

**UN System Task Team on the Post-2015 UN Development Agenda
Working Group on “Financing for sustainable development”**

Executive Summary

The working group of UNTT on Financing for Sustainable Development was set up to inform the ongoing deliberations on the United Nations Development Agenda beyond 2015, as well as to provide background work for the Intergovernmental Committee of Experts on Sustainable Development Financing.

The working group is to produce background material on financing for sustainable development, taking as much as possible an integrated perspective that addresses social, environmental, and economic dimensions. This work reflects the state of knowledge on specific areas, based on existing work of UN agencies.

Key insights of the ongoing analytical work reveal:

- (1) *Financing needs for sustainable development are enormous.* Different estimates of financing needs all confirm that there are large requirements across all critical sectors. For example, investment requirements for an energy transition respecting agreed climate targets are of the order of trillions US\$ per year. However, some caveats are in order: estimates are necessarily imprecise, highly dependent on assumptions that are often subjective, and suffer from aggregation problems as approaches and methodologies often differ across countries.
- (2) *Financing needs represent a relatively small portion of annual global savings,* estimated to be around \$17 trillion, as of 2012. Global financial assets are estimated at around \$218 trillion.¹ Redirecting a small percentage of this investment toward sustainable development could thus have an enormous impact.
- (3) Both *private and public financing from domestic and international sources* are necessary, and both need to be effectively exploited to fill the large financing gap. Generally, public and private resources serve development goals better if they are *seen as complements rather than substitutes*, as each type of financing has unique objectives. The private sector is profit oriented, and although there are growing pockets of socially responsible investing, it will not on its own invest in areas of global concern that are unattractive on a risk-reward basis.
- (4) With regard to *private financing*, it is important to recognize that:
 - International institutional investors, which hold \$75 to \$85 billion in assets, are a critical source of financing for sustainable development. Yet their investment to date has been limited, in part due to a weak enabling environment, as well as general market failures, particularly with respect to low-carbon technologies.
 - Moreover, for international institutional investors to finance long-term sustainable development on a large scale, there need to be changes in financial market incentives. In particular, misaligned short-term incentives – particularly by financial intermediaries – impede long-term investment and increase systemic risks.

¹ IMF, *World Economic Outlook 2012*

- Furthermore, in many developing countries an institutional investor base largely has yet to be developed. The challenge lies in building a domestic institutional investor base with a long-term investment horizon.
 - Domestic financial systems also have to ensure inclusivity, providing access to poor households and small and medium enterprises, since these enterprises are critical for sustainable growth and development.
- (5) Overall, policies to facilitate investment need to take a multi-faceted approach, including: (i) *reducing risks* by creating an enabling environment; (ii) *sharing risks* to leverage private resources with public funds; (iii) *restructuring investor incentives* to reduce short-term oriented behaviour; and (iv) *balancing regulations* to ensure financial sector stability with access to credit and financial services.
- (6) Ensuring long-term investment and credit for sustainable development will increase financial stability. *Stability and sustainability are therefore mutually reinforcing.*
- (7) *Public financing* on the national, regional, and international levels is indispensable for reducing poverty and achieving global goals, such as the MDGs, as well as for financing public goods.
- For developing countries, and in particular for the most vulnerable among them, ODA remains critical. Yet, ODA has been falling in real terms, notably for least developed countries, landlocked developing countries and small island development states, and for Sub-Saharan Africa. South-south cooperation has increased, but should not be seen as a substitute for ODA. Innovative sources can also raise additional resources. Donors need to deliver on their commitments, particularly for the most vulnerable countries, and increase coordination; while recipient countries need to develop a structured approach to managing diverse financing sources.
 - ODA is increasingly looked toward to leverage private finance. In addition, the share of financing for global public goods has increased substantially. While there are large overlaps between financing for poverty reduction and for public goods, the challenge lies in ensuring that traditional ODA for poverty reduction and development cooperation is not crowded out.
 - Domestic public finance is a critical component of resource mobilization for sustainable development. There is a significant gap between the capacity of developed and developing countries to raise public revenues. On average, tax to GDP ratios are 13 per cent in low income countries compared to 35.4 per cent in OECD countries. A challenge lies in designing policies to scale up tax revenues in the poorest countries. Tackling illicit financial flows can also play an important role in mobilizing public sector resources.
 - Ultimately, domestic resource mobilization will come from domestic growth. Macroeconomic and other policies are crucial, as is a global enabling environment which allows for necessary policy space.
- (8) Comprehensive carbon pricing policies, such as carbon taxes or emissions trading combined with the auctioning of allowances are viewed as a promising option to mobilize larger low-carbon investments. To date, climate and other environmental financing have evolved largely on a separate track from conventional development finance. However, *a comprehensive financing strategy will need to integrate all the dimensions of sustainable development into mainstream financing.*

1. Financing Needs

Estimating financing needs represents conceptual and practical challenges

Getting a clear picture of the financing needs for sustainable development in the future presents considerable conceptual and practical challenges. First, in order to quantify “needs”, clear norms or normative targets have to be agreed upon. Different goals and targets give rise to different needs. Costs and investment requirements can be defined only with respect to a counterfactual situation or baseline. A clear understanding of the baseline is critical to interpret the needs estimates. The critical question of the choice of goals and targets for sustainable development pathways is not addressed directly here. However, it conditions any assessment of financing needs. Importantly, different sustainability goals are associated with different time frames, and this has implications in terms of sequencing of investment and financing needs.

