Sustainable Development Financing:

Perspectives from Asia and the Pacific

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Contents

Introduction

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In 2015, leaders of the Asia-Pacific region will engage with the global community in the daunting task of renewing and recasting a global development agenda. The framework and focus on poverty eradication of the new sustainable development agenda has been laid out by United Nations Secretary-General in his synthesis report: The Road to Dignity by 2030,[1] which was released in December 2014. Post-2015 sustainable development has the potential to break new ground. Transitioning from the relatively simple Millennium Development Goals (MDGs), the sustainable development agenda, as proposed by United Nations member States, is a wide-ranging and transformational new development paradigm.

To ensure deeper and lasting economic and human progress, the architecture of the development agenda beyond 2015 calls for a rethink and redesign of development policy frameworks.

In this context, three momentous events will be taking place in 2015:

1. Agreeing on a universal set of 17 proposed sustainable development goals (SDGs) with 169 associated targets as contained in the Report of the Open Working Group on Sustainable Development Goals:[2]

During the seventieth session of the General Assembly meetings, which will be held from 25 to 27 September, a new United Nations development agenda will be adopted.[3] This will replace the MDGs, which served as the basis for development cooperation since the turn of the Millennium. More than any other region, the Asia and the Pacific is conscious that, in the decades to come, its economies will need to build on their development transformation and address increasing social and economic gaps to improve living standards. Development is more than extreme poverty reduction and inclusive growth is achievable mainly through renewed commitment in development partnerships and cooperation. The renewed United Nations development agenda must galvanize investment in economic diversification and employment creation in the Asia-Pacific region.

2. A new framework for the sustainable financing of development,[4] which is one of the most critical means of implementation for the emerging global development agenda:

From 13 to 16 July, the Third International Conference on Financing for Development will be held in Addis Ababa to adopt the financing inputs to the renewed development agenda. This publication aims to highlight the Asia-Pacific region's enormous financing needs and discuss the approaches and opportunities available to the region to meet those needs. The analysis in this publication is potentially an important input to the outcome of the Conference.

3. A new universal climate agreement, with specific climate actions[5] :

1 Available from www.un.org/disabilities/documents/reports/SG_Synthesis_Report_Road_to_Dignity_by_2030.pdf.

2 The Report of the Open Working Group on Sustainable Development Goals is available at www.un.org/ga/search/view_doc.asp?symbol=A/68/L.61&Lang=E.

3 Available from https://sustainabledevelopment.un.org/?page=view&nr=1064&type=13&menu=1300.

4 Available from www.un.org/esa/ffd/overview/third-conference-ffd.html.

5 Available from www.un.org/climatechange/blog/category/cop21-paris/.

From 30 November to 11 December, the United Nations Climate Change Conference will convene in Paris. During this event, the community of nations will seek to agree on allocations of emissions rights among countries. If, in the next 20 years, the emission reduction obligations fall too heavily on developing countries and the elasticity of growth in emissions with respect to economic activity diminishes too slowly, then developing countries – even the more advanced developing countries – will be condemned to a permanent level of about one-fourth to one-third the economic choices and capability of the advanced economies. It will be important for the Paris agreements to avoid cutting off possibilities for investment in new activities and infrastructure in the Asia-Pacific region. A positive outcome of the climate change conference would guarantee accelerated financing investment in activities that reduce poverty and sustain environmental integrity.

Importantly, financing for sustainable development has become a significant and integral part of the current development discourse on the United Nations development agenda beyond 2015. Developing countries tried to have the financing for development conference precede the Summit due to their reluctance take on new international obligations - implicit in the draft SDGs - without the resources and the enabling international economic environment to meet such commitments. To secure the "future we want" it is critical "to facilitate the mobilization of resources and their effective use in achieving sustainable development objectives."[6]

A. Global processes

The first step in renewing the global development agenda occurred on 19 July 2014, when the Open Working Group of the United Nations agreed on a draft of a set of 17 Sustainable Development Goals) (United Nations, 2014a). This effort to agree on SDGs was seen as the follow up to the MDGs, whose end-date had been set to 2015. Aside from the 17 specific goals, the draft SDGs set out 169 associated targets (United Nations, 2014a), including 62 means of implementation items. From the start, developing countries sought to ensure that the SDGs discussions would correct the inadequacies of the MDGs through the incorporation of a more robust global partnership for development and the explicit identification of means of implementation (see box 1.1).

Box 1.1. Open Working Group of the General Assembly on Sustainable Development Goals

The outcome document of the United Nations Conference on Sustainable Development, entitled "The future we want", among other things, set out a mandate to establish an open working group to develop a set of sustainable development goals for consideration and appropriate action by the General Assembly at its sixty-eighth session. It also provided the basis for their conceptualization. The document gave the mandate that the sustainable development goals should be coherent with and integrated into the United Nations development agenda beyond 2015.

The proposed sustainable development goals are:

GOAL 1 End poverty in all its forms everywhere

GOAL 2 End hunger, achieve food security and improved nutrition and promote sustainable agriculture

GOAL 3 Ensure healthy lives and promote well-being for all at all ages

GOAL 4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

GOAL 5 Achieve gender equality and empower all women and girls

GOAL 6 Ensure availability and sustainable management of water and sanitation for all

[6] See General Assembly resolution 66/288. Available from www.uncsd2012.org/.

GOAL 7	Ensure access to affordable, reliable, sustainable and modern energy for all
GOAL 8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
GOAL 9	Build resilient infrastructures, promote inclusive and sustainable industrialization and foster innovation
GOAL 10	Reduce inequality within and among countries
GOAL 11	Make cities and human settlements inclusive, safe, resilient and sustainable
GOAL 12	Ensure sustainable consumption and production patterns
GOAL 13	Take urgent action to combat climate change and its impacts
GOAL 14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
GOAL 15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
GOAL 16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
GOAL 17	Strengthen the means of implementation and revitalize the global partnership for sustainable development

Source: United Nations (2014a).

The Open Working Group has emphasized the need to ensure adequate financial resources for investments in sustainable development, inter alia, through (a) strengthening domestic resource mobilization, including by improving tax collection and the efficiency of public spending and by strengthening systems to harness domestic savings for investment, (b) the full implementation by developed countries of overseas development assistance (ODA) commitments in line with the agreed formula and timetable; and (c) the mobilization of additional financial resources from multiple sources.[7]

With some further elaboration, MDGs on poverty, hunger, gender, health, education have all been carried over to the proposed SDGs. For many developing countries there are unmet goals in the MDGs. However, MDGs had been particularly valuable in mobilizing ODA, including sustaining the political constituency for supporting the meeting of the 0.7 of GNI commitment in developed countries. Attaining the unmet MDGs, including a recommitment to ODA, will be part of the development agenda beyond 2015.

A key achievement of the proposed SDGs is the revival of attention to the economic pillar of sustainable development, including economic growth, industrialization, employment, trade, agricultural subsidies, debt, and financial regulation. This achievement redirects future development strategies away from poverty reduction in 2000s, recognizing that the only durable solution to poverty is sustainable development. The association of development with poverty reduction in the 2000s assigned a privileged role to the donor countries and their aid agencies. In MDGs, these issues are crammed into "MDG 8," the global partnership for development, with a very selective and poorly defined set of targets.

There are quite a few notable SDG elements that are critical in considering sustainable development financing in the Asia-Pacific region. Goal 8 embodies the global community's

[7] For further information on the eleventh session of the Open Working Group, see http://sustainabledevelopment.un.org/content/documents/3686WorkingDoc_0205_additionalsupporters.pdf.

agreement to "promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" (United Nations, 2014a, p. 11). It sets a target of at least 7% per annum GDP growth in the least-developed countries. More pointedly, associated goal 8.2 identifies the critical importance to "achieve higher levels of productivity of economies through diversification, technological upgrading and innovation, including through a focus on high value-added and labour-intensive sectors" (United Nations, 2014a, p. 11). This goal has enormous implications on the required level of investment relative to income to promote diversification, higher levels of productivity and innovation. In each country, economic authorities will have to deal with the financing requirements and corresponding financing infrastructure required to meet the investment ratios implied by these goals. The Asia-Pacific region has an exceptional opportunity to respond to goal 8.2 by creating more effective and responsive financing mechanisms.

Goal 10 is the SDG on inequality "reduce inequality within and among countries" (United Nations, 2014a, p. 5). This goal calls for a pattern in which the income growth of the bottom 40% of the population is higher than the national average. However, for the purposes of an analysis of sustainable development financing, goal 10.5 is worth highlighting the most — "improve regulation and monitoring of global financial markets and institutions and strengthen implementation of such regulations." This is of particular interest to the region, as many of its successful economies had been adversely affected by the 1997 financial crisis and, after a period of recovery, the subsequent 2008-2009 financial crises. This goal is found under the overall target of reducing inequality, which is an agreed challenge among regional Governments.

Goal 17, "strengthen the means of implementation and revitalize the global partnership for sustainable development" is of specific interest to this study. Among these means are goal 17.1 "strengthen domestic resource mobilization, including through international support to developing countries to improve domestic capacity for tax and other revenue collection" (United Nations, 2014a, p. 19), whose implications for the region are explored in section IV of this study. Goal 17.3 calls for the mobilization of "additional financial resources for developing countries from multiple sources," which will be discussed in multiple sections in this study.

This publication also discusses multiple aspects of goal 17.13, "enhance global macroeconomic stability, including through policy coordination and policy coherence" (United Nations, 2014a, p. 20) as being of fundamental interest to the region. It is clear that the actual aspects of meeting this goal have to be worked out in new mechanisms and in practice, but it is an indispensable element in financing sustainable development in the Asia-Pacific region.

On 18 June 2013, the General Assembly decided to establish an intergovernmental committee of experts on sustainable development financing, as recommended in the outcome document of the Conference on Sustainable Development. The aim of the Committee's report is to "assess financing needs, consider the effectiveness, consistency and synergies of existing instruments and frameworks and evaluate additional initiatives" and conclude its work by 2014 (para. 255, A/Res/66/288).[8] The August 2014 report of the "Intergovernmental Committee of Experts on Sustainable Development Financing" (ICESDF) (United Nations, 2014b) is important to the forthcoming financing for development, development agenda, and climate change convention decisions. It paid special attention to private financing flows, and the "blending" of private and public financing flows. This publication will consider and include many of the perspectives and ideas from ICESDF which in its report reflected on some of the perspectives on Asia and the Pacific financial market developments and some key issues and challenges facing the region in financing sustainable development and other priorities.

Importantly, the Committee further agreed to base this work on four pillars: the universal values of the Millennium Declaration; the principles of the Rio Declaration on Environment and Development and the United Nations Conference on Sustainable Development; the Monterrey Consensus on Financing for Development, with its emphasis on the use of all forms of financing, including public, private, domestic and international in a holistic manner; and a multi-stakeholder approach, including civil society, the business sector and other major groups (see box 1.2).

Box 1.2. A brief on Monterrey Consensus 2002 and Doha Declaration 2008

The Heads of State and Government that gathered in Monterrey, Mexico, on 21 and 22 March 2002, adopted the Monterrey Consensus, which was designed "to address the challenges of financing for development around the world, particularly in developing countries". In the consensus they stated that their goal was to eradicate poverty, achieve sustained economic growth and promote sustainable development as the world advances to a *fully* inclusive and equitable global economic system. The consensus further underscored the importance of the six leading actions as follows: (a) mobilizing domestic financial resources for development, (b) mobilizing international resources for development: foreign direct investment (FDI) and other private flows, (c) international trade as an engine for development, (d) increasing international financial and technical cooperation for development, (e) external debt, and (f) addressing systemic issues: enhancing the coherence and consistency of the international monetary, financial and trading systems in support of development.

It was recognized that Governments must remain fully engaged as "to build a global alliance for development will require an unremitting effort". In that regard, the Heads of State and Government committed themselves to keeping fully engaged, nationally, regionally and internationally, to ensure proper follow-up to the implementation of agreements and commitments reached at the Conference, and to continue to build bridges between development, finance, and trade organizations and initiatives, within the framework of the holistic agenda of the Conference,.They also stressed that greater cooperation among existing institutions was needed based on a clear understanding and respect for their respective mandates and governance structures

8 General Assembly resolution 67/203 of 21 December 2012 specified that the intergovernmental committee should update the General Assembly on the progress of its work before the beginning of the sixty-eight session of the Assembly. This resolution as well as General Assembly resolution 67/199 entitled "Follow-up to the International Conference on Financing for Development" of 21 December 2012 stressed the need to reinforce coherence and coordination and to avoid duplication of efforts with regard to the financing for development process.

Box 1.2. *(continued)*

The principle objective of the Doha Declaration was to reaffirm the goals and commitments of the Monterrey Consensus. The Heads of State and Government and High Representatives that gathered in Doha, from 29 November to 2 December 2008, almost seven years after the landmark International Conference on Financing for Development, reiterated their resolve to take concrete action to implement the Monterrey Consensus and address the challenges of financing for development in the spirit of global partnership and solidarity. The key objectives, among others, were to eradicate poverty, achieve sustained economic growth and promote sustainable development in order to advance to a fully inclusive and equitable global economic system.

In the Declaration, the commitment to reinvigorate the global partnership for development in order to effectively address the full range of financing for development challenges facing the world today was further asserted. In addition, multiple financing for development challenges and opportunities that have emerged since the Monterrey Conference, including the impact of the financial crisis, additional costs of climate change mitigation and adaptation and damage to the Earth's environment, price volatility in international markets of key commodities, expanding economic cooperation and the growing needs for reconstruction and development of post- conflict countries was recognized and the resolve to take concerted global action to address all these areas while consistently furthering economic and human development for all was reaffirmed.

Source: Report of the International Conference on Financing for Development, Monterrey, Mexico, 18-22 March 2002 (A/CONF.198/11, chapter 1, resolution 1, annex). The Follow-up International Conference on Financing for Development to Review the Implementation of the Monterrey Consensus (A/CONF.212/L.1) Available from www.un.org/esa/ffd.

B. Regional processes

ESCAP, in partnership with the Government of Thailand, organized the Asia-Pacific Forum on Sustainable Development in Pattaya, Thailand, from 19 to 21 May 2014.[9] The meeting underscored the importance of critical policy issues related to the means of implementation, including: financing for sustainable development; science, technology, and innovation; rule-based and equitable multilateral trading systems; strengthened global and South-South partnerships, including with the private sector, for development; and effective governance at all levels for transformation towards sustainable development.

