8.4352	3.673	2.68	0.7216	0.9952	0.7217

Source: Authors' calculation based on MDBs & DFIs annual reports (2015) and public forex historical databases

### PUBLIC FINANCIAL FLOWS

#### SOURCES

The main sources of public financing flows are government revenues at the national and local levels. National governments earn revenue from tax collection, and other sources such as income from public entities and government-owned corporations. At the local level, revenue stems mainly from local taxes, grants and subsidies, and other sources such as social contributions, tariffs and charges.

There is currently no accurate estimate on the share of public revenue dedicated to SDG financing. In the past, the United Nations recommended that at least 20% of GDP in developing countries tax revenue would be required to reach the MDGs.<sup>31</sup> The Sustainable Development Solutions Network recommends that countries allocate at least 20% of their gross national income (GNI) in domestic resources to sustainable development.<sup>32</sup>

Assuming that most SDG investment needs are infrastructure-related, we used estimates of infrastructure investments to assess the proportion of government revenues allocated to SDG investment needs. We adjusted weightings to reflect efforts the public sector should make to address SDG investment needs, in consideration of their current tax collection systems, as well as of the likelihood of private sector involvement.

Relying on estimates from a joint report by the Organisation for Economic Co-operation and Development (OECD) and United Cities and Local Governments (UCLG), we calculated government revenues at local level as representing 23.8 % of government revenues (in current US\$) and subtracted 52.6% from this, representing transfers from government and/ or international entities.<sup>33</sup>

Based on the above table 5 shows our estimate of public financial flows contributing to SDG investment needs, namely US\$ 438 billion in advanced countries, US\$ 1005 billion in EMDEs and US\$ 83 billion in Africa.

<sup>30.</sup> We chose 2015 as the reference year for our study of financial flows mainly because of the availability of data.

<sup>31.</sup> OECD (2014)

<sup>32.</sup> Schmidt-Traub & Sachs (2015)

<sup>33.</sup> OECD/UCLG (2016)

**Table 5:** Public financial flows contributing to SDG investment needs (in US\$ billions)

	NATIONAL GOVERNMENT REVENUES	LOCAL GOVERNMENT REVENUES	TOTAL
Advanced countries	379	60	438
Emerging & developing countries	903	102	1005
Africa	75	6	83

Source: Authors' analysis based on World Bank database (2015c, 2015d), OECD/UCLG data (2016)

To estimate public sector contribution to SDG investment needs, we made the following assumptions:<sup>34</sup>

- We assumed that advanced economies could allocate 5% of national and local government revenues to SDG financing going forward. Our assumption relies on the fact that advanced countries invest 3.2% of GDP in economic infrastructure (McKinsey, 2016), with 40% financed by public resources (NCEC, 2016). Our 5% estimate is based on the combination of these two figures. The proportion of public resources going to infrastructure investment remains relatively stable until 2030.
- Using the same method, we assumed that EMDEs could allocate 20% of their national and local government revenues to SDG financing. EMDE countries invest 4.4% of GDP in economic infrastructure (McKinsey, 2016), with 60% financed by public resources (NCEC, 2016), leading to our 16% estimate. To fill the infrastructure financing gap, EMDE countries should allocate 6.8% of GDP to infrastructure spending, equivalent of 24% of public resources. We used the average between the current level and the expected level of investment.
- We also assumed that Africa could allocate 25% of national and local government revenues to SDG financing. According to the annual report of the Infrastructure Consortium for Africa (2015), African national budgets financed around US\$ 28.4 billion (34.1%) of the US\$ 83.4 billion committed to infrastructure in 2015. We chose to make a more conservative assumption.

With those assumptions, we were able to compute an estimated contribution of the public sector to SDG financing. The implication is that in advanced countries, the public sector could finance approximately US\$ 0.4 trillion, or 29% of domestic SDG investment needs, – not considering official development assistance (ODA) financing – whereas emerging and developing countries' public sector financial capacity is approximately US\$ 1.2 trillion, or 26% of domestic SDG investment needs. The figure is much lower for the African continent, where capacity is approximately US\$ 128 billion (including ODA financing), or 9% of the continent's SDG investment needs. As a result, we estimate current overall public financing flows to be approximately US\$ 1.6 trillion, or 27% of the SDG investment needs. We now take a closer look at how effectively public financing flows serve the SDGs.

<sup>34.</sup> Local government revenues represent 23.8% of public revenue. Their revenues comprise grants & subsidies from central government (52.6%), local tax revenue (31.7%) and other revenues such as social contribution, tariff/user charges and fees from local public services, etc. (15.7%). Source: OECD/UCLG (2016). We derive our estimates of local government revenues from these estimates.