A transition to sustainable development would involve concerted action in a range of sectors. There are many interdependencies, synergies and trade-offs across sectors, which affects investment requirements and financing needs. In particular, there may be co-benefits or negative side effects among policies and actions taken in different sectors. Estimates from different sectors obtained in isolation generally cannot be added up due to double counting, inconsistency, and difficulty in accounting for cross-sector impacts. To the extent possible, estimates of investment requirements or “needs” would have to be obtained from integrated models. However, the coverage of the existing models is far from spanning the range of areas relevant for sustainable development.

The quality of investment is as important as its amount

For sustainability purposes, the quality of investment (what technologies and services are invested in, for example, for energy infrastructure or agriculture) is as important as the amounts of investment. Yet, the extent to which the qualitative dimension is captured by existing models and studies is highly variable.

There is a further conceptual gap between “investment needs” and “financing needs”. The latter incorporate the dimensions linked with the practical mobilization of finance for specific projects and programmes. Those are usually not examined in models that produce investment needs.

Lastly, depending on the context, barriers related to financing may not be the most critical obstacle to investment that is compatible with sustainability goals. National policy environments, both at the sector level and economy-wide, as well as international rules, norms and standards, may be as important to address. Yet this dimension is not factored in most quantitative models. The way international development aid is delivered can also importantly impact financing requirements. Efficient mechanisms for providing development assistance can reduce costs while producing positive outcomes faster and at a lower price tag. Alternatively, inefficient mechanisms for providing development assistance can vastly increase the costs while delaying or deterring progress.

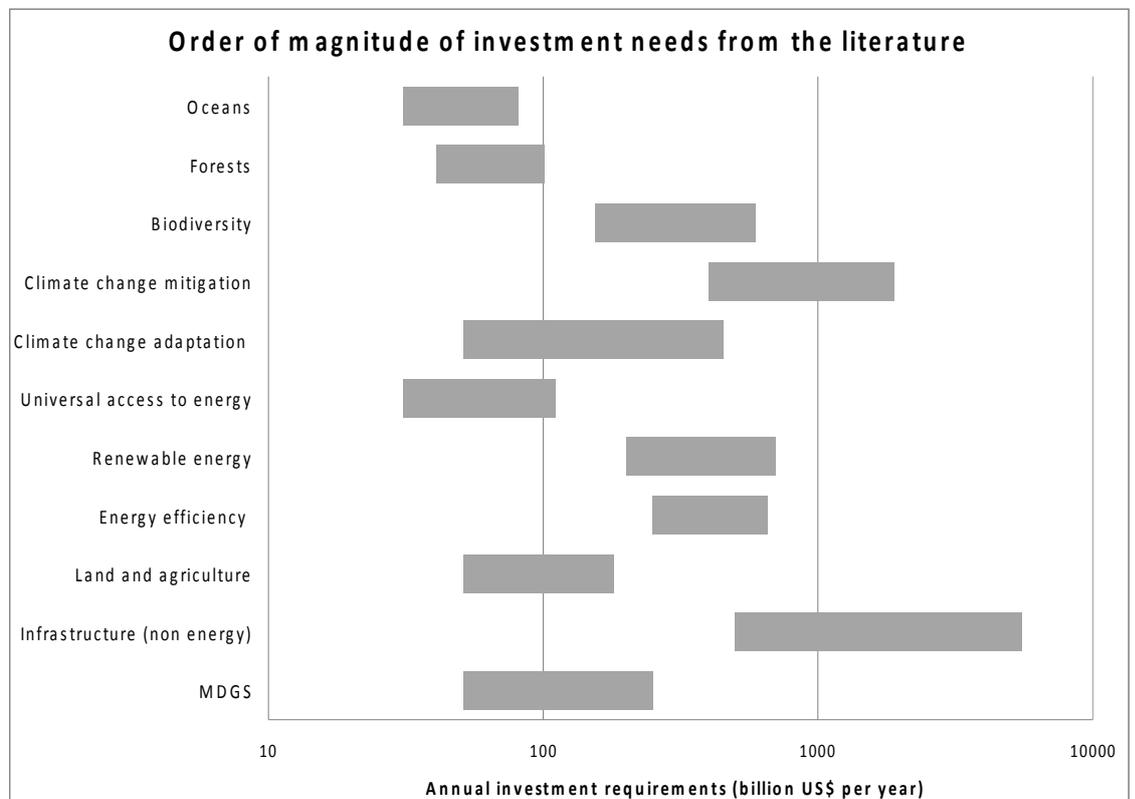
Estimates generate huge numbers, without exception

Within each of the clusters or sectors examined here, the range of published estimates is wide, reflecting differences in data, scope, methodologies, baselines, and other factors including sheer uncertainty. Important gaps or dimensions are not well covered by existing estimates, including for peace and security and disaster risk management. In other clusters the existing picture is partial at best (for example, oceans and tourism).