In 10 and 11 June 2014, the Asia-Pacific Outreach Meeting on Sustainable Development Financing was held in Jakarta. Organized by ESCAP in partnership with the Ministry of Finance of Indonesia, the meeting aimed to provide regional inputs to the global report of the Intergovernmental Committee of Experts on Sustainable Development Financing. Many elements of the current report are based on the background document of the meeting.[10]

Two months later, the seventieth session of the ESCAP Commission included a ministerial panel on the Asia-Pacific perspectives on sustainable development and development financing. The panel, which was chaired by the Prime Minister of Bhutan, included the finance ministers of Indonesia, Sri Lanka and the Philippines, as well as experts.[11]

[9] See www.unescap.org/events/asia-pacific-forum-sustainable-development.

[10] Further information about the meeting is available at/www.unescap.org/events/asia-pacific-outreach-meeting-sustainable-development-financing.

[11] See www.unescap.org/commission/70.

More recently, ESCAP conducted in-depth analytical research focusing on the financing needs of countries with special vulnerabilities in the Asia-Pacific region for the Regional Meeting on Financing Graduation Gaps of Asia-Pacific Least Developed Countries, which was held in Dhaka in October 2014. The meeting was jointly organized by the United Nations Department of Economic and Social Affairs and the Government of Bangladesh.[12] Finally, a working group established by ESCAP member States in November 2014 as part of the implementation of the Bangkok Declaration on Regional Economic Cooperation and Integration is preparing a report on ways to enhance financial cooperation in the region.[13] For the Asia-Pacific region, sustainable development will require a radically reconfigured international financial architecture and correspondingly robust domestic financial sectors.

The rest of the publication is organized as follows. Section 2 provides a regional framework for financing of sustainable development framework. Section 3 outlines the financing requirements. Domestic resource mobilization issues are discussed in section 4, after which section 5 presents domestic and international private financing in the region. Section 6 deals with international public financing. Section 7 highlights the importance of financing of development gaps in last developed countries. Finally, section 8 contains a concluding summary.

[12] See www.unescap.org/events/regional-meeting-financing-graduation-gaps-asia-pacific-ldcs.

[13] Further information about the Bangkok Declaration on Regional Economic Cooperation and Integration is available at www.unescap.org/events/mcrei/.

Towards a regional financing for sustainable development framework

2

As member States define the contours of the development agenda beyond 2015, the tapping of domestic, international and innovative sources of finance, and uses of the mobilized funds and their proper allocation have taken centre stage. The implementation of a new, ambitious development agenda with sustainable development at its core requires more effective incentives, a better allocation of existing resources and additional funds from domestic, external and innovative sources.

The focus on sustainable development introduces new dimensions and challenges to the development financing dialogue. In line with the basic precepts of sustainable development, sustainable development financing must be aligned with development outcomes that integrate and synergize the three dimensions of sustainable development, namely the economic, social and environmental dimensions, as outlined in the United Nations Conference on Sustainable Development outcome document to ensure intra- and intergenerational equity.

There is now global interest in understanding institutional mechanisms and modalities for leveraging new, emerging and innovative sources of financing from a variety of domestic and external sources. As noted in General Assembly resolution 65/1, such sources of finance should be stable and predictable and supplement traditional sources instead of being a substitute for them.[1] In the light of the insufficient funding available from traditional sources of development finance, policymakers must consider taking steps to mobilize emerging and innovative sources of financing.

This is particularly important due to the need to fund necessary but expensive developmental investments, such as for closing infrastructure gaps within and across countries in the region and for addressing the impacts of climate change. For such purposes, the creation of appropriate institutional and regulatory frameworks for the development of domestic capital markets and for supporting the development of domestic institutional investors, for example, could help mobilize much needed additional financial resources.

A. Conceptual framework

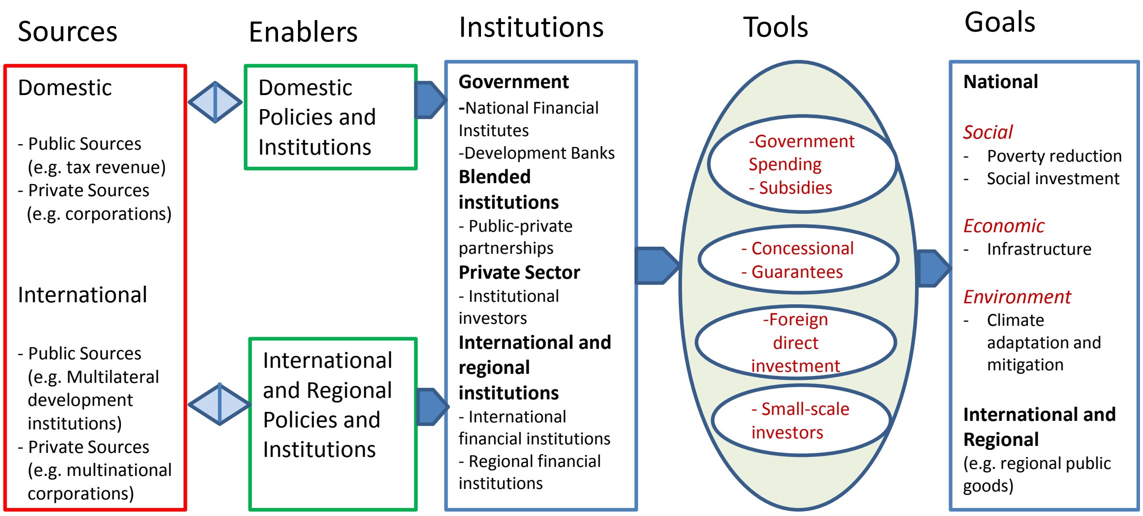
The schematic view of financing for sustainable development, around which this publication is organized, is provided in figure 2.1. The publication examines both domestic and international funding sources and also looks at public and private sources. There is need to reflect on how resource mobilization from these sources can be catalysed to meet growing and emerging requirements, and how public funds can leverage private funds to finance sustainable development.

Once adopted, the new and ambitious agenda with sustainable development at its core requires more tailored approaches, modalities and incentives. While the mobilization of resources through existing and new sources of domestic, external and innovative financing is challenging, there is also need for deploying resources efficiently towards the right sustainable development outcomes.[2]

1 See General Assembly resolution 65/1.

2 See the work of the Leading Group on Innovative Financing for Development, the Task Force on International Financial Transactions for Development and the Task Force on Innovative Financing for Education. See also United Nations (2009). The report highlighted eight innovative finance mechanisms, UNITAID, IFFIm–GAVI, Advance Market Commitments, the Voluntary Solidarity Contribution for UNITAID, (product) RED and the Global Fund, Debt2Health, Carbon Market and Socially Responsible Investments.

Figure 2.1. A schematic view of the sources of financing for sustainable development



Source: ESCAP.

Note: The sustainable development goals proposed by the Open Working Group on the Sustainable Development Goals are available at https://sustainabledevelopment.un.org/sdgsproposal; see also United Nations (2013) and ESCAP, ADB and UNDP (2013).

The sustainable development agenda, as it is emerging, will require significant investments in public goods, such as social services, clean air, water and the continued flow of ecosystem services, upon which economies and people depend.[3] Because those kinds of investments are characterized by high social rates of return, but low private rates, their funding is more likely to originate and be leveraged from public resources.

The concerted identification of required investments by the global community through the sustainable development agenda reinforces a basic point that strengthening the demand side and promoting investment demand precedes considerations of how to finance such investments. For too long, policy thinking has been hostage to placing priority to meeting fixed ceilings on public sector deficits, which has led to insufficient and delayed infrastructure investment undermining the prospects of crowding in private investment in the medium term (Development Committee, 2006). The Development Committee (2006, p. i) highlighted the indispensable transmission channel through which fiscal policy influences growth and raised the alarm on short-sighted decisions to cancel or delay infrastructure projects to meet deficit target and that end up harming growth prospects.

The funding of necessary but expensive developmental programmes to close infrastructure gaps within and between countries in the region and to address the impacts of climate change, requires mobilizing public finances and supportive domestic and international capital markets. It is important to recognize that timely and analytical public sector spending can boost growth rates, augmenting fiscal resources, and that public investment can actually crowd in private investment. In addition, innovative sources of finance, such as carbon taxes, diaspora bonds and financial transaction taxes, can be drawn upon (World Bank, 2013).

More importantly, for undertaking policies and structural reform measures, countries require the following: political stability, macroeconomic stability and policy certainty. An essential component is to reduce risks and encouraging private investment through a sound regulatory framework and

[3] The working Document of the Open Working Group on the Sustainable Development Goals is available from http://sustainabledevelopment.un.org/focussdgs.html#_edn33; United Nations (2013); ESCAP, ADB and UNDP (2013).

rule of law to unleash private sector potential. By establishing the right incentives and regulations, Governments can level the playing field and create competition to direct private investment in a way that advances sustainable development. In particular, countries can encourage long term investments for inclusive growth and sustainable at the national and regional levels, which include, among others, if a predictable regulatory framework and institutions and effective enforcement of the rule of law, and tax neutrality.

B. Securing macroeconomic stability

In going forward, it is important that the Governments of Asia-Pacific economies take into account the potential macroeconomic challenges of funding inclusive and sustainable development by maintaining fiscal sustainability and price stability. As part of a development-oriented macroeconomic framework, policymakers have an obligation to manage domestic and external public debt in a prudent manner in order to minimize adverse effects on inflation, exchange rates, interest rates and growth for signs of any potential risks. Such prudence must be exercised with the understanding that in situations of weak demand, public austerity policies can actually worsen debt ratios and do not necessarily trigger greater private spending or foreign financing inflows.

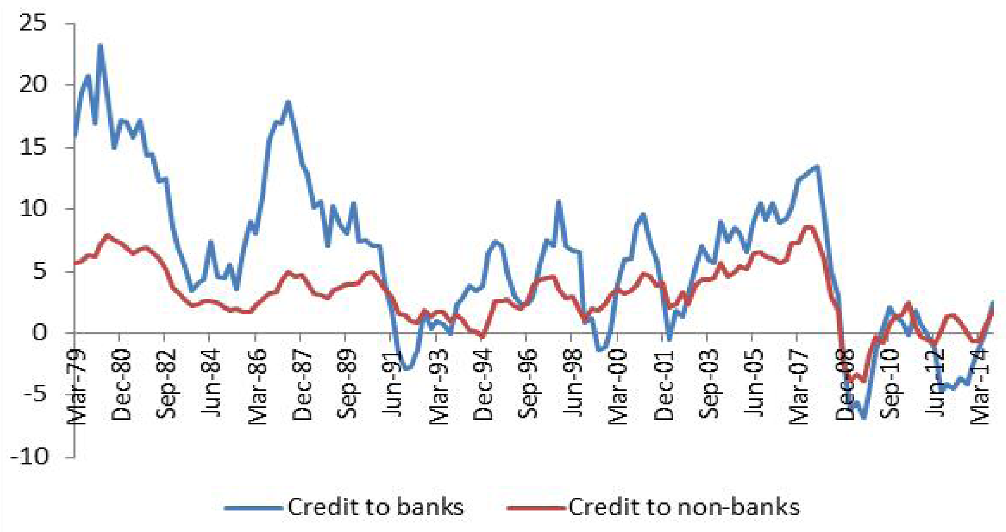
Furthermore, Governments need to be concerned with whether their growth would be sufficient to generate resources to keep public debt and inflation at manageable levels. Macroeconomic stability can be achieved as long as policies are designed carefully and implemented effectively. It would be prudent for Governments running fiscal deficits in the region to keep close track of public debt profiles to better manage their macroeconomic implications. In particular, attention should be directed at currency composition and the maturity of public debt.

The private debt profiles of the economies are potentially more significant than the public debt profiles of many Governments in the region. The economies have continued to liberalize their capital accounts even after the Asian financial crisis, and have relied instead on building up public sector-controlled international reserves. As the East Asian economies learned only too well during the 1997-1998 financial and currency crisis (and as has been the parallel experience in Iceland, Ireland, Spain, and Portugal since the onset of Eurozone debt crisis), prudent levels of public sector and current deficits are no defense against vulnerability to private sector external liabilities in the event of private sector capital flow reversals.[4] The end of quantitative easing policies of the United States Federal Reserve Bank and the prospect of higher international interest rates highlight the timeliness of this issue. Governments in the region must strengthen their individual and joint capabilities to manage capital account flows and the debt profiles of their resident private sectors as part of their efforts to raise financing for sustainable development.

Regional policymakers must contend with the over-dependence of global payments and the monetary system on one national currency. This has made the global liquidity situation, and correspondingly the rate of growth of the global economy and the level of commodity prices, hostage to domestic policy priorities of the major currency country. The increasing scale of international finance amplifies the impact of policy changes on the major reserve currency country, the United States. Figure 2.2 depicts some major episodes in global liquidity induced by these policy shifts. The extent that the Asia-Pacific region seeks to maintain its global pre-eminence in its investment ratio is the extent to which it will be vulnerable to these episodic patterns, especially for finance-led growth, in which both boom and bust are problematical.

4 For this issue as seen from a Filippino point of view in an earlier era of burgeoning yen carry trade before the Asian crisis, see Montes (1997). For an analysis of the Asian crisis that recognizes its capital account character and does not have to rely on bad governance explanations as was the fashion in Western circles, see Montes (1998).

Figure 2.2. Global patterns of liquidity [to be updated-vertical axis]



Source: BIS.