#### **CHANNELS & INSTRUMENTS**

In the absence of dedicated data at the government and local authorities' levels, we turned to figures on public financing flows channelled through ODA, multilateral agencies, DFIs and export credit agencies for insights.

ODA. The World Bank (2015) estimated flows from net ODA and official aid received as amounting to US\$ 152 billion for 2015, including US\$ 131 billion from the Development Assistance Committee (DAC) countries.<sup>35</sup> There is a wide dispersion of ODA allocation across recipient countries and across countries with similar levels of income. Africa received about a third of net ODA flows. As per figure 10, overall, infrastructure appears to be the main investment destination.<sup>36</sup>

Figure 10: ODA by sector in emerging and developing countries, 2015



Source: Authors' analysis based on World Bank (2015), OECD database (2015a)

For some sectors, ODA is relatively well documented, for example by the OECD. Grants dominate in sectors where private finance is lacking the most, such as health or education.

However, not all ODA flows qualify as direct contributions to SDG investment needs: part of what now counts as ODA (scholarships to study in the donor's higher education institutions and administrative costs of aid agencies in donor countries and of awareness promotion of development cooperation in particular) is in fact in-donor spending and does not directly contribute to sustainable development financing and therefore to sustainable development, per the Brookings Institution report.<sup>37</sup>

<sup>35.</sup> ODA from DAC countries is estimated to be US\$ 131 billion in 2015 (OECD, 2015)

<sup>36.</sup> Economic Infrastructure and Services covers assistance for networks, utilities and services that facilitate economic activity. It includes, but is not limited to: Energy, Transportation and Communications (OECD, 2015e). Social Infrastructure covers efforts to develop the human resource potential and ameliorate living conditions in aid recipient countries. It includes, but not limited to: Education, Health, Water supply, sanitation and sewage (OECD, 2015e).

<sup>37.</sup> Kharas and Rogerson (2016)
MDBs and DFIs. MDBs committed US\$ 215 billion in 2015,<sup>38</sup> with major investments in infrastructure and energy, as per figure 11. Over the past six years, MDBs<sup>39</sup> have committed over US\$ 158 billion to climate finance. In 2015 only, reported climate finance commitments amounted to US\$ 25 billion,<sup>40</sup> mainly in emerging and developing countries.



Figure 11: MDBs' spending by sector, 2015

Source: Authors' analysis based on MDBs annual reports (2015)

In 2015, the 20 largest DFIs committed approximately **US\$ 50 billion** globally.<sup>41</sup> As figure 12 shows, most funds went to the banking and financial sectors, as well as to power and infrastructure. We estimate that 86% of those flows are in the form of debt and only 7% in the form of equity. Sub-Saharan Africa accounts for 31% of European DFIs investment portfolio.

<sup>38.</sup> Data derived from annual reports and converted in US\$. MDBs: AfDB, ADB, AIIB, CAF, EBRD, EIB, ETDB, IDA, IDB, IFC, IBRD, ISDB, NADB, NIB, OFID. Full names to the abbreviations can be found in the list of abbreviations and acronyms

<sup>39.</sup> African Development Bank (AfDB), Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), Inter-American Development Bank (IDB) and the World Bank group.

<sup>40.</sup> World Bank et al. (2016)

<sup>41.</sup> Data derived from annual reports and converted in US\$. DFIs: BIO, BMI-SBI, CDC Group Plc., COFIDES, DEG, FINNFUND, FMO, IFU, NORFUND, OEEB, Proparco (AFD), SIFEM, SIMEST, SOFID, SWEDFUND, ADFD, JICA, JBIC, KfW Dev Bank, OPIC. Full names to the abbreviations can be found in the list of abbreviations and acronyms.



Figure 12: DFIs' investments per sector, 2015



It should be noted that a substantial part of ODA is channelled through DFIs or MDBs. This raises double counting issues, because it is difficult to identify the share of ODA that is invested through DFIs or MDBs. Nevertheless, in its assessment of ODA from DAC countries, OECD (2015) estimated that 28% are allocated to multilateral institutions.