Investment requirements for the energy transition respecting agreed climate targets are huge, of the order of trillions US\$ per year. Overall, the order of magnitude of the investment requirements for “climate-compatible” and “sustainable development” scenarios (which include goals and target related to climate) are of the order of several trillions per year.

Investment requirements for MDGs and other related goals (e.g. universal access to electricity) are one order of magnitude lower than those related to climate change mitigation. The opportunity cost of achieving those goals would seem to be low, regardless of which other goals are adopted. The order of magnitude of estimated investment requirements for the management of global commons (biodiversity, oceans, and forests) is several tens to hundreds of billion dollars per year.

The most comprehensive assessments indicate trade-offs and synergies among areas and clusters. However, there is no agreement among models on the implications of those trade-offs and synergies for investment requirements and financing needs.



Source: Authors' elaboration.

The financing needs of LDCs, LLDCs and SIDS, in particular, are considerable, especially compared to their GDP. There is some scope for increasing government revenues in these countries, but together with current ODA levels this will not be sufficient to cover the financing needs of the most vulnerable countries, especially for infrastructure. The fulfillment of ODA commitments therefore remains critical, as does an increased role by the private sector.

2. Private sector resources for sustainable development

The private sector consists of a complex web of providers of capital (such as pensioners and households or corporations), financial sector instruments (such as bonds and equities), institutional intermediaries (such as pension funds and hedge funds) and end investments (such as real estate, infrastructure, and others). Some financing is direct, such as corporate direct investment, but much financial flows are routed through intermediaries.

Institutional investors could finance sustainable development...

International institutional investors, in particular, who are estimated to hold between \$75 and 85 trillion in assets, have been looked to as a potential source of financing for sustainable development. This is particularly the case since pension and other funds, such as sovereign wealth funds, have relatively long duration liabilities that are suitable for long-term investment. Infrastructure investment should be particularly attractive to some of these investors because of its stable real return profile.

...but their investment is limited so far

However, investment by international institutional investors in ‘gap areas’, such as infrastructure, SMEs, innovation, and climate financing, remains limited in both developed and developing countries. For example, direct investment in infrastructure globally represents less than one per cent of pension fund assets.² There are several reasons for this shortfall in long-term investment, including regulatory uncertainty, and weak legal frameworks and governance on a country level, as discussed in more detail below. However, it is notable that investment in these areas is insufficient in both developed and developing countries – across a wide range of policy and regulatory regimes – albeit to different extents.

More broadly, institutional investors have exhibited a short-term outlook in much of their investment, which is reflected in both the volatility of international capital flows to developing countries, as well as in developed country capital markets. In the United States, for example, the average holding period for stocks fell from about eight years in the 1960s, when investors were more long-term oriented, to approximately six months in 2010. The longer-term investment horizon necessary for sustainable development would ultimately also increase financial market stability.

² United Nations, 2013, *International Financial System and Development*, Report of the Secretary-General

Nonetheless, a recent trend by some institutional investors, and by pension funds in particular, is an increase in investment in “alternative asset classes”, such as private equity (PE), hedge funds, venture capital (VC), real estate, and infrastructure, seemingly indicating a growing allocation to less liquid and longer-term investments. Since many funds lack internal expertise to invest directly in these areas, much of this growth is being allocated through secondary intermediaries, such as private equity and hedge funds. While these structures play important roles in financing, they are *not* well-suited as vehicles for pension funds and other longer-term investors. In particular, the chain of intermediaries increases ‘principal/agent’ problems, with incentives increasingly less aligned with the goals of the initial investor, as well as with public goals.

Policies should focus on improving the enabling environment while also addressing misaligned and short-term incentives

Misaligned incentives, such as short-term oriented compensation packages, high portfolio manager mobility, and other institutional factors,³ present impediments to long-term stable investment. Without changes in incentives, it is unlikely that institutional investors will fully contribute to financing needs for sustainable development. The way forward will require both a top-down approach (regulatory reforms for institutional investors) and bottom-up private sector responses.

With regard to the latter, a number of major sustainable finance initiatives have sprung up and expanded over the past 20-30 years. Their activities include (i) the development of standards and principles to help financial institutions adopt sustainable principles; (ii) research into how an emphasis on sustainable development can have a material impact on the financial sector; and (iii) awareness raising and capacity building and public policy advocacy for a paradigm shift in financial markets.