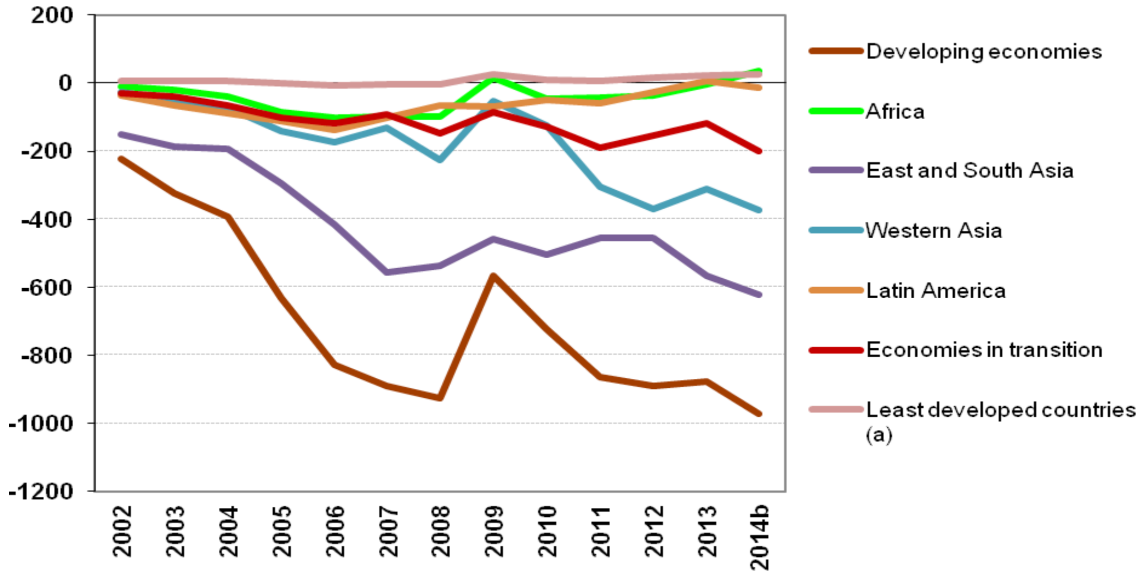
The economies of Asia and the Pacific, with the exception of the Philippines, managed to evade the first crisis episode shown in figure 2.1, which started in 1982. This was triggered by the United States Federal Reserve effort to defeat domestic inflationary tendencies by raising interest rates to more than 20% overnight; this action then sparked the 1980s debt crises era in the developing world. A period of generous liquidity followed from 1992 onwards when regional policymakers, presiding over much more open capital accounts, found themselves fielding short-term hot money flows fuelled by the carry trade. This episode ended with the Asian financial crisis in 1997. The subsequent ample global liquidity era of the 2000s ended with the financial sector breakdown in the United States and Europe in 2007-2008. Crisis-response policies subsequent to the crisis in the United States, made feasible by the reserve status of the United States dollar, provided another global liquidity boom until early 2013, when the Federal Reserve bank announced the eventual normalization of United States monetary policy.[5]

Due to global monetary policy divergence among the United States, eurozone and Japan, the region is facing the rising potential of capital flows volatility. Capital flows are reversing again against developing countries, including least developed countries. Economies of Asia and the Pacific are particularly vulnerable, having been the destination of the liquidity. This may subsequently induce significant macroeconomic instability in the region, risking not only inclusive growth prospects in the near term, but also the sustainable development agenda by diverting the attention of policymakers.

The most recent example of macroeconomic instability, as a result of the contrasting directions in exchange rates between the yen and other currencies in 1990s, created the appropriate conditions for carry trade transactions in South-East Asia, which ultimately, helped spur the 1997-1998 financial crisis. Having learned the lesson in a hard way during the Asian financial crisis of 1997-1998, monetary authorities from the region have been heavy investors in the financial markets of developed countries as a form of self-insurance against mediocre policy coordination and monetary policy swings among the major currency countries and private capital flow reversals. This has created a new situation, in which developing country monetary authorities have become major investors in developed country treasury bonds. This is shown by region in Figure 3, where negative values denote transfer towards developed countries. It identifies East and South Asia as the most prominent locations of net transfer of resources from developing to developed countries.

5 See ESCAP (2014a) for further discussion, and its potential impact in the Asia-Pacific region.

Figure 2.3. Net transfer of resources to developing economies and economies in transition, 2001-2013



Source: figure III.2, p. 69, UNDESA (2015).

Therefore, as discussed in UNDESA (2015, pp. 63-65), for at least a decade, developing countries as a group have been net investors in developed country financial markets. They have significantly increased their reserve levels as a form of self-insurance against sudden stops and reversals of short term private capital flow. Attention to reducing these long-standing financing imbalances can release financing resources that may be used nationally and locally.

C. Managing bank-based lending

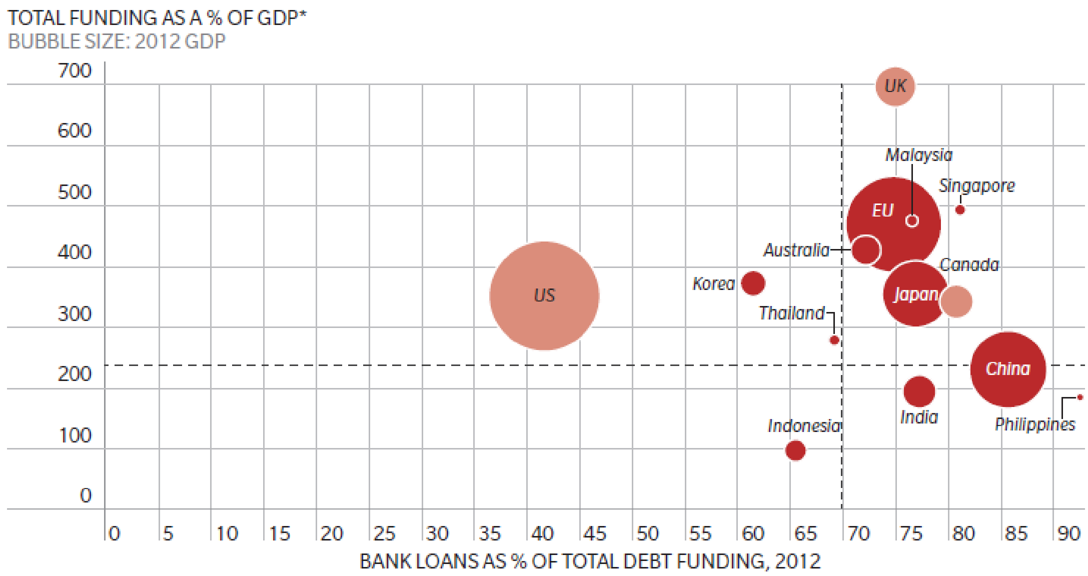
In expanding the creation of long-term finance in their domestic financial sectors, economies in Asia and the -Pacific can consider two general models: (1) a market-based approach used by the United Kingdom of Great Britain and Northern Ireland and the United States or (2) a bank-based system, which is the standard in Germany, Japan, and the Republic of Korea. Actual financial sectors are found in a continuum between these two types, but the typology speaks to the dominant form in which financing decisions are made.

Market-based financing relies more on leverage and securitization and mechanisms to transform short-term portfolio positions into long-term finance. Banks and other financial institutions are involved in transactions that provide short-term liquidity and transfer risk. Equity markets are an important element of market-based finance and tend to foster short-term investment horizons on the supply side. The 2007-2008 Asian financial crisis exposed many vulnerabilities of market-based finance. In a number of cases, top management lacked adequate capacity to manage the total risk absorbed by financial companies because very few specialists understood the cascading difficulties that could be triggered by sophisticated financial instruments, such as credit default swaps. Often, many instruments, such as over-the-counter derivatives, were crafted for specific situations and could not be traded in markets.

In the region, under bank–based finance, financial institutions extend loans to private companies. Bank-based finance has historically been more stable, even though it is not immune to herd behavior among competing groups, which can lead to systemic crises, such as what occurred in the run up to the 1997-1998 financial crisis in the Republic of Korea. Bank-based finance involves relational lending and information networks, and can be very effective in supporting the risk taking and long-term investment of conglomerates and related groups. This approach requires strong capacities to evaluate projects and design financial packages. The bank-based lending can provide financing access to different levels of the population that can, in turn, create a more equitable and inclusive society. With adequate supervision from authorities with systemic responsibilities, bank-based finance can mobilize enormous resources even with tight regulations on accessing external financial markets.

For example, bank lending accounted for 47% of total financing in Asia and the Pacific and 160% of GDP in 2012. This is particularly evident in China, where bank lending constituted 70% of total financing. However, in the case of the United States, bank assets accounted for 22% of overall financing and 97% of GDP (see figure 2.4).

Figure 2.4. Bank based financing in Asia-Pacific region, 2012



Source: Sheng, Soon Ng and Edelmann (2013).

Notes: Total funding is the total sum of equity funding, corporate bond funding and bank loans.

Historically, state-owned banks have played a key role in successful development episodes in Japan, Republic of Korea, Turkey, Brazil, China and India. Bouts of financial crises have also resulted in the nationalization of private banks. In many cases, such as in Sweden in the 1990s, nationalized banks have been promptly reprivatized. In the United Kingdom, the Government is still the dominant shareholder in the Royal Bank of Scotland. In Malaysia, Turkey, and France state-owned banks continue to play a significant role. "Behest lending" (political capture) and inefficiency have been used to justify privatization of publicly owned banks. Recent financial crises have shown that private banking is susceptible to corresponding vulnerabilities, such as insider deal-making, inefficiency and even crime. Recent scandals in insider setting of the London Interbank Offered Rate (LIBOR) underline how being "private" is not a guarantee to behaviour consistent with the social interest.

In that context, until domestic institutional investors develop, development banks can provide a good interim solution for financing long-term infrastructure projects. In developing capital markets for the financing of public goods, such as infrastructure, it is important to keep in mind that private agents seek profitability, implying that projects need to be bankable. Other elements required to support the development of capital markets are an examination of legal restrictions on ownership, the development of derivatives markets, financial disclosure and reporting requirements, and macroeconomic fundamentals.

In efforts to modernize their financial sectors, many countries of the region are not compelled to conform to current fashion and could consider more traditional pathways to developing their financial sectors. Policies that could be considered more "traditional" may include (a) continuation of specialized banking companies, such as those for agriculture, industry, and regional financing, (b) a significant participation of state-owned financial companies alongside private companies, (c) higher requirements for capitalization, and (d) strong coordination of financing activities for industrial and infrastructural priorities.

D. Promoting global and regional trade-links

Robust trade has been a significant enabler of economic growth and sustainable development in the Asia-Pacific region. A universal, rules-based, open, non-discriminatory and equitable multilateral trading system and meaningful trade liberalization have the potential to promote long-term public and private investment in productive capacities at the national level, which can subsequently create regional links for trade promotion.

However, merchandise trade in Asia and the Pacific continues to face considerable challenges, owing to the economic situation, both externally and within the region. Due to a significant drop in export growth in recent years, the developed economies of the region have experienced tepid GDP growth and a lower than expected pick up of consumer demand. Furthermore, the continuation of trade-reducing policies by the developed countries has restricted export growth by an amount that exceeds $255 billion from the Asia-Pacific region during the period 2009-2013 (ESCAP, 2014a).

At the global level, there has been some optimism for multilateral trade-negotiations under WTO in 2014 through the agreed implementation proposal of the Trade Facilitation Agreement (TFA), known as the Bali Package. This event could boost trade prospects and job opportunities in the Asia-Pacific region.

In particular, the deadlock at the WTO Doha Development Round trade negotiations until recently has been accompanied by a flurry of regional trade agreements processed in the Asia-Pacific region. To push forward the work towards the goal of establishing the free trade area of the Asia-Pacific, the Asia-Pacific Economic Cooperation leaders' meeting, which was held in Beijing in November 2014, formally agreed to advance regional trade integration through a step-by-step approach. Simultaneously, the proposed Trans-Pacific Partnership (TPP) is being led by the United States along with seven countries of the Asia-Pacific region with various levels of economic structure and trade openness. In the region, another agreement that is emerging as a strong alternative is the Regional Comprehensive Economic Partnership (RCEP), which involves 16 Asia-Pacific economies (ESCAP, 2014b).

Importantly, the proposed formation of the ASEAN Economic Community by 2015, can allow countries within this group to fast track the implementation policy measures aimed at: addressing non-tariff barriers; realizing the customs single window; and deepening services and investment liberalization. Furthermore, another key challenge to increasing the contribution of exports to growth and development in the region is providing more comprehensive trade finance to small and medium-sized enterprises (SMEs), which account for 80-90% of Asia-Pacific businesses, but are less likely to export than larger enterprises.

As recognized in the Bangkok Declaration of December 2013, ESCAP has consistently supported member States of the region to consolidate subregional and smaller free trade blocks into a region-wide integrated market through cooperation and integration in trade and investment that can unleash region wide trade and investment growth.

E. Enhancing regional financial architecture

In the Asia-Pacific region, there has been a steady momentum to increase financial cooperation in the aftermath of the Asian Financial Crisis of 1997-1998. Not surprisingly, it has strongly focused on the prevention of future financial crises. Thus, the Chiang Mai Initiative (CMI) set up a facility for the provision of emergency liquidity and the Asian Bond Fund (ABF) and Asian Bond Market Initiative (ABMI) are aimed at developing local currency bond markets to minimize the risks arising from the currency and maturity mismatches that led to the Asian Financial Crisis.

In addition to those important initiatives, most countries in the region have made their economies more robust to financial disruptions by accumulating foreign exchange reserves and avoiding large budget and current account deficits. Those efforts have clearly paid off as indicated the ability of most countries in the region to endure the global financial crisis of 2008-2009 without suffering major disruptions.

However, countries in the region are still very much dependent on the United States dollar. Therefore, the countries in the region should accelerate their efforts pertaining to regional policy coordination and cooperative actions to increase the supply of IMF Special Drawing Rights (SDRs). One way this can be done is through regular periodic allocations of SDRs to International Monetary Fund (IMF) member countries, if the allocations are made to augment national reserves, not on the basis of IMF quotas. While the U.S. dollar remains dominant, regional arrangements to pool mechanisms to provide liquidity for international payments purposes must be strengthened. The scale of resources available in both the multilaterialized Chiang Mai initiative and the Contingency Reserve Arrangement of the BRICS (in which China, India and the Russian Federation participate) are inadequate to carry out the task. Their usefulness in underpinning a liquidity backup for economies in the region will be greatly enhanced with the elimination of the requirement that access beyond an initial percentage requires participation in an IMF programme. Regional policymakers should seriously consider expanding membership in the multilateralized Chiang Mai initiative, among others, to include all the developing countries in the region.

Generally, private capital inflows are highly concentrated in a small number of emerging economies, even as successful expansion of the regional financial architecture would draw other economies into the same dilemmas. The development challenges facing these recipient countries differ substantively from those that do not receive such private resource inflows. For example, in most of the emerging developing economies, maintaining large and stable inflows is a priority, whereas in the countries with special needs, Governments need to put in place policy packages to sustain inflows of long-term financing. Therefore, macroeconomic policy responses in those two distinct settings will clearly differ. The record indicates that Governments in low income and vulnerable economies have in general been unable to attract significant foreign private financial resources due to underdeveloped domestic financial markets and inadequate infrastructure. For those economies, therefore, ODA is critical to supplement domestic resources.