**Export Credit Agencies (ECAs).**<sup>42</sup> ECAs are an important channel of public SDG financing flows. They play a critical role in promoting the export of capital goods of developing countries. It is particularly difficult to track ECA flows, because they come in part in the form of guarantees or insurance. Their role is therefore often indirect, acting as a catalyst and enabler of investments, especially in countries perceived to be high-risk. In 2015, export credit for medium- and long-term transactions amounted to **US\$ 131 billion**,<sup>43</sup> with only three countries, China, Japan and Korea, providing about half of the export credit support. The OECD provides additional insights into the arrangement of official export credits:<sup>44</sup> Of US\$ 56.3 billion<sup>45</sup> of "committed" credits, Africa received 9%. In terms of sectors, Transport & Storage account for nearly 40%, Industry for 22% and Energy Generation and Supply 13%.<sup>46</sup>

**Sovereign Wealth Funds (SWFs)**. SWFs weigh US\$ 4 trillion in AUM and typically invest about 2% of their assets in infrastructure, and a relative high proportion in emerging and developing countries. In our attempt to identify the annual flows from SWFs and absent good data, we assumed the estimated average life of investments to be 10 years and therefore annual flows to represent one tenth of the AUM. We also assumed that the major contribution of SWFs towards SDG investment needs was mainly via infrastructure financing, incidentally the biggest component of SDG investment needs. Using World Bank data on SWF investment in infrastructure as a proxy,<sup>47</sup> we estimate that SWFs could bring an additional annual **US\$ 8 billion** to SDG financing.

42. ECA flows include guarantees and loans. While considering guarantees, we are probably double counting these flows both on the public and private side.

- 45. The amount represents value of "committed" credits that were provided directly or that were insured or guaranteed (OECD).
- 46. Over the period 2007 2016 (OECD)
- SWF currently invest 2% on average in infrastructure. Source: World Bank Finance & Markets, PPIAF (2014)

<sup>43.</sup> US EXIM Competitiveness Report (2016)

<sup>44. &</sup>quot;The arrangement on Guidelines for Officially Supported Export Credits" provides a framework on terms and conditions of officially supported export credits. Although all "export credits from official sources" are supported on Arrangement terms and conditions by the majority of OECD member countries, some countries provide official export credits on other than Arrangement terms and conditions. Since these transactions generally have not been reported according to the agreed individual transaction reporting system, only statistics on Arrangement official export credits are presented.

# **CONCLUSION & OUTLOOK FOR PUBLIC FINANCIAL FLOWS**

We estimate public financing flows (domestic and international) that have the capacity to serve SDG investment needs at approximately **US\$ 1.4 trillion**. This is a rough estimate given data gaps and assumptions, but we believe it is an adequate and useful proxy. Figures show that the supply of public money pales in comparison with the demand side (US\$ 6 trillion of SDG investment needs). They also highlight, once again, how large the challenge looms for Africa. As figure 13 shows, African governments allocating 25% of their revenue would enable them to achieve only 8% of their SDG investment needs.

**Figure 13:** Private finance serving SDG investment needs - advanced vs EMDEs vs Africa (in US\$ trillions)



#### Total public finance serving SDG investment needs

Source: Authors' analysis based on World Bank database (2015c, 2015d, 2015e)

Despite pressure on public budgets in advanced countries, there is arguably still room for manoeuvre to increase action in favour of SDGs domestically. This is compounded by the somewhat narrower scope of SDG priorities in advanced countries, often limited to environmental issues. Reality is more contrasted in emerging and developing countries, where few have the same resources as in advanced countries, given lower tax collection and hence public resources. According to the OECD (2014), half of Sub-Saharan African countries still mobilise less than 17% of GDP in tax revenues, the minimum threshold the UN considered necessary to achieve the MDGs. By way of comparison, the average tax revenue raised by OECD countries is close to 35% of GDP.

For African countries specifically, public financing resources remain highly dependent on international aid such as ODA. According to the OECD (2015c), ODA represents 30% of all external incoming flows in Africa, against 17% in emerging and developing countries. To make matters more complex, SDG priorities in emerging and developing countries are broader, with social and economic issues dominating. This is even more pronounced in Africa.

Increasing contributions to the SDGs from the public sector in EMDEs would require an increase of public transfers from advanced countries – and potentially from the BRICS (Brazil, Russia, India, China and South Africa) - to developing countries. However, budget pressures in advanced countries make this unlikely.

# **PRIVATE FINANCIAL FLOWS**

#### SOURCES

The sources of private finance are household savings and corporate profits. They can be invested directly in the SDGs, or via the finance industry, banks or other financial institutions such as pension funds, insurance companies, hedge funds, and even foundations.

We again find significant data gaps when trying to gauge private financing flows to the SDGs, consistent with gaps we found researching SDG investment needs and public financing flows. In this case, it is because private flows are not typically linked – or tagged – to the SDGs.