However, despite some significant achievements and major breakthroughs, sustainable finance practices are still far from mainstream, and their adoption is driven by corporate decisions and initiatives. In 2009, for example, a mere 7 per cent or USD 6.8 trillion of investments in the massive USD 121 trillion global capital market was subject to sustainable environmental, social and governance (ESG) considerations.⁴ To further increase the impact of sustainable finance initiatives, financial institutions could (i) foster sustainability considerations at all levels, including at the Board and senior management levels; (ii) adopt and implement sets of sustainable finance principles relevant for their industries; (iii) increase reporting on the ESG impacts of their operations; and (iv) limit ‘short-termism’ institutionally and promote more long-term and sustainable financing, by changing incentives, such as discussed above, and by further including sustainability objectives in compensation packages.

³ Compensation packages are often characterized by asymmetric returns, in which managers have an enormous potential upside monetary gain, but no downside penalty when losses are realized. Other institutional factors include managements incentives to keep high stock prices for publicly traded management companies.

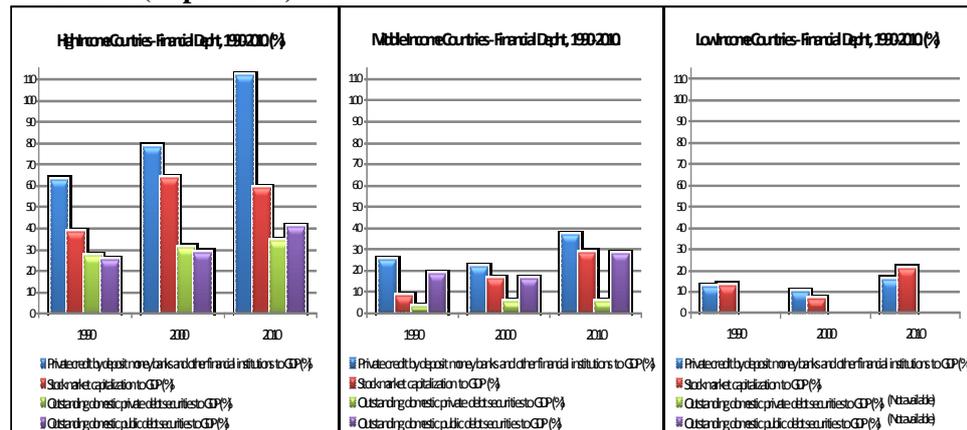
⁴ UNEP, 2011, *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*

Financial sector development in developing countries

Prudent and well-sequenced financial sector development is crucial for developing countries...

Financial systems in developing countries tend to be dominated by banks, whose financing is generally short-term in nature and not well suited for covering firms' longer term financing needs for investment projects. Bond markets are in general mainly composed of sovereign issues. Equity markets are little developed in a majority of developing countries and in general remain limited to—and concentrated in—a small number of large firms.

Figure 1. Depth of selected financial system components by income groups, 1990-2010 (in per cent)⁵



Source: ECLAC, Financing for Development Division on the basis of Global Financial Development Database, World Bank, April 2013.

Deeper capital markets could provide a conduit for the long-term investment necessary for sustainable development. However, while longer-term instruments are important *facilitators* of long-term investment, such instruments do not necessarily indicate a long-term investment horizon necessary for sustainable development. This is partially because investors can sell long-term instruments in secondary markets. Few businesses need only one round of investment. Additional capital is often needed for working capital, follow-on and new investments, and so forth. By raising the cost of capital, short-term secondary market fluctuations can impact the very survival of the firm, as happened during the most recent financial crises, as well as during the emerging market crises in the 1990s. This is particularly important in the context of developing country markets, since without long-term investors, these can fuel volatility in the real economy, rather than contributing to long-term growth.

...but needs to be developed along with a long-term domestic investor base

A domestic institutional investor base, including domestic pension funds, could provide a more stable source of investment. The presence of institutional investors in developing countries is still significantly lower than in high-income countries, with pension fund assets at around 8 per cent of

⁵ The banking system depth is measured as the stock of private credit (by deposit money banks and other financial institutions) in percent of GDP, the equity market depth is measured by the stock market capitalization with respect to GDP and the domestic bond market depth is measured by the stock of outstanding domestic public and private debt securities, as a percentage of GDP.

GDP, and insurance company premiums at around 4 per cent of GDP.⁶ In major developed country markets, pension assets range from 70 per cent to over 100 per cent of GDP.⁷

Furthermore, in many cases, the contribution of domestic institutional investors to the development of markets for long-term financing of productive development has been limited, as they have invested large portions of their portfolio in bank deposits and public bonds rather than in equity or corporate bonds. Moreover, even in developed markets, institutional investors do not necessarily invest with a long-term investment horizon, as discussed above. This implies that having institutional investors that manage large volumes of savings is not enough to ensure the channeling of such savings towards productive development in the domestic economies. Specific policy action is needed in order to provide the adequate incentives to these agents so that they channel their investments in accordance to national development objectives.