All of these efforts will increase the density and frequency of financial and monetary cooperation in the Asia-Pacific region. They will also increase the intensity of information exchange among monetary and fiscal authorities, so critical to deal with the outsized impact of short-term private capital movements, which are an unfortunate feature of the current international system. Therefore, by having a robust regional financial architecture and cooperation would contribute to inclusive growth and financial stability through a combination of initiatives, including financial market development and integration, reforming the existing financial institutions and mobilization of financial resources for long-term investments for sustainable development.

Policy options

Some of the goals of an Asia-Pacific model of financing for sustainable development must be to: [6]

- Prioritize investments that integrate the economic, social and environmental dimensions of sustainable development;
- Promote inclusive and resource-efficient growth to reduce social and income inequality, decent jobs and overall economic efficiency through appropriate resource allocation towards achieving zero income poverty and zero hunger and malnutrition;
- Catalyse long-term finance for sustainable infrastructure investment, including in areas of transportation services, water and sanitation and energy access;
- Strengthen investments in public goods by increasing financial resources in the quality of education, health services and social protections systems;
- Mobilize market incentives and financing access for sustainable energy investments and climate mitigation and adaptation;
- Strengthen governance structures and regulatory frameworks to minimize and manage risks, and to guarantee effective institutional mechanisms to attain socially responsible goals of inclusive growth, social equity and climate-resilient development.

[6] See Synthesis report of the Secretary-General on the post-2015 sustainable development agenda. New York. (A/69/700). ; see also United Nations (2013), ESCAP, ADB and UNDP (2013).

Financing requirements for sustainable development

3

Home to two thirds of the world's poor, the Asia-Pacific region faces enormous development challenges, the financing of which requires even more effective public sector governance and leadership and new and innovative institutions, agents and tools.[1] This section provides a brief overview of recent estimates of the region's needs to finance its sustainable development as the actual size of financing requirements vary due to the wide differences in the size of the economies in the region and the state of infrastructure.

Strategies for financing sustainable development in the region must be aligned with the principles of social equity, inclusive economic growth and environmental sustainability. Despite these conditions, the potential for mobilizing resources from domestic and external sources is large, yet also often constrained by the borrowing and absorptive capacity of many countries emanating from under-developed markets and institutions. This is especially the case with regard to countries with special needs, a group that is comprised of least developed countries, landlocked developing countries and small island developing States.[2]

Given that many countries are still struggling to return to the GDP growth rates reached prior to the 2007-2008 financial crisis, and that structural transformation throughout the region has been limited, the resource requirements for sustainable development in Asia and the Pacific are extensive. In particular, growth in the region needs to accelerate further and policymakers need to set more measures aimed at boosting employment and trade, which are two areas that are integral in making growth more inclusive and generating the additional financial resources required to meet the enormous sustainable development needs in areas of social sectors, infrastructure and environmental dimension.

The publication showcases that the requirements of financing sustainable development will address the following: (a) social sector development should include basic needs related to poverty reduction and hunger, improving health and education, providing access to affordable energy and promoting gender equality; (b) economic sector improvement should require financing infrastructure and rural development, among others; and (c) the environmental dimension should be related to adaptation and climate resilient development, developing an efficient energy sector and promoting regional public goods, including those that tackle climate change consequences.

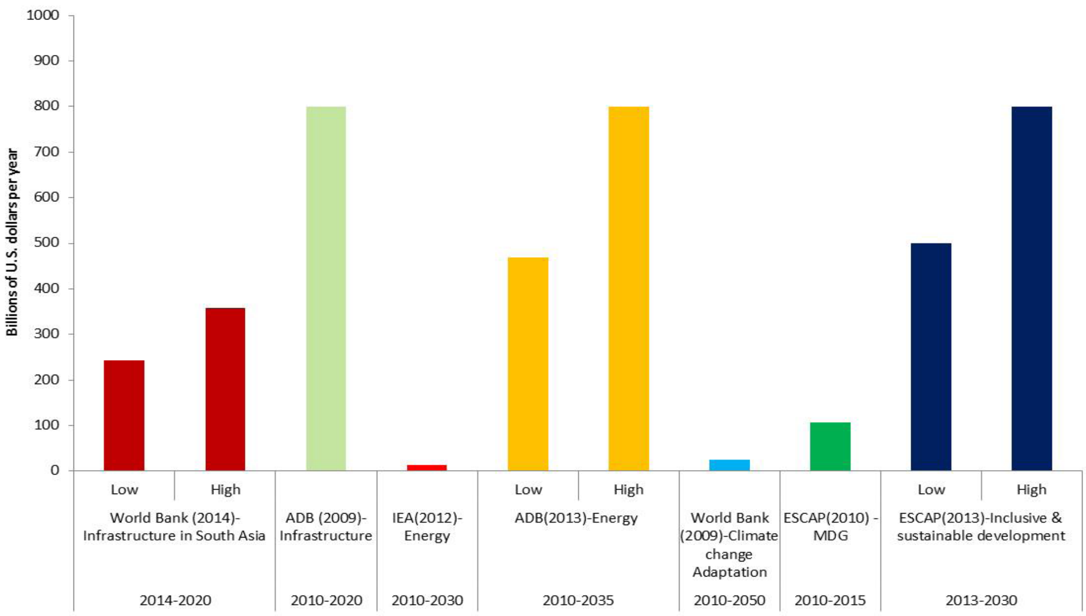
Furthermore, quantifying financing needs varies across different periods and issues. In many cases these financing estimates are complex and imprecise in nature. The ICESDF report provides several global estimates for sustainable development with a cautionary notes that these estimates "'vary widely" According to the report, "the estimates presented in the present report are indicative, aimed at providing an order of magnitude of financing requirements, rather than precise figures" (United Nations, 2014b). This is simply because in most of the cases, the aggregation exercise fails to take into account the nature of synergies and cross-cutting nature of sustainable development, especially the feedback mechanisms from economic to social and environmental sector and vice-versa.

1 ESCAP estimates that 621 million people lived below the $1.25/day poverty line in the Asia-Pacific region in 2012

2 United Nations System Task Team on the Post-2015 UN Development Agenda, (2014).

At the global level, total financing needs range from $4 trillion to $7 trillion per year based on several estimates (United Nations, 2014b). In the case of developing countries, these estimates are $3.3 trillion-$4.5 trillion per year for the period 2015-2030. Estimates also show that the undersupply of infrastructure in developing economies has been estimated at around $1 trillion per year through 2020, with an additional $200 to $300 billion per year needed to ensure that infrastructure investments are low emitting and climate resilient (World Bank, 2013). Notably, current investment in these SDG sectors is about $1.4 trillion, making the annual investment gap between $1.9 and $3.1 trillion (UNCTAD, 2014b). For Asia and the Pacific, based on various estimates, it could cost $2.1 trillion to $2.5 trillion per year to close the region's infrastructure gaps, provide universal access to social protection, health and education, and implement climate change mitigation and adaptation measures (see figure 3.1).

Figure 3.1. Key estimates of annual financing requirements in Asia-Pacific economies



Source: ESCAP. See references shown in the figure for details of the methodology of cost estimations and website information on the reports.

Note: Estimates show annual financing requirements to achieve various development and infrastructure goals.

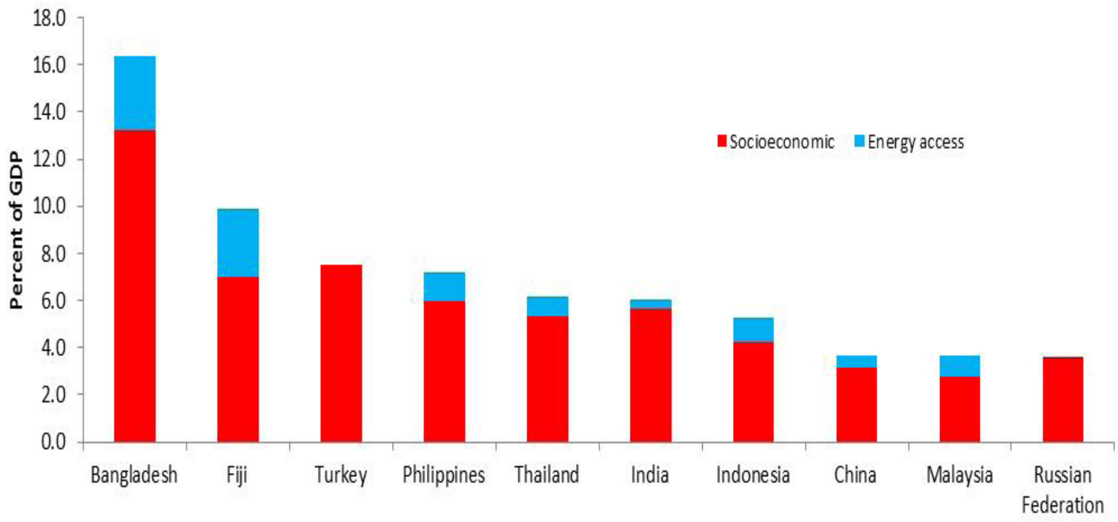
A. Social equity

Limited progress in social equity remains the key issue in addressing the growing income disparity and access to basic social needs. Investment in the social sector is essential to achieve inclusive growth and sustainable development. In 2013, ESCAP estimated that the Asia-Pacific region needs between $500 billion and $800 billion per annum merely to close development gaps in the areas of education, health, employment, social protection and access to energy services between 2013 and 2030 (ESCAP, 2013b). The cost estimates were prepared for 10 countries which account for more than 80% of the population and 80% of GDP of the developing Asia-Pacific region, namely Bangladesh, China, Fiji, India, Indonesia, Malaysia, Philippines, the Russian Federation, Thailand and Turkey.[3]

[3] In an earlier study, ESCAP estimated that the region needed $639 billion per annum to attain the Millennium Development Goals by 2015. See ESCAP (2010).

Countries with special needs require more resources than others to implement an inclusive and sustainable development agenda. For example, Bangladesh and Fiji would require on average about 16.4% and 9.9% of their GDP, respectively, over the period 2013-2030 to provide universal access to modern energy services, compared with an average of 8.2% of GDP for other countries in the region (see figure 3.2).

Figure 3.2. Total Investment requirement in selected Asia-Pacific economies, 2013-2030



Source: ESCAP (2013b).

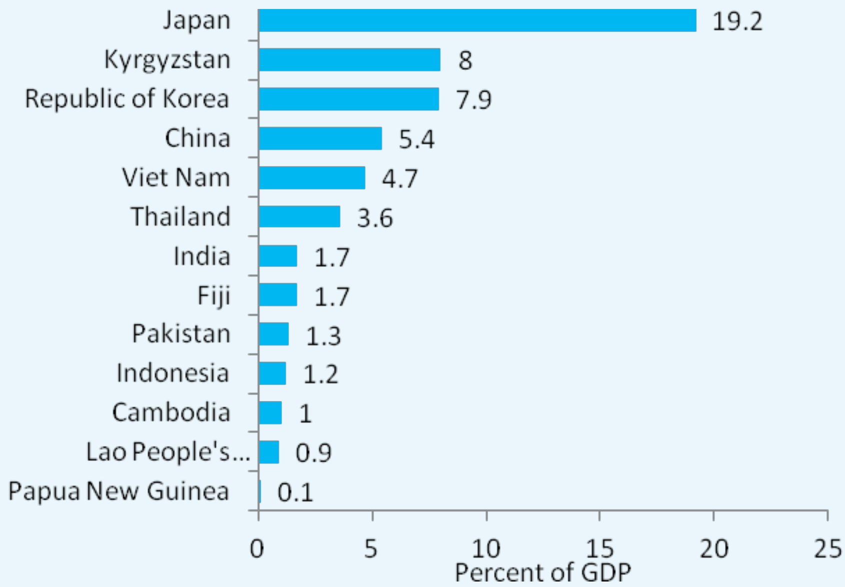
Promoting social investment is a fundamental pillar of inclusive and sustainable development, developing Asia-Pacific countries have made substantial progress in implementing the social protection floor (SPF). For example, 23 out of the 27 developing Asia-Pacific countries for which data are available increased social protection spending as a share of total government expenditures between 1996 and 2013.4 By providing essential social transfers, countries ensure that its citizens have access to social services in the area of health, income security for children, working-age individuals and older persons - the four components of the SPF. Social protection has been typically financed through the combination of government tax revenues and ODA. The demographic and social changes that are happening in the region, coupled with the increasing frequency and intensity of natural and economic crises, are putting strains on these traditional financial sources (see box 3.1).

[4] ESCAP, based on ADB, Key Indicators for Asia and the Pacific 2014, Country Profiles.

Box 3.1. Innovative measures for financing the social protection floor in Asia and the Pacific

Despite progress made in enhancing social protection, coverage gaps remain. Lack of fiscal space results in poor availability and quality of public social services and low levels of social protection benefits. Indeed, countries are underperforming when it comes to the financing of social protection, as corroborated by the Asian Development Bank Social Protection Index (SPI). A total of 19 countries in the region have SPIs lower than 0.10, and 10 middle-income countries have a SPI in the range of 0.10–0.20 (see figure B3.1).[a] This is alarming given that a SPI of 0.20 is considered to be the benchmark, which is to say that social protection spending should be at least equal to 20% of poverty-line expenditures or 5% of GDP (as poverty-line expenditures are set at one-quarter of GDP per capita) for it to be effective.

Figure B3.1. Social protection expenditures in selected Asia-Pacific economies, 2009



In this context, innovative financing schemes are seen as critical to achieve sustainable financing of social protection, especially owing to the need to increase social investments in the context of the development agenda beyond 2015. Some examples are the following:

- A health equity fund (HEF): establishes "third-party payer" systems to health facilities for services provided to the poorest patients;

- Sovereign wealth funds (SWF): a pool of money derived from a country's reserves which are set aside for investment purposes that will benefit the country's economy and citizens; -Impact investing: an investment that uses the incentives of commercial capital development to generate beneficial social and environmental impact;

- Microfinance: a financial service – including microinsurance and microcredit – available to poor entrepreneurs and small business owners who have no collateral and would not otherwise qualify for a standard bank loan or insurance.