For our purposes, we will use gross savings<sup>48</sup> as a proxy for the source of private flows. According to the United Nations Development Programme (UNDP), it is estimated that only about 10% of current infrastructure investments come from the private sector.<sup>49</sup> Considering that infrastructure represents the largest component of SDG investment needs, and probably where private sector intervention will make the most sense, we made the working assumption that:

- Advanced countries allocate 10% of their gross savings to sustainable development.
- Emerging and developing countries allocate 10% of their gross savings to sustainable development.
- African countries allocate 30% of their gross savings to sustainable development, rather than 10%, because of high remittances.

Table 6 captures these figures.

Table 6: Sources of private financial flows (in US\$ billions)

	GROSS SAVINGS	ESTIMATED CONTRIBUTION TO SDGS	GROSS SAVINGS SERVING SDGS
Advanced countries	9253	10%	925
Emerging & developing countries	9827	10%	983
Africa	324	30%	97

Source: Authors' analysis based on World Bank database (2015e)

Based on these assumptions, it follows that private finance could potentially address almost 62% of the total investment needs in advanced countries, more than twice the public sector contribution. In emerging and developing countries, private financing could match public sector financing, at roughly 22% of investment needs. As far as Africa is concerned, private finance is barely higher than public finance and would contribute to 6% of SDG investment needs.

Once more, the figures point to the centrality of Africa in seeking to address the global SDG financing gap.

<sup>48.</sup> World bank database (2015e)49. UNDP (2017)

## **CHANNELS & INSTRUMENTS**

As we did for public flows, we reviewed specific private finance channels and intermediaries to better understand how and where private flows currently serve the SDGs. It is predictably difficult to identify those that dedicate all or part of their activities to financing of the SDGs; for instance, it is difficult to earmark bank deposits to SDGs, except perhaps from foundations, microfinance and, to some degree, from remittances. We considered institutional investors a good proxy for listed bond and equity markets. In the end, we reviewed the following channels, which we estimate cover most of the identifiable private flows: direct investments (Foreign Direct Investment (FDI); traditional financial institutions (institutional investors, remittances, foundations, microfinance); alternative financial institutions (private equity, crowdfunding).

#### i. Direct investments

**Foreign Direct Investments (FDIs).** In 2015, UNCTAD estimated overall FDI<sup>50</sup> inflows, a key source of private finance, at approximately US\$ 1.7 trillion. How exactly FDI maps to the SDGs remains uncertain. However, noting that nearly half of greenfield FDI is related to service industries such as energy, water, construction, transport and telecommunications, we chose to focus only on those investments<sup>51</sup> as a proxy for flows that directly contribute to new SDG investments. UNCTAD estimated greenfield FDI flows at **US\$ 773 billion annually**, which we therefore retain as FDI contribution to SDG investments.<sup>52</sup>

In 2015, emerging and developing countries accounted for 65% of all greenfield FDI, or US\$ 500 billion. The African continent received 9%, or US\$ 67 billion. Countries with the highest investment needs are not necessarily the main recipients of FDI.<sup>53</sup>

#### ii. Traditional financial institutions

In many cases, institutional investors' size is measured in AUM, whereas SDG investment needs are measured in flows. We have estimated annual flows using AUM amount over the average life of investments.

**Institutional Investors** (primarily pension funds & insurance companies). According to the World Bank (2015), OECD institutional investors hold **US\$ 80 trillion<sup>54</sup>** in AUM, with an average 1% held in infrastructure and 10% in emerging and developing economies. Emerging markets institutional investors hold US\$ 5 trillion in AUM, they invest an average 0.5% in infrastructure and a higher proportion in emerging and developing economies than OECD average. **Other institutional investors (asset and wealth managers)** weigh **US\$ 20 trillion** with an average 1% invested in infrastructure, and a very small proportion in emerging and developing economies.

According to the OECD (2015d), pension funds invest mostly in fixed income and public equities. Despite potential large demand, investment in infrastructure remains limited. In most advanced countries, pension funds investment in emerging markets infrastructure remains opportunistic. They tend to invest domestically, or in regions with very low perceived risk. Political instability and financial markets volatility are the main concerns behind their lack of interest.

In our attempt to identify relevant annual flows from institutional investors, and absent clear and specific data, we again made some assumptions. We estimated the average life of investments to be 10 years and therefore annual flows to represent one tenth of AUM. We also assumed the largest contribution of institutional investors towards SDG investment needs to stem from infrastructure financing, incidentally the biggest component of SDG

<sup>50.</sup> FDI refers to an investment made to acquire lasting interest in enterprises operating outside of the economy of the investor. (UNCTAD, 1993).