Inclusive Finance

Financial inclusion is critical for sustainable growth and development

In developing countries only 55 per cent of the population on average have an account in a formal financial institution. Affordable access to savings accounts, payments, credit, insurance and other financial services can help people generate income, manage irregular cash flow, invest in opportunities, and strengthen resilience to shocks.

Similarly, access to finance by SMEs constitutes a key policy concern among economies across the world since these enterprises are critical for sustainable growth, development and employment generation at the worldwide level. Institutional investment in SMEs has been limited, in part because the low expected returns on the investment relative to the amount of work required, given the small size of each deal. In addition, onerous collateral requirements have reduced lending by banks. Furthermore, bank financing has fallen in recent years however, and remains limited in many countries.

Specific reforms depend on the local context and may take different shapes given the different levels of development and policy priorities. To facilitate access to credit and bank lending, basic regulatory foundations for property rights are important. These include a framework for business registration, a system that provides unique identification to companies, a framework that permits registering and enforcing interests in collateral to secure credit, and credit rating agencies.

In addition, a challenge lies in designing a regulatory framework that provides access to credit while ensuring the stability of the financial system. As discussed above, there is an important role for public policy here. Support for SME financial inclusion has been in countries' agendas for decades. Governments around the world have used instruments such as guarantee

⁶ IMF, 2013, *Trends in Capital Market Development in Emerging Market and Developing Countries*.

⁷ World Bank, 2013, *Global Financial Development Database*, April 2013

funds, directed lending and interest rate subsidies among many others to promote SME's access to financial services. Here Development Banks can also play an important role through risk-sharing mechanisms. New instruments focused on reducing risks through diversification can complement traditional tools.

Direct investors

Foreign direct investment is an important source for infrastructure investments

Corporations and transnational companies are the primary investors in infrastructure and other direct investments. FDI will likely continue to rise in growing developing economies, where demand remains strong. However, there are still obstacles. First, few financial instruments are available for institutional and other financial investors in developing countries to address the structural characteristics of infrastructure projects – long pay-back periods, large sunk costs and resources needs for project preparation. Second, few infrastructure sectors recover costs in the near term. Third, there is a lack of bankable projects. Many infrastructure projects require significant and costly preparation before they can interest private sector bids. Yet access to financial resources for project feasibility studies is limited. Overall, there is an important role for government. Indeed, around one third of infrastructure financing currently comes from the public sector.

An adequate institutional and regulatory framework is critical

To increase green-field investment, the provision of an adequate institutional and regulatory framework is critical. Potential reforms include the introduction of regulations and the establishment of an independent regulatory agency prior to opening up to FDI. Establishing clear rules for investors and making sure governments are better prepared for engaging in specific projects will help minimize risks for all parties.

The challenges that complicate traditional infrastructure investments are even more salient with low-carbon investments, which have larger up-front costs, significant externalities, dependence on government policies and technology risks. Many of the technologies currently in use have large environmental externalities that are not factored into market prices. Financing is also needed for new and emerging technologies, which carry high risks that are often difficult to measure and price and which involve knowledge externalities. The viability of green projects and investment in new technologies is therefore often dependent on the maintenance of policy support.

3. Public and private sector blended finance, including climate and ecosystem financing, and synergies across instruments and frameworks

The public sector has a critical role in setting goals, building a regulatory environment including establishing clear price signals, and investing in public infrastructure in ways that create conditions for attractive investment risk/return profiles. These conditions are not in place in many countries where a range of institutional, technical, political and financial barriers deter investment.

As discussed above, sustainable development investments can be scaled up either through reducing risks (through fostering long-term policy stability, streamline licensing procedures, and other measures), direct risk-sharing (through co-investment, guarantees and insurances) or increasing rewards (such as premium prices and tax credits).

The bulk of international public funds are used for subsidies

So far, the bulk of international public funds have been used to provide subsidies to the private sector through concessional loans or grants to increase investment reward or risk sharing mechanisms. In recent blended energy projects financed with public support, the rate of subsidization can easily exceed 50 per cent of the project costs — largely eliminating risks for the private investors without fairly compensating tax payers. While this approach has proven effective to demonstrate green technologies and encourage early entrant investors, it is not sustainable over the longer term and cannot promote investment at scale.

Over the longer term, mechanisms that focus on risk-mitigation (i.e. eliminating risks) rather than risk sharing or compensating the private sector can more appropriately ‘crowd-in’ private sector finance. However, improvement of structural conditions for investment often takes time – one or two decades in some sectors, such as clean energy. Thus, it may still be desirable to compensate private investors for extra risks or lower returns compared to other investment opportunities during this transition. This nevertheless, should be based on a cost effective analysis of various mix of risk mitigating, risk sharing and compensation instruments. Such an analysis will determine the efficiency of blended finance for sustainable development.