Countries in Asia and the Pacific have increasingly begun to use these innovative schemes to finance social protection. Complementing traditional sources, such schemes can be combined to finance SPF (see table B3.1).

Box 3.1. *(continued)*

Table B3.1. Innovative financing initiatives by social protection fund component

	Health	Children	Working-age	Older persons
Initiative	Health Equity Funds	The Citizen Foundation	Revolving Fund	Human Development Fund
Type	HEF	Impact investing	Microfinance	SWF
Country	Cambodia	Pakistan	India	Mongolia

Cambodia-Health Equity Funds: HEFs appeared in Cambodia in the early 2000s, initially supported by NGOs. Today, Cambodian HEFs cover more than three-quarters of its citizens who live below the poverty line. In 2008, the country had 30 hospital HEFs that reported to the Ministry of Health. Moreover, the proportion of persons identified as eligible to benefit from HEFs ranged between 12% and 24% of the total populations of the villages involved. HEFs have helped to increase the proportion of poor among hospital users. In four HEF-affiliated hospitals, in 2003-2004, the poorest made up 7% to 52% of hospitalised patients.[b]

Pakistan-The Citizen Foundation: Following an impact investing approach, the Citizens Foundation (TCF) builds and operates schools across four provinces, which are government certified and follow a national curriculum. At TCF schools, parents contribute on a sliding scale (capped at 5% of household income) that is based on an assessment of household income and the number of children in a family. The average monthly contribution of $1 per pupil is a small share of the monthly cost of $11 per pupil to run the school. Corporate ad philanthropic donations pick up the rest, with over 50% of funds raised within Pakistan and the remainder from across the globe. In 2011, 72% of TCF students pursued post-secondary education, compared with the government school average of 40%.[c]

Mongolia-Human Development Fund: The Government of Mongolia has been supporting old age pensions through the Human Development Fund (HDF). The HDF was established in 2009 with the aim of accumulating excess revenues from the mining sector, and redirecting them towards the economic and human development of the country. In addition to pensions, the HDF is currently being used for providing health, housing and educational benefits to Mongolian citizens. Due to lack of fiscal space, Mongolia is considering the establishment of a pension reserve fund, to which a percentage of excess mining royalties will be invested.[d]

India-Revolving Fund: The 2001 earthquake in Gujarat left over 12,000 people dead and damages of approximately $2.5 million. In response to limited Government financial support, the All India Disaster Mitigation Institute (AIDMI) created the Revolving Fund, a microcredit loan without interest rates, targeted at economic recovery and business development. To be eligible for a loan, the applicant must be a member of the Chamber of Commerce and Industry for Small Businesses (CCISB), come from a poor, disaster-affected household, and have an economically active profile. The Revolving Fund should be repaid within 12 months. Once repaid, the CCISB member is eligible to apply for additional loans.

[a] ADB (2013d).

[b] Noirhomme, Ridde and Morestin (2009).

[c] D. Capital Partners (2013).

[d] Campi (2012).

B. Economic dynamism

Notwithstanding the significant investment requirements to tackle social development challenges, infrastructure is a critical and additional component of sustainable development. Lack of infrastructure development across the region, including in emerging economies, are holding back not only inclusive growth but also affecting overall access to education and health services in remote parts of countries, and in rural areas. To create stronger linkages within and across countries, funding facilities of a large number of infrastructure projects is critical to boost further growth and jobs creation, and to sustain economic dynamism in the region. A specific investment in infrastructure projects includes, among other things, the domestic transport and information and communications technology (ICT), as well as water supply and sanitation and electricity access indicators.

A recent World Bank study estimated that the South Asian subregion alone would need between \$1.7 trillion and \$2.5 trillion to close its infrastructure gaps by 2020 (Andrés, Biller and Dappe, 2013). The Asian Development Bank (ADB) has estimated that the region would need \$800 billion per year to close its infrastructure gaps by 2020 (ADB and ADBI, 2009). An ESCAP study conducted in 2006 similarly estimated that the total infrastructure investment requirement could be \$608 billion (ESCAP, 2006).

Recently, ESCAP further estimated that the cost of investment projects in selected areas of transport exceeded \$350 billion per year. This is due to large demand for investment in the transport sector in terms of infrastructure and services, as well as for maintenance (see box 3.2) (ESCAP, 2013b).

Box 3.2. Transport financing requirements

Traditionally, domestic public resources have been the main source of funding, together with external assistance received from donor countries or loans from international finance institutions, which are particularly important for the poorer countries in the region. The World Bank and ADB lending for transport projects in the Asia-Pacific region is about \$7 billion per year.

While financing domestic infrastructure is challenging, funding regional projects is even more difficult. Indeed, regional projects are by nature more complex than national ones as they require greater coordination efforts. Furthermore, the prospective returns from regional projects will be realized only if all parties complete their part of the work. The costs and impacts of regional projects may also be unevenly distributed among the participants and introduce further complexities and differing levels of commitment.

The Asian Highway and the Trans-Asian Railway networks are two key regional transport infrastructures. Owing to inadequate investments, these networks operate below their potential. For instance, although substantial efforts have been made to upgrade the Asian Highway network, 12,000 km of roads still do not meet minimum quality standards. Such poor road quality can act as a deterrent for international transport due to the resulting high vehicle operating costs or long journey times, thereby reducing the economic opportunities that could result from better connectivity. Furthermore, in order to improve the efficiency of road transport operations and cater to economic and trade growth, the road sections also need to be upgraded to meet Asian Highway standards. Upgrading different classes of the Asian Highway network to higher quality standards will need considerable investment, estimated at \$36 billion.[a] Moreover, there are currently an estimated 10,900 km of missing links in the Trans-Asian Railway network, or 9% of the identified network.[b] These missing links prevent countries in the region from reaping the full benefit of the increased use of rail for the international transport of goods. Constructing these missing links is, however, costly (ESCAP has estimated that approximately \$59 billion is necessary for completing these missing links.)

Recognizing the importance of regional transport connectivity, some countries in the ESCAP region have provided financial assistance to other member countries to develop their portion of the regional infrastructure. This intra-Asian cooperation has emerged as a growing source of infrastructure financing and has been done mainly on a bilateral basis.[c] Developing dedicated mechanisms for addressing critical regional infrastructure gaps may, however, be necessary to ensure that sufficient funds are allocated to transport projects that could be beneficial for the whole region.

[a] Upgrading 12,000 km of below class III to class III standards would require $3.5 billion, strengthening pavement of 31,500 km of class III roads to asphalt concrete (class II) without widening and geometrical improvements would require $7 billion and upgrading 45,500 km (excluding roads mountainous and hilly terrain) of class II road to four-lanes (class I) standards would require $25.5 billion.

[b] “Missing links” are defined as the absence of continuous rail infrastructure between the railway networks of neighbouring countries or the absence of continuous railway infrastructure within one country, often due to local geography.

[c] ESCAP, (2013c).

Another critical area here is the emergence of the cities in the region. Recent data suggest that more than 56% of the population in the Asia-Pacific region is expected to live in urban areas by 2030.[5] Infrastructure development has not kept pace with urbanization, and cities in the region are facing serious infrastructure deficits, which require total investments of about $60 billion a year (ADB, 2008). The economic cost of inadequate infrastructure is not only high, but is also beginning to threaten the competitiveness and productivity of national economies and the region overall. For example, current urban infrastructure deficit costs in India are about 4.3% of its GDP per year, and a massive $1.2 trillion is needed as investment for current gaps, and to meet the requirements of future urban populations (McKinsey & Company, 2011).

This raises an urgent need for cities to mobilize additional revenues in order to meet the challenges emanating from unprecedented urbanization and to fill gaps in investment that threaten to undermine the transition from a low- and middle-income status. Therefore, financing cities. infrastructure continues to be one of the key elements of financing strategies in the Asia-Pacific region, and for the overall sustainable development financing strategies (see box 3.3).

[5] ESCAP Online Statistical Database. Available from www.unescap.org/stat/data/statdb/DataExplorer.aspx (accessed on 4 June 2014).

Box 3.3. Financing urban infrastructure in Asia and the Pacific

Urbanizationin a major driver of the region's growth – but massive urban infrastructure deficits are undermining its competitiveness. Much of the region's dynamic growth and the poverty reduction that has resulted can be attributed to rapid urbanization.

The region's cities may be economic heavyweights, but they are also fiscal lightweights. While cities in Asia and the Pacific are the "engines of growth", with urban areas contributing 80% of GDP in the region in 2011, most of them are unable to raise the resources required to finance the infrastructure they need. Cities, even megacities, are still overly dependent on national and state/provincial government transfers. Despite decentralization, IMF data show that local governments are less self-sufficient today than they were 15 years ago.[a] National Governments have not transferred funds or enabled local jurisdictions access to finance to match service delivery responsibilities. In addition, the ability of local governments to raise their own revenues is extremely limited and cost recovery on service delivery is lacking. An additional obstacle is that local governments have limited access to capital markets. This is especially the case for the region's secondary and medium-sized towns and cities – where the majority of urban growth is occurring.

Investment needs will increase as a result of climate change and environmental degradation. In addition to the above challenges, a new set of funding requirements is looming as a result of the need to respond to the environmental impacts of rapid development and to mitigate and adapt to climate change. For example, it is estimated that Bangladesh will require an additional $2.67 billion up to 2050 to "climate-proof" infrastructure in major towns.[b] It is important to note that in any case the cost of adaptation is a fraction of the costs that countries would incur if no action is taken. Yet, local governments have neither the mandate to fund, nor access to the funds needed, to foster a sustainable economy or even to put in place the infrastructure that their cities need. This is inclusive of investment in both "hard" and "soft" infrastructure, including the need to invest in ecosystem integrity as adaptation to the projected impacts of climate change.

[a] Gardenne and Singhal (2013).

[b] Dasgupta and others (2010).

C. Environmental sustainability

Greater attention must be dedicated to investment in mitigation and adaptation to climate change to prevent the region's cities from being overwhelmed by financial and other implications of climate change and associated environmental impacts, including the quality of life of their citizens.

For environment-related investments in the Asia-Pacific region, the International Energy Agency (IEA) estimated that investment of nearly $14.3 billion per year (from 2011 to 2030) would be required to achieve universal energy access by 2030 for the Asia-Pacific region (IEA, 2011).[6] Similarly, according to the World Bank, the costs for adaptation to climate change would amount to $25 billion annually from 2010 to 2030 (World Bank, 2010). Furthermore, Asia and the Pacific remains the most disaster-prone region of the world, but efforts on disaster risk finance have had mixed success (see box 3.4).

[6] IEA estimated that average annualized additional investment would amount to $910 billion for mitigation through 2050, while the World Bank estimated the amount to be about $100 billion for the same period. Climate Policy Initiative, The Global Landscape of Climate Finance 2013 (San Francisco, 2013).

Box 3.4. Disaster risk financing — success amid much failure

While Asia and the Pacific remains the most disaster-prone region of the world, efforts on disaster risk finance have had mixed success. The common approach has been for Governments to set aside contingency funds for various emergencies, and calamity funds, especially for disasters. To avoid moral hazard, such funds should only cover risks that cannot be absorbed by private insurance, such as disaster-related damage affecting small farmers and the urban poor who are unable to afford private insurance.[a] However, due to the specific nature of covariant risks related to disasters, private sector insurance penetration is quite weak and uneven in developing countries in the region. Other issues, such as adverse selection and moral hazard, continue to plague indemnity-based insurance systems, and future climate risks appear to be contributing to increased insurance losses and, in some cases, uninsurability. Two successful modalities of disaster-risk financing have emerged in recent years that may warrant further analysis and broad-based application:

First, parametric insurance in which payouts are linked to an occurrence of a triggering event, such as rainfall, temperature and snow indices, as opposed to traditional insurance in which payouts are linked to actual damage (such as crop losses), has proven effective. Index-based livestock insurance in Mongolia is a case in point.[b] In India, the Agriculture Insurance Company has successfully launched an index insurance product in Haryana and Punjab states to cover wheat crops, using earth observation satellite products as the basis for determining the triggering event.[c] The Regional Drought Mechanism of ESCAP provides satellite-based drought indexing, which can be used for developing parametric insurance products. Many of the challenges faced by conventional insurance systems are absent in the case of parametric insurance, which can be a cost-effective alternative as seen in the above cases. Parametric insurance has proven ideal for low-frequency but high-intensity losses, especially weather-related risks in agriculture.

Second, regional cooperation has been demonstrated to be effective, especially in risk pooling among smaller developing countries. Many small economies do not have the capacity to absorb financial losses caused by natural disasters, nor do their limited budgetary capacities enable them to build up sufficient contingency reserves. Furthermore, they have limited access to catastrophe insurance due to the limitations of risk pooling because of the small scale of business. In the South Pacific, the average annual direct losses caused by natural disasters were estimated at $284 million, and are expected to rise. The Pacific island countries have recently launched a regional insurance pooling facility — the Pacific Catastrophe Risk Assessment and Financing Initiative — with support of the World Bank and the Secretariat of the Pacific Community. The pilot programme, funded principally by the Government of Japan, has successfully put in place the catastrophe insurance that covers cyclone and earthquake risks, including tsunami triggered by earthquakes. Six Pacific island economies, namely the Cook Islands, Marshall Islands, Samoa, Solomon Islands, Tonga and Vanuatu, are participating in the programme. The coverage is expected to be $45 million in the first phase. The financial analysis carried out showed that a regional risk pooling mechanism would generate savings of up to 50% compared with individual risk-transfer solutions.

[a] ESCAP (2013a).

[b] Mahul and Skees (2008).

[c] IFAD and WFP (2010).

The region needs to invest between $11.7 trillion and $19.9 trillion until 2035 in order to modernize its energy sector, including adaptation of new technologies and renewable forms of energy (ADB, 2013a). While the various estimates of the region's financial needs are not additive, there is little doubt that significant resources are needed for the region to develop in a sustainable way.

It should be noted that closing infrastructure gaps, providing energy access, and climate adaptation and mitigation projects have significant potential for spurring higher levels of economic growth and creating jobs and incomes for those in the lower income deciles, and generating savings which could further finance sustainable development investments.