<sup>51.</sup> A type of foreign direct investment where a parent company builds its operations in a foreign country from the ground up.

<sup>52.</sup> UNCTAD FDI/MNE database (2015)

<sup>53.</sup> UNCTAD FDI/MNE database (2015)

<sup>54.</sup> World Bank Finance & Markets, PPIAF (2014)

investment needs. Using World Bank data as a proxy,<sup>55</sup> we reach the conclusion that institutional investors could bring an additional **US\$ 102.5 billion** for SDG financing annually. OECD institutional investors could contribute US\$ 80 billion, while emerging market institutional investors could contribute US\$ 2.5 billion. Other institutional investors could contribute US\$ 20 billion.

Remittances.<sup>56</sup> In 2015, the World Bank estimated remittance flows at US\$ 552 billion. This is by far the most important form of private flows. Out of the US\$ 429 billion remittance flows received by emerging and developing countries, Africa accounts for 15.7%, or US\$ 67 billion. This confirms the importance of their contribution to SDG financing needs, either directly or via remittance-backed financial products. Remittances account for more than three times the amount of ODA (US\$ 152 billion) in emerging and developing countries. According to a study of 71 developing countries by the International Fund for Agricultural Development (IFAD, 2017), only 25% of remittances are saved or invested, and only 23% from the savings and investments are channelled through financial institutions. This report shows remittances to have a significant effect on poverty reduction:<sup>57</sup> a 10% increase in per capita remittances contributes to a 3.5% decline in the share of poor people in the overall population. Half of the income received through remittances is spent on agriculture-related expenses. 75% of family remittances are used for immediate needs such as food, shelter and bill payment, whereas the remaining 25% is dedicated to building more secure and independent futures through better education, improved health, savings and investing in assets and income generating activities. We used estimates from the International Fund for Agricultural Development (IFAD) on the proportion of remittances saved or invested as a proxy and assumed that no more than 25% of remittances can potentially serve SDG investment needs.

**Foundations**. Flows channelled from foundations are well documented, because of donor transparency demands. Flows can frequently be tracked per SDG, although their actual impact is more challenging to assess. In 2015, foundations dedicated **US\$ 19 billion** to SDG funding, mainly in the form of grants.<sup>58</sup> Africa received US\$ 1 billion, and all emerging and developing countries (including Africa) twice that amount. Foundations distributed approximately US\$ 112 billion across the different regions and over the 2010 – 2015 period. Breaking this down per SDG, education (Goal 4) received US\$ 37.6 billion, health (Goal 3) received US\$ 36 billion, and peace-building and related impact (Goal 16) received US\$ 12.9 billion.

**Microfinance**. The provision of financial services to unemployed or low-income individuals or groups has been widely encouraged and acclaimed for years, resulting in a continuous rise of aggregated capital deployed to US\$ 102 billion, reaching 132 million clients. It is strongest in South Asia and the Latin America & Caribbean regions, and mostly targets and succeeds with women and rural areas. Microfinance mainly aims to increase financial inclusion, reduce poverty by creating jobs and supporting small and medium-sized enterprises (SMEs) and empowerment of vulnerable communities. We have estimated yearly flows from microfinance institutions at **US\$ 7.5 billion**.<sup>59</sup>

58. SDGfunders/Foundation Center, interactive database (2015)

<sup>55.</sup> OECD institutional investors currently invest 1% on average in infrastructure, emerging market institutional investors currently invest 0.5% on average, and other institutional investors currently invest 1% on average (World Bank Finance & Markets, PPIAF, 2014).

Remittances are defined as cross-border, person-to-person payments of relatively low value. The transfers are typically recurrent payments by migrant workers to their relatives (IFAD, 2017).

<sup>57.</sup> IFAD (2017)

<sup>59.</sup> Portfolio value in 2014 was US\$ 87.1 billion and annual growth for the year 2015 was estimated in a convergence report, Microfinance Barometer 2017 to be 8.6% (Convergence, 2017).