Coverage and consistency of Climate and ecosystems financing

The landscape of global public funds is complex and inefficient, while many funds remain underfunded

The international community has responded to the existing scarcity of public finance for sustainable development by increasing North-South public finance transfers for climate change and ecosystem finance activities over recent years. By pledging \$30 billion in climate change finance by 2012 and up to \$100 billion annually by 2020, governments have ushered in a new era of funding for climate change. Only ten years ago, climate finance was managed by a small number of large funds associated with the United Nations Framework Convention on Climate Change (UNFCCC) process. Since then, there has been an explosion of public, private, bilateral and multilateral sources with over than fifty international public funds (multilateral and bilateral), 55 carbon pricing mechanisms and countless equity funds in operation.

For example, governments have designed and reformed institutions such as the Global Environment Facility (GEF), the Adaptation Fund (AF), the Climate Investment Funds (CIF), and most recently the Green Climate Fund (GCF), as well as new evolving financial mechanisms such as performance-based payments for reducing emissions from deforestation, degradation, and forest conservation (REDD+), as well as carbon crediting and trading schemes, and water funds.

Developing countries have increased public spending on climate change

In addition, developing countries have increased their own public spending on climate change and ecosystems activities, including through national budgets and national climate and biodiversity funds. Pilot Climate Public Expenditure and Institutional Reviews (CPEIRs) conducted by UNDP in Asia and Africa revealed that Governments are already allocating from 3 per cent to 15 per cent of their budget to climate change-related expenditures. An increasing number of developing countries are establishing national biodiversity trust funds and national climate funds to complement budgetary allocations. Several of these funds are capitalized from innovative sources of finance such as a levy on fuel exports or a two per cent levy on the proceeds of certified emission reduction issuances under the Clean Development Mechanism, which are dedicated to the Adaptation Fund (See section 4).

The diversity of climate finance is easily matched by biodiversity finance. Several international public funds have also been established to support biodiversity conservation. Furthermore, biodiversity managers are exploring a wide range of innovative mechanisms to generate revenue and to carry out their mandate, including resource user fees, payment for environmental services, biodiversity and carbon offsets, benefit-sharing/revenue sharing schemes, and certification mechanisms.

However, this apparent luxuriance masks the under-capitalization of most of these new funds. Rather than reflecting the need to manage exponentially increasing resources, the development of new financing instruments appears as a sub-optimal response to an unresolved financing gap. By some estimates global funding would need to increase by at least an order of magnitude to meet international biodiversity targets. Similar situations prevail in several climate and water sub-sectors.

In addition, an unintended consequence of the luxuriant financial landscape for sustainable development is a dramatic increase in complexity. Requirements, processes and reporting differ markedly among the new funds and instruments. Countries are faced with the tasks of identifying which funds are appropriate for them and are currently capitalized, how to access resources, how to blend them to support transformative change and how to develop cost effective methods to monitor and evaluate results.

Only adequate capitalization of existing funds will reduce complexity

The coming years are likely to see a continued increase in the complexity of sustainable development finance as environmental aid is increasingly provided through bilateral channels. The proliferation of financing instruments has attracted increasing attention within international policy discussions on sustainable development finance. In particular, the UNFCCC established the Green Climate Fund to manage a “significant share” of these resources and reduce the fragmentation of the international climate finance architecture. Similar efforts are attempted for other global commons, with ongoing discussions on a global fund for forests as well as the establishment of the Global Partnership for Oceans Fund. However, history indicates that many of the funds created in multilateral processes have been inadequately financed. Ultimately, the only way to reduce the increased fragmentation and

complexity of sustainable development finance is to ensure an adequate capitalization of existing funds.

Carbon markets are often regarded as one of the most promising mechanisms to scale up private investment in climate change, and regional, national and sub-national carbon pricing initiatives are proliferating. However, the present economic downturn in most OECD countries has led to a significant reduction in industrial activity and demand for carbon allowances. As a result, offset carbon prices have been plummeting since mid-2011. Kyoto offsets are currently being traded at a few Euro (€) cents,¹ while EU Allowance (EUA) prices fell from about €30 in mid-2008 to lows of below €4 in early 2013, substantially less than what is needed for a transition to a sustainable, low-carbon world and for scaling up investment in clean energy in developing countries. Carbon markets are likely to remain plagued by uncertain prices for several years. Outside the Kyoto Protocol, no decisions are expected on new international emissions reduction targets or new carbon market mechanisms before 2015, making implementation impossible before 2020.

Synergies across instruments and frameworks

Integrated solutions can leverage synergies and reduce financing needs

Sectors relevant to sustainable development are deeply interconnected and solutions (in terms of e.g. public and private investment paths and related policies) focusing on individual sectors lead to missed opportunities and substantially higher costs. By contrast, integrated solutions can leverage synergies and substantially reduce financing needs. For example, the total amount required to protect wetlands could be reduced by an order of magnitude if perverse incentives in other sectors that encourage conversion of wetlands could be reformed.