Domestic public finance

4

Mobilizing domestic resources to increase financing for development is a key pillar of the development agenda beyond 2015. An important component of this will be for Governments to raise the resources required to invest in sustainable development. Governments have several options to unlock the fiscal space for such spending. They can, for example, increase their borrowing, either domestically or from abroad. They can also expand fiscal space by making existing public expenditure more efficient and/or by reprioritizing public expenditure to make it more development-oriented. Countries can also mobilize domestic resources by strengthening tax and non-tax revenues. More importantly, domestic public finance is one of the critical elements to provide public goods and promote inclusive growth, while counter-cyclical fiscal policies can support macroeconomic stability.

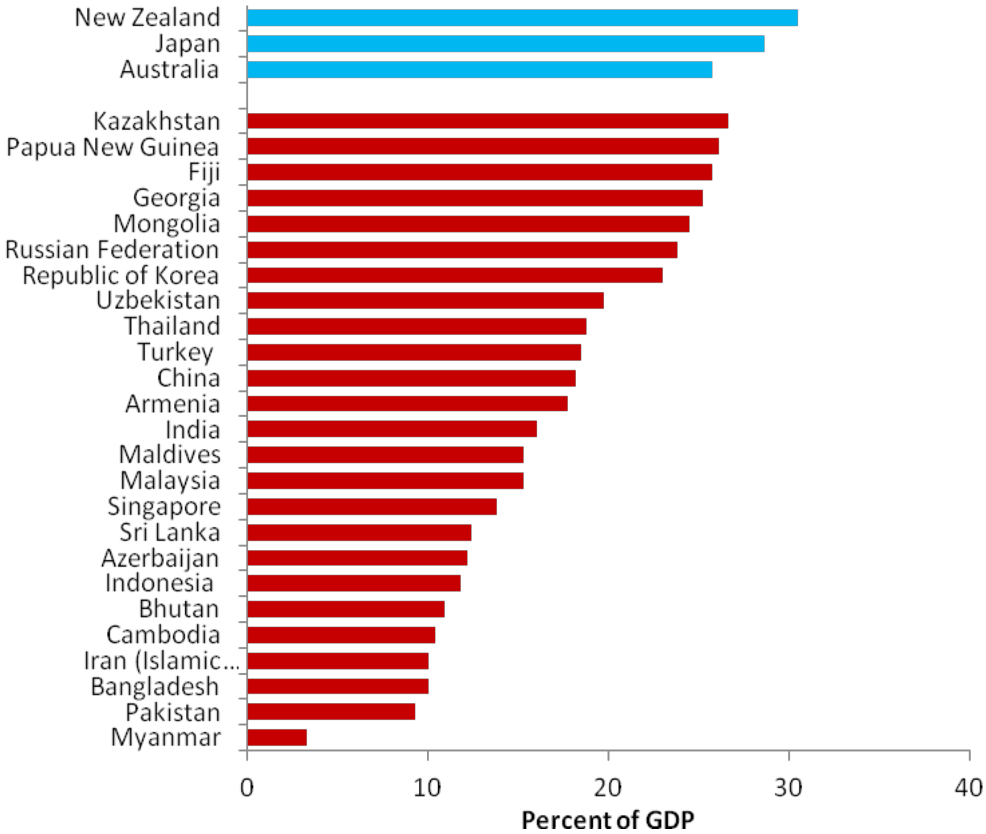
A. Domestic tax revenues

There is significant potential for increasing tax revenues in the Asia-Pacific region (ESCAP, 2013d). The collection of tax revenues in the developing countries of Asia and the Pacific is low, not only compared with developed regions or countries, such as the European Union or the United States of America, but also compared with other developing regions. In 2011, the average tax-to-GDP ratio in Asia and the Pacific was only 14.8% of GDP for central Government revenues, compared with 17.1% of GDP in Latin America and the Caribbean and 16.3% in sub-Saharan Africa. In the same year, the average tax revenue of the general Government was 16.9% of the GDP for the region's developing economies, compared with 24.2% for its developed economies. As shown in figure 4.1, only seven countries, four of which are resource-rich, collected tax revenues of more than 20% of GDP – and some had tax-to-GDP ratios in the single digits. This is problematic in the light of the positive relationship between tax collection and development.

There are several reasons why tax-to-GDP ratios are low in the region. First, personal income taxes schemes are still at an early stage of development. One reason is that a large proportion of the labour force is employed in the informal sector or in agriculture, which are not susceptible to income taxes. Moreover, in many countries, wealthier individuals avoid or evade tax payment. In Bangladesh, for example, only about 1% of the population pays income tax; in India the proportion is only 3%. In Pakistan less than 1% of the population filed an income tax return in 2011.

An important element to increase tax-to-GDP ratios is to tax capital gains more effectively, which is currently rarely done. This may arise from the difficulty in valuing capital gains, but is more likely due to the potential negative impact on competitiveness vis-à-vis countries that do not have such a tax. However, mechanisms for taxing capital gains in securities or property have been developed by some countries and could be more widely implemented. For instance, investment income is taxed at a flat withholding rate of 20% in China. One possibility would be to introduce dual income tax systems that not only impose increasing marginal rates on income but also taxes income on labour and capital separately. Doing so would enable greater flexibility to address global tax competition in order to attract capital. However, in most developing countries, tax systems do not treat labour and capital income separately. Clearly, the complexity of dual tax systems raises many challenges, including separation of labour and capital incomes. Further work is, therefore, needed on the suitability of such a system for developing countries and how to overcome difficulties in its implementation.

Figure 4.1. Tax-to-GDP ratios in selected Asia-Pacific economies, 2011



Source: IMF, Government Finance Statistics (GFS). Available from www.imf.org/external/data.htm.

Notes: Data from Armenia, Australia, China, India, the Islamic Republic of Iran, Kazakhstan, Mongolia, New Zealand, the Republic of Korea, the Russian Federation, Thailand, and Turkey pertain to general government tax revenues, for other countries data are for central Government tax revenues.

Second, many countries have shifted from taxation of trade to taxation on goods and services by introducing and expanding value added taxes (VAT) or general sales taxes (GST). Between 1990 and 2014, VAT or GST revenue rose from less than a fifth of indirect tax revenue to about one half. Despite raising significant amounts of revenue, collection efficiency of VAT/GST is quite low in many countries, indicating tax exemptions and difficulties in implementation of the tax. ESCAP estimates that in China, collection efficiency is less than 50%. In Bangladesh, India, Malaysia and Pakistan, collection efficiency is less than 40%. In Indonesia, estimates of VAT "gaps" have been put at 50–60% (ESCAP, 2014a). Indeed, the additional revenue from these taxes has often been unable to offset declines in trade tax revenue, a problem that IMF staff has seen in other least developed countries and middle-income countries (Baunsgaard and Keen, 2004). Also, a concern with VAT/GST is equity; as the poor spend a larger percentage of their income on consumption, these taxes have a relatively greater impact on the poor than on the rich.[1] Another concern is that the informal sector largely escapes the VAT net, discouraging businesses from making the transition to formal activities.

[1] It is possible to offset these effects to some extent by zero-rating or exempting certain goods and services. Indeed most countries have exemptions and lower rates for certain items such as food. However, the benefits of doing so must be weighed against increases in administrative costs.

Third, in many Asia-Pacific countries, a large part of tax revenue is also eroded by exemptions and concessions as countries aim to promote investment and, in particular, attract foreign direct investment (FDI). These exemptions include policies, such as tax holidays, reduced corporate income tax rates, investment tax allowances and partial profit exemptions to reduce the cost of capital.

In South-East Asia, for instance, these tax policies have been pursued extensively to encourage investment and to promote exports, research and development and skills training. In countries such as Indonesia, the Republic of Korea, Pakistan, Sri Lanka and Thailand, small companies are taxed at substantially lower rates. Some of those countries also offer preferential tax treatment for a whole sector — in Sri Lanka for tourism and construction and for insurance, and in Pakistan for power generation. Losses of revenue due to lower corporate income tax rates effectively being applied than the relevant statutory rate are equivalent to 0.5% of GDP in Georgia and 0.6% of GDP in the Philippines and Tajikistan.

Corporate tax concessions are worthwhile if they lead to higher investment, especially in employment-intensive sectors. It may be useful to offer special incentives to foreign investors if they can offer technological or other forms of expertise not available in the country. However, preferential tax treatment for foreign investors distorts competition by putting local companies at a disadvantage; therefore, careful cost-benefit analyses are needed to evaluate the usefulness of such tax policies.

Realizing their tax potential fully could raise more than $440 billion in tax revenues in 17 countries in the region, of which $306 billion would be raised in developing countries. ESCAP research indicates that Governments in the region have great potential to strengthen tax revenues as a major source of domestic resources for financing sustainable development. Most economies in the region are currently collecting tax revenues below their potential. In several economies the tax potential is quite sizeable, amounting to several percentage points of GDP. In Afghanistan, Bangladesh, Bhutan, the Islamic Republic of Iran, Maldives and Singapore the tax potential is equivalent to between 5% and 7% of GDP. In Hong Kong, China, the tax potential exceeds 12% of GDP (see table 4.1). If economies were to tap this potential, tax revenues would increase by 70% or more in several of them.

It has to be further recognized that some countries of the region are exploring innovative financing. For example, payments for ecosystem services are increasingly being explored in the region to create incentives for their sustainable use and conservation of natural resources. These have had a measurable impact on poverty rates and forest loss, for example in Viet Nam (Xuan and Santiago, 2010). Policymakers are discussing other innovative and emerging sources of resource mobilization from both domestic (see box 4.1) and external sources that will decisively create momentum for sustained economic growth.[2]

[2] See Communiqué Meeting of Finance Ministers and Central Bank Governors Sydney, 22-23 February 2014. Available from www.g20.org.

Table 4.1. Estimated tax potential in selected Asia-Pacific economies

Countries/areas	Year	Tax-to-GDP ratio (in % of GDP)		Tax gap	Tax gap in million United States dollars
		Actual	Potential		
Afghanistan	2011	8.8	15.0	6.2	$1 268
Azerbaijan	2012	12.9	15.1	2.1	$1 425
Bangladesh	2013	10.5	18.0	7.5	$8 774
Bhutan	2009	9.2	16.0	6.7	$120
Cambodia	2011	10.0	13.0	3.0	$427
China	2012	19.4	21.2	1.8	$150 153
Hong Kong, China	2011	14.2	26.7	12.5	$32 928
Indonesia	2012	11.9	16.6	4.7	$41 041
Iran (Islamic Republic of)	2013	5.8	13.1	7.2	$40 013
Japan	2012	17.0	19.3	2.2	$133 375
Malaysia	2012	16.1	17.4	1.3	$3 881
Maldives	2010	10.7	16.5	5.8	$129
Nepal	2013	15.2	16.1	0.9	$163
Pakistan	2012	10.3	12.1	1.8	$4 037
Philippines	2012	12.9	14.3	1.5	$3 668
Singapore	2011	13.8	20.7	6.9	$19 151
Thailand	2011	18.8	19.0	0.2	$622

Source: ESCAP (2014a).

Notes: The tax gap in column 5 is calculated by taking the difference between the estimated tax potential and the actual tax-to-GDP ratio for a given country/area in the year with the most recent data (listed in column 2). Only countries/areas with a positive tax gap are listed in this table.

Increasing the collection of tax revenues is important towards ensuring that adequate financial resources are allocated for the social sector in areas such as health, education, gender equality, water and sanitation. In particular, the government tax revenues are an essential element in ensuring that financing social sector development, including gender equality and empowerment, is carried out by the States, in order to support building effective public services and to enable access to economic resources.

Box 4.1. Innovative taxes for sustainable development in India

To fund the Sarva Siksha Abhiyan (education for all campaign), India started levying a 2% surcharge on income tax payable by any assessment, as education cess in India. This "tax on tax", which is called education cess in India, has been used to fund universal access to good-quality basic education.

Similarly, the Central Road Fund was established by an Act of the Indian Parliament passed in 2000 in order to fund the development and maintenance of national highways, state highways and rural roads and for provision of roads over bridges and under bridges, and other safety features at unmanned railway crossings. The Fund is mobilized with a levy of a cess of Rs. 2 ($.03) per litre imposed on petrol and high-speed diesel oil.

Furthermore, at the cities and/or subnational level, local governments derive revenue often from land/property taxes, but there are several limitations to make use of this tax revenue for investments in growth and development. However, in many countries, there is a lack adequate technical capacity, sectoral financing mechanisms and skills support for officials and personnel. An adequate increase in tax revenues from federal and local sources could enable governments to adopt creative measures to ensure the service delivery, as appropriate.

B. Public expenditure management

Rationalization of public expenditure and more effective allocation and management could free up significant resources for development. Governments could significantly scale up resources by improving the expenditure management of their budgets. For instance, they could curb non-developmental expenditures, including defence expenditures, which for some countries in the region rank among the highest in the world. In 2013, the defence budget of the 10 highest ranked spenders globally reached $1.1 trillion. Of this, half of the countries were located in the Asia-Pacific region, accounting for 30%, equivalent to $342 billion, of this expenditure. [3]

In some countries, including Bangladesh, China, Georgia, India, Pakistan, the Republic of Korea, the Russian Federation and Singapore, defence accounts for more than 10% of total public expenditure. In fact, defence expenditure is often greater than the allocation to health and education combined. Clearly, countries could find ways to reduce such expenditure on non-development areas. This also includes other non-defence expenditure. For example, in the Pacific economies, the public sector is a major employer. In several countries in the subregion, this leads to more than half of public expenditure being spent on salaries and wages. Capital expenditure and development-oriented expenditure is limited as a result. The underpinning reason is capacity constraints and weak institutions, which cause poor implementation, as well as reduced the potential for better planning, budgeting and execution over the medium term.

Significant resources are spent on subsidies. In South-East Asia alone, energy subsidies amounted to $51 billion in 2012. Such subsidies present a drain on resources. In Uzbekistan and the Islamic Republic of Iran, for instance, energy subsidies in 2011 exceeded 50% of government revenue; in Turkmenistan they exceeded government revenues by more than a fifth (IMF, 2013). In some countries, including Bangladesh, Kyrgyzstan and Pakistan, energy subsidies consumed between a quarter and half of total government revenues, which often most benefit the wealthiest in society and are also environmentally harmful.[4] Subsidies on fuel alone reached nearly 2% of GDP in the fiscal year 2011/12 in India; in 2011, energy subsidies exceeded 3% of GDP in Bangladesh, Brunei Darussalam, Indonesia and Pakistan and exceeded 5% of GDP in Kyrgyzstan, Turkmenistan and Uzbekistan.[5] Rationalizing subsidies is, therefore, a key reform to raise public resources for productive development investment in the region.