#### iii. Alternative financial institutions

**Private equity.** In 2015, private equity<sup>60</sup> funds raised an aggregate **US\$ 329 billion**.<sup>61</sup> Advanced countries received 88% of this, and emerging and developing countries the remaining 12%. Africa's share of emerging and developing countries private equity allocation is 11% or US\$ 4.5 billion (considerably more than microfinance). Data on the social, economic and environmental impacts of private equity investments is generally not publicly available, so we cannot fully appreciate the impact of private equity on the SDGs. We therefore arbitrarily assume that private equity could potentially allocate 25% to SDG investments. Looking forward, some expect private equity to play an increasingly important role in Africa, given growing appetite for risk, expertise of local markets and a move towards more sustainable and impactful investment.<sup>62</sup>

**Crowdfunding** emerged after the 2008 financial crisis, aiming to provide new sources of seed or early-venture capital to underserved businesses or sectors. It is more developed in advanced countries and is still emerging in other markets and Africa. In 2015, the crowd-funding industry raised **US\$ 34.7 billion** in total,<sup>63</sup> US\$ 24 billion in advanced countries and US\$ 10.7 billion in emerging and developing countries, only US\$ 24 million of which in Africa. Lending accounted for 73%, grants and donations for 20% and equity 7%. The World Bank (2013) estimates that up to 344 million households in the developing world have the means to deploy up to US\$ 96 billion<sup>64</sup> a year by 2025 in crowdfunding investments. It is unclear how exactly crowdfunding contributes to SDG investments. Nearly 80% of funds raised in 2014 served businesses and entrepreneurs, social causes and real estate. However, because the essence of crowdfunding is to provide finance to underserved categories, we consider that the entire flow raised contributes directly to the SDGs.

# **CONCLUSION & OUTLOOK FOR PRIVATE FINANCIAL FLOWS**

Just like public financing flows, private financing flows serving the SDGs are difficult to identify: they are not consistently monitored and there are important data gaps. With that in mind, our review leads us to estimate **annual private financing flows** at **US\$ 1.9 trillion** (figure 14). This is more than public flows but still considerably below the level of incremental SDG investment needs.

As with public flows, it is apparent that advanced economies receive far more private finance than emerging and developing countries, the African continent receiving the least of all. We have seen that even blended finance, a tool promoted by development institutions, is considerably lower in developing countries and in Africa than in more prosperous parts of the world. Interestingly, the largest financial flows are perhaps not where one would expect them. In advanced countries, institutional investors are playing a key role in unlocking more private finance towards SDG investments. In emerging and developing countries, remittances and FDIs appear to be the most important private flows. While those external flows have steadily increased over the past years, it remains to be seen whether their scale (in billions) can truly address the SDG financing gap (in trillions).

<sup>60.</sup> Private equity is capital provided by retail and institutional investors directly invested in private companies.

<sup>61.</sup> Preqin (2017)

<sup>62.</sup> PwC (2016)

<sup>63.</sup> Massolution (2015)

<sup>64. &</sup>quot;These households have an income of at least US\$ 10,000 a year, and at least three months of savings or three months savings in equity holdings" (infoDev/World Bank, 2013).

**Figure 14:** Private finance serving SDG investment needs - advanced vs emerging markets & developing countries- and Africa (in US\$ trillions)

Private finance serving the SDG investment needs



Source: Authors' analysis based on World Bank data (2015)

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# GLOSSARY

#### **Blended finance**

According to the World Economic Forum (2015), blended finance is the "strategic use of development finance and philanthropic funds to mobilize private capital flows to emerging and frontier markets". OECD (2018) defines blended finance as "the strategic use of development finance for the mobilisation of additional commercial finance towards sustainable development in developing countries".

## CCTV

Closed-circuit television, or the use of video cameras to transmit images to a specific limited number of screens on a close network, for example for safety or traffic monitoring purposes.

#### Crowdfunding

An Internet enabled way for businesses or other organizations to raise money in the form of either donations or investments from multiple individuals.<sup>65</sup>

#### Divestment

Avoiding and disposing of investments in specific types of assets for financial, ethical or political purposes. A report states that 430 institutions and 2,040 individuals have committed to divesting a total of US\$ 2.6 trillion (0.04% of total equity market of US\$ 69 trillion) in coal, tar sands and other polluting assets (Arabella Advisors, 2015). Arabella Advisors (2016) reports an increase to US\$ 5.2 trillion for 688 institutions and 58,399 individuals. What percentage is allocated or reallocated to SDG investments is not being monitored.

#### **Export Credit**

An export credit is an insurance, guarantee or financing arrangement which enables a foreign buyer of exported good and/or services to defer payment over a period of time. Export credits are generally divided into short-term, medium-term (usually two to five years repayment) and long-term (usually over five years). As defined by OECD.<sup>66</sup>

#### **Financial flows**

A measure of dedicated or committed amount of finance related to a set period.

#### Financing gap

The difference between the investments needed to meet the SDGs (SDG investment needs) and the associated level of financing (SDG financial flows).