In theory, integration per se should not necessarily be an issue for financing. Scoping and planning could be done in an integrated manner; when socially adequate solutions are found, the corresponding investment requirements and preferred packages of policies in support of those investment paths could be identified. Investment requirements could in turn be allocated back to their sector of origin, and funding solutions devised based on access to different sector-targeted sources.

Unfortunately, a wide range of barriers currently discourages the tighter integration of sustainable development efforts. International agreements, targets and financial commitments are organized by sector. Institutional settings at the national level remains based on sectors. Decisions are made by different communities. These different actors operate across different spatial, temporal and institutional scales. They manage different budgets, and sometimes compete with one another for resources. Furthermore, in many countries capacity for integrated planning and engineering at all levels remains limited.

This sector-oriented silo approach further influences the coverage, coherence and consistency of international public financing frameworks for sustainable

development. It leads to (i) a fragmentation of international, regional and national funding instruments, channels, agents and initiatives; (ii) unrealistic sector targets at all levels; (iii) missed cross-sector synergies; (iv) incompatible sector policies; and (v) inconsistent fund allocation across sectors.

These sector funding gaps and inconsistencies are compounded by severe regional imbalances. Outside the BASIC countries (Brazil, South Africa, India and China), developing countries have consistently accounted for less than 10 per cent of investment in clean energy over each of the last nine years. Africa accounted for less than 1 per cent of total sustainable development investment, despite its critical importance for global ecosystem service management, notably biodiversity, and its recognized adaptation and energy access needs.

The international community faces several challenges to establish an efficient development cooperation landscape. A major challenge is to use public resources in a truly catalytic and sustainable manner to unlock private investment. Another challenge, as above, is to reduce the complexity, while helping recipient countries navigate this complexity to improve access to funding. A third is to improve its coverage, coherence, consistency, and efficiency. A fourth is to ensure that it provides the additional public resources required to promote sustainable development at scale.

4. Public financing for sustainable development

In areas where private financing is insufficient or entirely absent, both domestic and external sources of public finance – taxation and development assistance – will continue to play a critical role. There are two main areas where public financing is necessary: additional social needs and areas that the private sector does not finance sufficiently due to market failures.

In view of both the large overall financing needs for sustainable development and the unique role that public finance can play, additional public financing will be needed at the national, regional and global level.

National public financing

Many developing countries have made progress in improving their tax ratios in recent years....

In a majority of countries, above tasks are largely funded through mobilization of domestic public resources, mainly from national tax systems. Many developing countries have made progress in improving their tax ratios in recent years. Some countries have achieved sustained revenue increases of 4-5 per cent of GDP over just a few years. These developments reflect increased revenue from the VAT, robust receipts from corporate income taxes, and, to a lesser extent, personal income taxes, but also declining trade tax revenues. Nonetheless a significant gap in the capacity to raise public revenues persists between developed and developing countries – on average,

tax to GDP ratios are 13 per cent in low income countries compared to 35.4 per cent in OECD countries.⁸

Developing countries face a range of common challenges in raising resources: sectors that are hard to tax and have weak administrative capacity and compliance habits; weak revenue administration and low taxpayer morale; heavy reliance on multinational enterprises; difficulties in dealing with state-owned enterprises; and pressures on revenue from trade liberalization and international tax competition.

In many developing countries, the extractive industries are a particularly important sector. However, fiscal-regime design for extractive industries is complex. Investments are often characterized by large sunk costs, long time horizons and significant uncertainty over resource prices, rendering the credibility of the investment regime critical to investors. The prominent presence of multinational enterprises in the sector also heightens concerns over tax planning and avoidance in the host country.

In addition, incomes from personal income taxes are generally low and stagnant in developing countries. They are overwhelmingly raised from wage withholding in large enterprises and from public sector employees, and raise between 1 and 3 per cent of GDP. In this regard, tax evasion and avoidance by the very rich could be addressed more forcefully. More effective administrations are necessary to limit opportunities for rent seeking and to achieve greater voluntary compliance to extend the tax base. This entails better risk management and taxpayer segmentation.

It is particularly important to curb illicit outflows of resources. Broadly, two categories of illicit flows can be distinguished – tax-related components such as tax evasion, and proceeds from illegal activities such as the manufacturing, trading and selling of illegal narcotics. Estimates on the magnitude of illicit financial flows vary widely, but they are invariably significant.

Illicit flows have a devastating impact on poorer countries

Illicit financial flows impact both developed and developing countries. However, the impact of the flows differs across countries. A few developed countries, especially those hosting financial centres, may enjoy net benefits from illicit flows, despite losses in tax revenues. But even many developed countries are net losers, and illicit flows have a devastating impact on poorer countries. They not only drain resources and tax revenues, but also have a negative impact on economic growth and sustainable development (through lower levels of investment) and impact a country's governance system, by undermining monetary, fiscal and other institutions.