Removing or reducing subsidies is politically challenging; in many countries the removal of fuel and energy subsidies has sparked protests. Yet, doing so would make significant resources available for financing sustainable development. According to ESCAP estimates, savings from these subsidies would be sufficient to finance a comprehensive policy package comprising income security for the entire elderly population and all persons living with disabilities, as well as providing universal access to health and education in India and Bangladesh. In Pakistan and Indonesia, energy subsidies would, in addition, be sufficient to finance employment for everyone for 100 days per year, at a wage equivalent to the national poverty threshold (UNDESA, 2015).

3 The highest ranking country, the United States, accounted for 52%.

4 The subsidy refers to the pre-tax subsidy for petroleum products, electricity, natural gas and coal, i.e. if the price paid by firms and households is below supply and distribution costs.

5 IMF data.

Public resources for development could be raised by curbing illicit financial flows, including those related to tax evasion and avoidance. The Asia-Pacific region accounts for more than 60% of the estimated $5.9 trillion that flowed out of developing countries illicitly or illegally between 2001 and 2010 to evade or avoid taxation (Kar and Freitas, 2012). Of the 10 countries with the largest illicit capital flows, six are in the Asia-Pacific region; of all least developed countries, illicit outflows from Bangladesh are the largest, reaching $35 billion between 1990 and 2008 (Kar, 2011).

One mechanism for avoiding tax payments is by mispricing trade by overstating the value of imports or understating the value of exports. In doing so, profits can be transferred from one country to another, generally from high- to low-tax regimes. Estimates of such mispricing into the European Union and the United States between 2005 and 2007 include $577 million for Pakistan, $350 million for Bangladesh and $475 million for Viet Nam (Christian Aid, 2009).

Similarly, multinational corporations can price transactions between subsidiaries in different countries to divert profits to low-tax countries and thereby minimize their tax liabilities. It is, therefore, necessary to develop mechanisms for proper apportionment of costs between the domestic and foreign operations of firms operating within countries so that there is no loss of tax revenues, especially in the presence of treaties for avoidance of double taxation. Already, about 20 Asian countries have adopted transfer-pricing rules in their tax laws, mostly based on Organisation for Economic Co-operation and Development. (OECD) lines. For instance, Indian legislation prescribes five methods to compute the "arm's length price". In that regard, countries may also wish to consider some degree of harmonization of taxation of profits of multinational companies.

Policy options

To boost tax revenues, especially in countries with significant untapped tax potential, the Governments of the Asia-Pacific region could do the following: raise value added taxes and capital gains; harmonize income tax rates; tackle tax evasion and make tax administrations more efficient; broaden the tax base; and rationalize tax rates to minimize welfare losses. One objective would be to rationalize very high rates, which lead to disproportionate welfare losses and increase the incentive for tax evasion. Similarly, high tariffs may encourage smuggling, illicit trade and under invoicing of imports, and also address the issues of transfer pricing.[6]

Some of the policy options to explore are the following:

- Income tax: While a progressive tax system that places more of the tax burden on upper-income households is in place in most countries in the region, greater efforts are needed to broaden tax bases. Moreover, a framework for developing a fair tax system that promotes both growth and equitable distribution of income is needed.
- Value added taxes (VAT). Part of the framework will entail increasing the collection efficiency of sales taxes and VAT, and tackling non-compliance and evasion of VAT payments, which are important issues in several countries. Here too, the base for VAT receipts can be strengthened by extending its coverage to a wider range of sectors, including finance and services, which are currently often exempt. However, in that regard, equity and jurisdictional issues between national and subnational levels of government need to be addressed.
- Rationalization of tax rates. Clearly, a high degree of informality in labour markets is a contributing factor to low tax coverage. However, tax avoidance of the wealthy is often a more relevant and pressing concern. To address this, rationalizing tax rates to provide greater incentives for tax compliance could be considered. In addition, countries could review the progressivity of their tax codes, in particular the taxation of capital income and inheritance and wealth taxes.

[6] For example, in 2010, illicit financial flows from developing countries were estimated to be in the range of $850 billion to $1.1 trillion as reported in UNDESA (2014b).

- Capital gains. In many countries, more efforts are needed to tax capital gains effectively. Some countries have in place mechanisms for taxing capital gains in securities or property, however there is scope to implement such mechanisms more widely throughout the region. Regional cooperation can play an important role in mobilizing domestic resources, particularly in terms of avoiding tax competition.
- National tax policies. Countries need to increase anti-laundering efforts and should address base erosion and profit shifting by multinational corporations. Evidence shows that low tax rates do not necessarily imply that countries will grow more rapidly. While tax concessions and exemptions to attract investment are a common practice in the region, particularly in some less-developed countries, this is the exception. Exemptions and concessions are generally used to attract FDI. However, they often perpetuate tax competition between countries, which ultimately deprives them of urgently needed revenues and unduly results in a "race-to-the-bottom".
- Tax evasion. Tackling tax evasion is critical for leveraging more domestic resources for sustainable finance. One way to address tax evasion may be by deducting more taxes at source through withholding or advance taxes. The introduction of minimum taxes on companies and associations of persons is a popular instrument for tackling tax evasion. Additional measures require greater regional cooperation to deal with tax havens and to tackle transfer pricing by multinational corporations.
- Tax policies for natural resources. Many countries in the region have significant natural resources. Fishing license fees, for instance, are an important source of revenue for several small island developing economies. Managing the tax and non-tax revenues from these natural resources poses additional challenges. For one, countries face a trade-off between raising higher levels of revenue rapidly by increasing rates of natural resource extraction, and managing their resources more sustainably by reducing rates of extraction, yet securing longer-term revenues. In addition, natural resource-rich economies often have significant tax leakage due to profit shifting and tax erosion; this can have a significant impact on revenues. Addressing this requires a concerted regional effort. More steps, therefore, need to be taken to tackle this issue.
- Make existing expenditure more effective and development oriented. An important component of making more domestic public resources available for financing sustainable development is to rationalize public expenditure to make it more effective. This entails reprioritizing existing expenditure towards development, and making it more effective by reducing, for instance, subsidies. Therefore, reducing poorly targeted subsidies, especially those on energy, can contribute significantly to making more resources available. Not only are such subsidies often regressive, they can also make budgets vulnerable to global economic activity, particularly if they are price-based.
- City financing: The rapid growth of urbanization in the region is creating additional needs for stepping up public infrastructure investment, and to formulate fiscal strategies. Domestic resource mobilization, national budgets are critical for financing development projects at the national and city levels. In particular, there is a clear need for mainstreaming national policies and sustainable development financing into national budgets. This will provide a comprehensive guideline for developing systems that create an enabling environment for innovation and adaptation of financing options, which can be based on subnational circumstances.
- Asia-Pacific Tax forum: Countries may consider creating an Asia-Pacific tax forum to enhance regional cooperation to tackle tax evasion and tax avoidance, particularly with regard to transnational corporations, and to prevent the illicit fund transfers.

Domestic and international private financing

5

With regard to economic growth dynamism of the Asia-Pacific region, the private sector has been playing a pivotal role and can even contribute towards achieving sustainable development. However, investment from the private sector face several constraints, which the Governments need to address in order to improve the enabling domestic policy environment and the overall allocative efficiency and productivity of the public sector. In this context, private businesses have benefited a great deal in recent years from better access to regional value chains.

This chapter highlights the need to exploit the potential of the private sector to facilitate the channelling of savings towards investment in sustainable development. The private sector can increase investments in such areas as sustainable infrastructure, climate resilient agriculture, innovation, and SMEs access to finance.

A. Broadening and deepening capital markets

It is generally viewed that capital markets have an important role to play in the intermediation of funds from savers to investors. Banks have traditionally been a main source of finance for investments in developing and emerging markets, with bond and equity markets serving as important complementary roles. The view that a vibrant financial sector has a positive effect on economic growth and development has long been understood (Das and Basu, 2015). This chapter presents ways in which capital markets can mobilize resources towards infrastructure and social and environmental development. The chapter also considers the fact that the development of capital markets can be restricted due to small country size, as is the case of the Pacific island developing economies and some of the region's least development countries.

The ultimate objective of policies that broaden and deepen capital markets is to mobilize greater volumes and longer-term finance for sustainable investment. There is a useful distinction between efficiency on the one hand and "financial deepening" on the other hand. For sustainable development finance to be effective, resources must be channelled to the real sector and productive investments. This enables greater volumes of socially productive investment in new economic activities and social infrastructure. This process results in a virtuous circle that allows for higher levels of economic activity and ultimately a greater proportion of income saved, which can, in turn, help to spur further investment. Financial deepening entails increasing the volume and variety of financial transactions. It can go hand-in-hand with increased socially productive investment and can occur even when savings are not increasing. The role of the financial system is to intermediate between surplus and deficit units of an economy. Normally, Government and the corporate sector are the deficit units and households both invest and save.

For example, Malaysia has made a lot progress in developing its capital markets, which currently provide 40% of the financing available, as well as more options for savers. To achieve this development, Malaysia has implemented two capital market development plans. The first one

(2001-2010) focused on basic infrastructure, such as regulations and payments systems and the second plan (2011-2020) is focusing on improving the governance of financial institutions and investor protection, with Government playing a facilitating role. The Malaysian financial markets are rather open, implying that the availability of funding does not depend only on the domestic market. In addition, Islamic bonds have become very important instrument for infrastructure financing.

Asia and the Pacific has large pool of savings which has yet to be deployed for development purposes. As noted in box 5.1, the region's combined assets of high net worth individuals and mass affluent stood at $33.2 trillion in 2012 and is expected to increase to $65.9 trillion by 2020.

Box 5.1. Assets of high net worth individuals and mass affluent in Asia and the Pacific

The Asia-Pacific region is characterized by high levels of savings. According to PricewaterhouseCoopers (PwC), the region's high net worth individuals had $12.7 trillion in assets in 2012, while the region's mass affluent had $20.5 trillion in assets.[a] PwC estimates that these values will increase, respectively, to $43.3 trillion and $22.6 trillion by 2020.[b] These large and growing savings can provide financing for the region's sustainable development. However, the development of capital markets in the region has not kept pace with its rapid economic growth, and, as a result, substantial amounts of the region's savings are held in other parts of the world.

[a] High net worth individuals own $1 million or more in assets; mass affluent individuals own between $100,000 and $1 million in assets.

[b] PwC (2014).

Commercial banks have traditionally played a major role in the financial markets of Asia and the Pacific. However, funding long-term developmental projects through banks is subject to maturity risks because of the short-term nature of banks' assets. To reduce these risks, the region needs to develop its capital markets, which can match more effectively investors and savers with different time horizons and risk profiles. The development of capital markets requires specialized institutions and regulatory frameworks.

The importance of capital market development as part of a strategy to mobilize domestic resources for development was recognized by the drafters of the 2002 Monterrey Consensus on Financing for Development and its follow-up 2008 Doha Declaration: We recognize the need to strengthen and develop the domestic financial sector, by encouraging the orderly development of capital markets through sound banking systems and other institutional arrangements aimed at addressing development financing needs, including the insurance sector and debt and equity markets, that encourage and channel savings and foster productive investments (United Nations, 2002).

A.1. Equity markets

Although the share of equity markets as a proportion of total financial sector assets is small in Asia and the Pacific, the key stock markets have expanded impressively in recent years. As a result, the region's share in world market capitalization stands at 31%, of which the stock markets of Tokyo, Hong Kong and Shanghai account for more than 50%. In addition, there are other dynamic markets in the region that have strong potential for cross border listing.

Stock market capitalization in Asia and the Pacific was close to $15 trillion, well over the value of Eastern Europe, Middle East and Africa (EMEA) markets combined. In total, almost 20,000 companies were listed in the region's stock markets by the end of 2012 — well above comparative figures for other continents. Stock markets in Asia and the Pacific, however, vary significantly in terms of market capitalization, ranging from 144% of GDP in Malaysia to 0.3% of GDP in Armenia. In smaller economies, the breadth and depth of the markets are often quite limited because of lack of liquidity, low level of corporate listings and weak regulatory frameworks and corporate governance.

Several smaller countries in the region have developed their equity markets. Papua New Guinea has had an equity market since 1989, which has been used by State-owned enterprises to fund infrastructure investments. The stock exchange in Bhutan opened in 1993 and currently has 21 listed companies. Lao People's Democratic Republic established a stock market in 2010 and has three listed companies. The country is currently bringing the market's regulatory framework to international standards. The Cambodian stock market, which opened in 2012, is at an early stage of development. Although transactions are in the domestic currency, the riel, because of the high degree of dollarization of the Cambodian economy settlement can be done in U.S. dollars. The volume of transaction in the stock exchange is small, with its greatest challenge being to encourage local companies to be listed.

For large and emerging economies, equity markets are important sources of corporate financing, not only domestically but also internationally, as large corporations are increasingly listing in international stock exchanges. As a result, the equity markets of the region have witnessed growth in terms of size and cross-border investment activity. These markets are quite vibrant and offer high returns that encourage speculative trading and attract short-term excessive and volatile capital inflows. These inflows destabilize equity markets if they are suddenly reversed. In addition, in some equity markets, the pricing of stock issues may not truly reflect economic and corporate fundamentals, exacerbating the potential for market price volatility.

The region's stock markets have also become more integrated with international markets, and some of them are benefiting from foreign investments and cross listings. The level of development of the stock markets in the region is diverse, with a number of them serving as an important source of corporate funding, others can be developed further and for some, the full potential of equity markets remains to be exploited. For that purpose, countries in the region have scope for pursuing reforms to address a range of constraints holding back the growth of equity markets, including weaknesses in the legal, regulatory and governance frameworks.

A.2. Bond markets

Over time, the Asia-Pacific financial markets have become more diversified. In particular, local currency bond markets expanded a lot over the last decade, mostly for government bonds, with their amounts outstanding now exceeding those of foreign currency bonds. As noted previously, banks continue to dominate financial intermediation in stock and bonds, as domestic institutional investors lack sophistication in this area. The latter could provide much needed long-term financing in the light of their long-term liabilities.

The development of local currency (LCY) bond markets in the region received a boost after the Asian financial crisis of 1997-1998 (Lim and Lim, 2012). The rationale for supporting the development of such markets was to reduce the extent of currency mismatches, which prior to the crisis were associated with banks borrowing overseas in U.S. dollars and lending domestically in domestic currency. After 1997, domestic bond markets developed spectacularly in some Asia-Pacific developing countries (Seok and Kim, 2014).