### Foreign Direct Investment (FDI)

An investment made to acquire lasting interest in enterprises operating outside of the economy of the investor.<sup>67</sup>

#### Foundations

Non-profit organizations that provide or donate funds for charity purposes.

#### Impact

Impact is used here as a generic term to refer to the change effected by an activity or entity on people, the environment and the economy.

#### Impact-based business models

Business and financing models where the delivery of positive impacts is a main driver of business.

#### Impact investing

An investment approach with intentional social and environmental objectives and spanning both market rate and concessionary approaches to financial returns. Impact investing has grown considerably over the past years. In 2015, the GIIN annual survey reported US\$ 15 billion of new committed capital to impact investments.<sup>68</sup> Impact investment represented US\$ 77 billion in AUM in 2015, with Sub-Saharan Africa absorbing 19% of the AUM<sup>69</sup> according to a Ferdi study (2016). According to the same study, microfinance is a key sector for impact investment, representing 32% of assets managed, contributing to SDG 1 & 9. While impact investment is gaining in popularity (US\$ 22 billion US\$ invested in 2016), flows are mostly to OECD and donor countries, with investors more cautious about riskier developing markets.<sup>70</sup>

#### (Incremental) Investment needs

Investments needs are a measure of total investments needed to meet the SDGs. Different from financing gap (see definition above). Incremental investment needs are a measure of investments needed to meet the SDGs when existing investments have been accounted for.

- 66. OECD definition
- 67. UNCTAD (1993)
- 68. GIIN (2017)
- 69. I&P and Ferdi (2016)
- 70. GIIN (2017)

<sup>65.</sup> infoDev/World Bank (2013)

#### Official Development Assistance (ODA)

Loans made on concessional terms and grants by Development Assistance Committee (DAC) and non-DAC countries towards ODA recipients' countries.

#### Pay For Success (PFS)

This approach mobilizes private capital in social programs to address issues (recidivism, housing, youth unemployment, health and education) that traditionally rely on philanthropic or government funding, and thereby shift financial risk from service providers to investors. PFS contracts are known as Social Impact Bonds (SIBs) or Social Development Bonds (SDBs). Private capital is provided upfront to support social programs and is repaid by an outcomes payer (government, MDB or DFI respectively) only if contractually predetermined performance outcomes are achieved. These public-private partnerships are designed to deliver long-term social impacts and simultaneously provide a fair risk return to financial institutions; however, with limited applicability (complex frameworks, no fixed guidelines for impact assessment) and long-term scope, it is reaching only a modest market with an estimated US\$ 392 million raised for 108 projects over seven years. In 2017, two social impact bond issues targeted Africa for a total of US\$ 29 million.71

#### **Private equity**

Capital provided by retail and institutional investors invested directly or via funds in private companies. Preqin (2017) estimated the aggregate capital raised in private equity at US\$ 329 billion.

#### Remittances

Cross-border, person-to-person payments of relatively low value. The transfers are typically recurrent payments by migrant workers to their relatives (IFAD, 2017).

#### Specialised lending

Distinct from standard lending because loans either restrict use of funds towards a project with a specific objective, or to pursue an evolution of the borrower's business model towards a specific objective, in our context towards greener or sustainable practices or products and services. Green loans are an increasingly widely recognised example of the first type of specialised lending, linking loan issuance with financing "green" projects such as energy efficient real estate or renewable energy. Certain products link interest rates or even ongoing financing to sustainability performance.

#### Sustainable development

Economic development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

#### Sustainable finance

Finance that seeks alignment with sustainable development targets and policies.

#### Sovereign Wealth Funds (SWFs)

State-owned investment funds or entities that are commonly established from balance of payments surpluses, official foreign currency operations, the proceeds of privatizations, governmental transfer payments, fiscal surpluses, and/or receipts resulting from resource exports (SWF Institute). SWFs report their data in terms of stock of investment (AUM). SWFs weigh US\$ 4 trillion in AUM.<sup>72</sup>

#### Green bonds

These ring-fence use of proceeds to green entities and projects, usually related to renewable energy and energy efficiency.<sup>73</sup> 2016 saw a record issuance of US\$ 87.2 billion<sup>74</sup> of 'labelled' green bonds, up from US\$ 42 billion in 2015 and an even higher figure for 2017 global issuance reached US\$ 155.5 billion.<sup>75</sup> Including 'climate-aligned' bonds (a broader definition of bonds used to finance low carbon and climate-resilient infrastructure), green bond issuance was estimated at US\$ 694 billion in 2016. Despite the significant growth, the larger figure represents less than 0.5% of global bond markets (US\$ 150 trillion). Private sector issuance still lags the public sector: in 2016 over 60% of outstanding bonds were issued by public entities.