Strengthened anti-money laundering measures are needed, as well as mutual legal assistance and exchange of information between countries. The G20 concluded that developing countries should have the information and capacity to collect taxes owed them, and other countries have a duty to help

⁸ IMF, 2011, *Revenue mobilization in developing countries*

them, and therefore endorsed a global model for automatic exchange of information.

Public resources at the regional level

Regional sources of financing can mobilize resources for investment, promote institutional development and provide capacity building

The regional financing architecture comprises development banks, reserve pooling institutions and mechanisms for trade facilitation. Regional development banks place their emphasis on the provision of medium- and long-term resources through investment finance for infrastructure, productive and social development, and for climate change mitigation. They also support countries' counter-cyclical macro mechanisms.

To mitigate external shocks, several regions have also set up regional reserve pooling mechanisms. They include the FLAR in Latin America, the Arab Monetary Fund of the Gulf States and the Chiang Mai Initiative in Asia. These institutions provide balance of payments support during a crisis and thus complement global countercyclical mechanisms. Lastly, regional payment systems such as the Latin America Agreement on Payments and Reciprocal Credits (APRC) contribute to strengthen intra-regional trade flows and cooperation among regional central banks.

Global public finance

ODA remains critical, especially for vulnerable countries

At the global level, official development assistance remains a significant source of financing for developing countries, particularly for those that do not have sufficient access to other financing flows. For many of the most vulnerable countries, including least developed countries, small island development states and landlocked developing countries, ODA in fact remains the largest source of external financing.

Primarily, ODA serves as a means to assisting developing countries in overcoming internal problems, most prominently the eradication of poverty. In this sense, ODA aims to foster equity and help poor countries meet national development goals. However, over time, ODA has increasingly been used to also finance global issues, such as the eradication of diseases and combating climate change, in line with the 'allocative function' of international public finance.

Overall, ODA has been rising since the adoption of the Millennium Declaration and the MDGs in 2000. However, since 2010, when it reached its peak, ODA has fallen for two consecutive years, by a total of 6 per cent in real terms, to \$125.6 billion in 2012.⁹ These negative developments represent a clear retreat from the internationally agreed aid targets. In addition, progress in implementing the aid effectiveness agenda is slow. Out of 13 targets established at 2005 Paris Declaration to be reached by 2010, only one has been met, even though progress has been made towards achieving many of the remaining targets.

⁹ oecd.org/newsroom/aidtopoorcountriesslipsfurtherasgovernmentstightenbudgets.htm

South-south cooperation is expanding

While aid from traditional donors is decreasing, it is estimated that South-South development cooperation – concessional loans, grants and technical cooperation – has reached between \$12.9 billion and \$14.8 billion by 2010.¹⁰ South-south cooperation usually does not contain explicit policy conditions, and in comparison to ODA by traditional donors, it often puts more emphasis infrastructure and productive sectors rather than on poverty alleviation or fulfilling social needs. Expanding South-South cooperation may help to cushion the fall in aid receipts from traditional donors, but nonetheless should not be seen as a substitute for traditional aid flows.

Innovative mechanisms have so far raised only a modest amount of resources

Lastly, innovative sources of development finance have been increasingly discussed in view of shortfalls in ODA, the perceived lack of stability and reliability of aid flows, and the large financing needs for sustainable development. A significant number of such mechanisms have been implemented over the last two decades. So far, they have raised and/or intermediated only a modest amount of resources. Moreover, most IDF mechanisms, such as the airline tax, are counted in donor budgets as ODA. It is therefore difficult to assess how much of it can be considered additional to traditional aid. At the same time, a number of proposals of IDF are both technically feasible and have significant potential to raise revenues. They include internationally agreed taxes, such as financial and currency transaction taxes and carbon taxes, which can be levied domestically, but allocated for international purposes. Nonetheless, it has been difficult to ensure international agreements to allocate a portion of these taxes to development.

Given these and other major changes in development assistance since the current definition of ODA was adopted in 1972, there is an ongoing debate on the need to modernize the concept of ODA. Questions being discussed entail how to account for guarantees and other mechanisms used to leverage private finance, which are currently only included when they are exercised, as well as how to define concessionality in today's extremely low interest rate environment. Other questions relate to the risk of a rising share of financing for global public goods diverting ODA flows from the least developed countries and low income countries, to financing of global goods in middle income countries. This has raised questions on how to ensure that ODA goes to those most in need, and how to define eligibility and graduation criteria. For example, particularly in the context of climate change, there have been calls for at least an accurate and separate accounting for financing for global goods, to ensure that the financing is additional to existing ODA commitments.

¹⁰ United Nations, 2012, *Trends and Progress in International Development Cooperation*, Report by the Secretary-General.