#### Themed indices

Indices that "tag" corporate contributions to sustainability themes, such as carbon emissions or the SDGs.

73. Climate Bonds Initiative (2015)

<sup>71.</sup> Social Finance, interactive database (2017)

<sup>72.</sup> Schwartz (2015)

<sup>74.</sup> Climate Bonds Initiative (2015)

<sup>75.</sup> Climate Bonds Initiative (2018)

# **ABBREVIATIONS AND ACRONYMS**

ADB	Asian Development Bank	IFC	International Finance Corporation
ADFB	Abu Dhabi Fund for Development	IFU	Investeringsfonden for Udviklingslande
AfDB	African Development Bank	IIRC	International Integrated Reporting Council
AIIB	Asian Infrastructure Investment Bank	ISDB	Islamic Development Bank
AUM	Assets Under Management	JICA	Japan International Cooperation Agency
BIO	Belgian Investment Compa-	JBIC	Japan Bank for International Cooperation
	ny for Developing Countries	MDBs	Multilateral Development Banks
BMI-SBI	Belgian Corporation for In-	MDGs	Millennium Development Goals
	ternational Investment	NADB	North American Development Bank
BRICS	Brazil, Russia, India, China and South Africa	NIB	Nordic Investment Bank
CAF	Corporaction Andina de Fomento	ODA	Official Development Assistance
COFIDES	Compañía Española de Financiación del Desarrollo, COFIDES, S.A., S.M.E.	OECD	Organisation for Economic
DAC	Development Assistance Committee		Co-operation and Development
DEG	Deutsche Investitions- und En-	OeEB	Oesterreichische Entwicklungsbank AG
DEC	twicklungsgesellschaft	OFID	OPEC Fund for International Development
DFIs	Development Financial Institutions	OPIC	Overseas Private Investment Corporation
EBRD Euro	European Bank for Reconstruc-	SDGs	Sustainable Development Goals
	tion and Development	SIFEM	Swiss Investment Fund for Emerging Markets
EIB	European Investment Bank	SMEs	Small and medium-sized enterprises
EMDE	Emerging Markets and Developing Economies	SOFID	Sociedade Para O Financiamen- to Do Desenvolvimento
ETDB	ECO Trade And Development Bank	SWEs	Sovereign Wealth Funds
FDI	Foreign Direct Investment	TCFD	Task Force on Climate-relat-
FMO	Nederlandse Financierings-Maatschap-		ed Financial Disclosures
	pij voor Ontwikkelingslanden N.V	UCLG	United Cities and Local Governments
GDP	Gross Domestic product	UNCTAD	United Nations Conference on
GIIN	Global Impact Investing Network		Trade and Development
GNI	Gross National Income	UNEP FI	The United Nations Environment
GRI	Global Reporting Initiative		Programme Finance Initiative
IBRD	International Bank for Recon- struction and Development	SDSN	Sustainable Development Solutions Network
ICMA	International Capital Market Association	WBA	World Benchmarking Alliance
IDA	International Development Association	WEF World Economic Forum	
IDA	Inter-American Development Bank		
	ווונט-אווטרגמון שפיפוטטווופווג שמווג		



UN Environment – Finance Initiative is a partnership between UN Environment and the global financial sector created in the wake of the 1992 Earth Summit with a mission to promote sustainable finance. More than 200 financial institutions, including banks, insurers, and investors, work with UN Environment to understand today's environmental, social and governance challenges, why they matter to finance, and how to actively participate in addressing them.

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# °IMPACT

UNEP FI's Positive Impact Initiative explores solutions to the financing gap for sustainable development and the Sustainable Development Goals (SDGs). The Initiative helps move the financial sector towards a more thorough and deeper integration of impact analysis in decision-making. This improved understanding of impacts will ultimately also drive more impactful business models and investments. Based on the Principles for Positive Impact Finance, lenders and investors and a range of stakeholders are building on existing impact frameworks to develop guidance and tools for holistic impact analysis across a range of financing instruments. The Initiative is also engaging with the public sector to explore impactbased requests for proposals which can stimulate the private sector to develop impact-based business models. The initiative is championed by a core group of UNEP FI Members and a wide group of other stakeholders in the public and private sectors.

We invite all stakeholders to participate in UNEP FI's Positive Impact Initiative to collaborate on best practice and help build the impact ecosystem. For more information::

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