The value of domestic bonds outstanding in: China; Hong Kong, China; Indonesia; Malaysia; Philippines; Republic of Korea; Singapore; and Thailand represented only 21% of the GDP in 1997 (BIS data). These figures were comparable to developing countries from Latin America (20%) and Eastern Europe (17%). However, by 2010, the value of domestic bonds outstanding increased to 64% of GDP for Asia-Pacific developing countries, largely exceeding Latin America (34%) and Eastern Europe (33%) in the same year (Seok and Kim, 2014).

The region is leading a global trend towards local currency-based finance. International issues by both governments and corporations of local-currency bonds and notes have increased sharply since 2000 (Akyuz, 2015).

The share of LCY debt of emerging markets and developing economies was only about 2% in 2000. It has since climbed, reaching about 16% in 2013. For China, Thailand, and Turkey, the share of LCY debt exceeded one-third of their total debt. Governments have opened domestic debt markets to foreigners. This shift was also facilitated by the tendency toward currency appreciation in the 2000s, a time of abundant global liquidity and high commodity prices. These conditions could reverse in the near future, a change in direction that could be propelled by the normalization of United States monetary policy away from the quantitative easing policies implemented after 2007-2008 global financial crisis.

Table 5.1 shows bonds issued in domestic currency in selected Asia-Pacific countries for which data are available. The domestic bonds issued increased at an average annual rate of 16.8% for developing countries between 2005 and 2013, compared with 4.9% for developed countries. On average, growth of these markets was more rapid over the period 2005-2009 compared with 2009-2013, especially for the developed countries in the region.

Table 5.1. Domestic debt securities issued by selected Asia-Pacific economies, 2005-2013

	Amounts outstanding (Billions of US dollars)			Percentages of the GDP			Annual average growth rates	
	Sep.05	Sep.09	Sep.13	Sep.05	Sep.09	Sep.13	Sep. 05 - Sep. 09	Sep. 09 - Sep. 13
Developing countries	2,142.2	4,436.6	7,415.7	35	42	42	20.0	13.7
China	808.8	2,413.6	3,974.5	36	48	43	31.4	13.3
India	31.8	45.2	594.6	4	4	32	9.1	90.5
Indonesia	43.4	115.9	101.2	15	21	12	27.8	-3.3
Republic of Korea	699.2	925.4	1,361.7	78	102	104	7.3	10.1
Malaysia	131.0	204.4	326.7	91	101	104	11.8	12.4
Pakistan	33.7	44.0	95.8	31	26	41	6.9	21.5
Philippines	38.5	52.4	89.4	37	31	33	8.0	14.3
Russian Federation	49.3	135.4	267.1	6	11	13	28.7	18.5
Singapore	48.3	86.7	101.7	38	45	34	15.8	4.1
Thailand	76.2	196.7	286.5	43	74	74	26.7	9.9
Turkey	181.9	216.9	216.5	38	35	26	4.5	0.0
Developed countries	9,721.2	13,270.1	14,245.4	179	216	216	8.1	1.8
Australia	454.5	962.9	1,291.0	62	97	86	20.6	7.6
Japan	9,244.8	12,279.8	12,894.9	202	244	263	7.4	1.2
New Zealand	21.8	27.4	59.5	19	23	33	5.9	21.4
Total	14,005.6	22,143.3	29,076.8	120.9	132.5	119.5	12.1	7.0

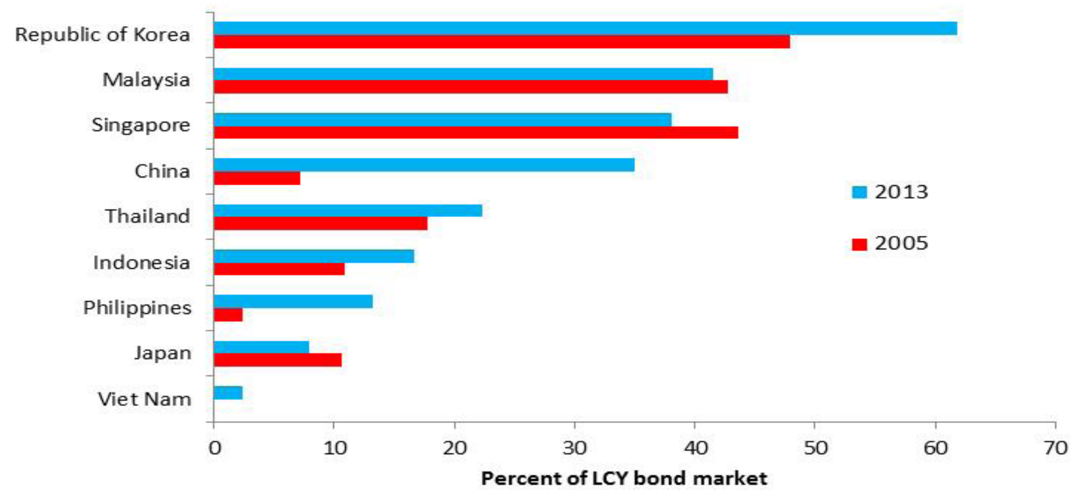
Sources: ESCAP, based on data from BIS Quarterly Review, March 2014, table 16A; World Bank, World Development Indicators database; and CEIC Data Company.

As of September 2013, Japan remained the largest issuer of domestic currency bonds in the region, but its share decreased to 44.3% from 66% in September 2005. Domestic currency bond issues in India increased the most rapidly, from only $0.2 billion in September 2005 to $2 billion in September 2013. The growth of LCY bond markets in the country was particularly rapid during the period 2009-2013: 90% per year. Other countries that experienced rapid growth in domestic currency bond issues were the Russian Federation (23.5%), China (22%), Thailand (18%), Australia and Pakistan (13.9%). On average, there was an increase in amounts outstanding of LCY bonds as percentages of the GDP between 2005 and 2009 for both developing and developed countries in the region. The largest ratios of LCY bonds outstanding to GDP in the region in September 2013 were for Japan (263%), Republic of Korea and Malaysia (104%), Australia (86%) and Thailand (74%).

On average, LCY bonds issued by Governments represent a large share of the total LCY bonds issued by Asia-Pacific economies, 78.1% as of December 2013. However, the share of corporate LCY bonds increased significantly, from 14.7% in December 2005 to 21.9% in December 2013. As of the latter date, the share of corporate bonds was highest in the Republic of Korea (61.8%); Hong Kong, China (44.3%); Malaysia (41.5%); Singapore (38.1%); and China (35%). Over the past eight years, the share of corporate bonds increased the most in China, the Republic of Korea and the Philippines (see figure 5.1).

The rapid growth of markets for LCY bonds in Asia-Pacific countries since the Asian financial crisis indicates the potential for the region to rely on national and regional markets increasingly for its financial needs, while reducing dependence on foreign currency borrowing. As of December 2013, the foreign holdings of LCY government bonds as a share of the amounts outstanding were 32.5% for Indonesia, 29.4% for Malaysia, 17.4% for Thailand, 9.2% for the Republic of Korea and 8.3% for Japan.[1]

Figure 5.1. Share of corporate bonds in the total LCY bonds issued, 2005 and 2013



Source: ESCAP, based on data from ADB, Asian Bonds Online, "Size on LCY bond market".

The extent of foreign participation points towards the broadening of the investor base, but it also suggests the need to broaden the domestic and regional investor base. The significant level of foreign participation can become problematical, even for countries which have robust balance of payments positions, if and when non-resident and non-regional portfolio investors find better prospective returns elsewhere and cash in their investments. Without a broader and deeper domestic and regional investor base capable of taking up the positions foreigners are abandoning, such reversals could have adverse effects on the financial sectors and foreign exchange markets.

[1] Asian Development Bank, AsianBondsOnline. Available from http://asianbondsonline.adb.org/.

A key aspect of sustainable development financing is attention by Governments of the region to improve intraregional financial information flows, which can boost intraregional portfolio flows. Governments in the region should also expand the capabilities and the number of genuinely regional institutions that intermediate funds from the region into the region. The Asian Bond Markets Initiative must not only focus on increasing the size of national markets, but also on to how to facilitate and promote markets and institutional infrastructure for intraregional finance.

In the context of ASEAN+3, the Asian Bond Market Forum (ABMF) was established in September 2010 to provide a platform for bond market experts from the region to foster the standardization of market practices and harmonization of regulations relating to cross-border bond transaction in the region. One of the ABMF subforums, SF1, has agreed to develop an intraregionally standardized bond issuance framework, which would ultimately allow bond issuers in ASEAN+3 to issue bonds in all participating economies with one set of standardized documentation and information disclosure requirements, subject to compliance with the legal and regulatory requirements of each economy. The deliberations of this subforum resulted in a recently published proposal to establish the ASEAN+3 Multi-Currency Bond Issuance Framework (AMBIF) (ADB, 2014).

An important part of this effort will involve increasing the flow of regional and extraregional investors, such as mutual funds, pension funds and insurance companies, in LCY bonds. Even though the region's recent success in this effort can be celebrated, it must be strengthened further through network building among authorities and financial institutions, harmonization of reporting requirements and regulations, and provisions of regional resources (for example, through insurance facilities for long-term investors from the region into the region) to boost intraregional investment flows.

Another issue that needs careful consideration is how to deal with potentially disruptive capital flows into and out of the region's LCY bond markets, such as the sudden withdrawals of funds that took place after the collapse of Lehman Brothers in September 2008. The risk of such disruptions reoccurring in the future reinforces the need for the development of LCY bond markets to be accompanied by proper regulation and an effective institutional framework to reduce volatility arising from the participation of foreign investors (Mitra and Ng, 2014). Macroprudential measures, including capital account management measures, should also be considered in the context of the development of the region's capital markets (Jeanne, 2014).

A.3. Institutional investors

Institutional investors include pension funds, mutual funds, insurance companies, sovereign wealth funds and investment managers. Institutional investors tend to have long investment horizons and as such contribute to the stability of the local markets. It may, therefore, be appropriate to explore ways to increase their presence in the domestic bond and equity markets. One way to do this is to promote savings through national pension funds and insurance companies. In view of the long-term orientation of institutional investors' investment portfolios, it is particularly important for authorities to provide predictable macroeconomic and regulatory frameworks as well as effective enforcement of the rule of law and absence of corruption.

Globally, most of the assets managed by institutional investors are located in OECD countries. As of the end of 2011, these countries held \$70 trillion of the \$85 trillion in assets held globally. Institutional investors can play an increasingly critical role in the global provision of long-term finance, part of which could be tapped for funding sustainable development. Their growing importance is accorded in a recent OECD report, in which they were viewed as "welcome developments as long as their associated risks are properly understood and managed" (OECD, 2013a). To facilitate the development of capital markets in the region, it is important that policymakers understand the mentality of institutional investors.

The following is a brief description of the current status of institutional investors in Asia and the Pacific. Table 5.2 shows details of the top institutional investors in the region in three categories: asset management firms such as insurance companies and mutual funds, pension funds and sovereign wealth funds. The table shows the largest institutional investors in each of those categories, their country, the amount of assets under management and their global ranking.

Table 5.2 Top institutional investors in Asia-Pacific economies

Top Asia-Pacific Asset Management firms (Dec-2012)		
Country and Asset Manager Name	Assets ($ billion)	World rank
Japan		
Nippon Life Insurance	662.9	23
Zenkyoren	531.9	33
Mitsubishi UFJ Financial	529.2	34
Sumitomo Mitsui Trust and Bank	456.1	38
Dai-ichi Life Insurance	362.1	47
Shinkin Central Bank	345.1	50
Meiji Yasuda Life Insurance	337.1	52
Nomura Holdings	277.3	61
Sumitomo Life Insurance	243.3	66
Mizuho Financial Group	239.6	68
Resona Trust and Bank	172.3	87
MS&AD Insurance Group	169.6	88
Nikko Asset Mgmt.	162.0	93
Sumitumo Mitsui Asset Mgmt.	68.9	161
Fukoku Mutual Life Insurance	67.3	164
Tokyo Marine Holdings	65.7	167
Daiwa Securities	53.4	185
NKSJ Holdings	46.0	200
Australia		
Macquarie Group	290.1	83
AMP	133.4	104
NAB/MLC	100.6	126
QIC	72.9	153
Westpac/BT	58.6	175
Industry Funds Mgmt.	40.3	222
Challenger Financial	39.7	224
Republic of Korea		
Samsung Group	338.5	76
Hanwha Group	71.1	156
Mirae Asset Financial Group	37.8	228
China		
China Asset Mgmt.	50.5	189
Harvest Fund Mgmt.	48.8	194
China Southern Fund Mgmt.	36.4	233
World (Top-500)	68,294.0	
Asia-Pacific (In top-500)	6,653.1	(9.7%)

Top Asia-Pacific Pension Funds (Dec-2012)		
Country and Fund Name	Assets ($ billion)	World rank
Japan		
Government Pension Investment	1,292.0	1
Local Government Officials	201.4	7
Pension Fund Association	119.2	20
National Public Service	93.1	24
Public School Employees	68.0	40
Organization for Workers	54.8	56
Private School Employees	40.6	85
Mitsubishi UFJ Financial	25.3	140
Nippon Telegraph & Telephone	24.3	149
Australia		
Future Fund	89.5	29
AustralianSuper	55.4	54
Qsuper	42.0	80
First State Super	37.5	94
State Super	37.2	96
UniSuper	34.8	104
CSC	27.5	126
REST	25.2	142
Hesta	22.5	160
Sunsuper	22.4	161
Cbus	21.5	167
Republic of Korea		
National Pension	368.5	4
Singapore		
Central Provident Fund	188.4	8
China		
National Social Security Fund	177.5	10
Malaysia		
Employees Provident Fund	175.7	12
Retirement Fund-KWAP	29.1	117
Russian Federation		
National Wealth Fund	88.1	27
India		
Employees Provident	68.1	39
World (Top-300)	13,995.2	
Asia-Pacific (In top-300)	3,675.5	(26.3%)

Top Asia-Pacific Sovereign Wealth Funds (Mar-14)		
Country/Area and Fund Name	Assets ($ billion)	World rank
China		
China Investment Corporation	575.2	4
SAFE Investment Company	567.9	5
National Social Security Fund	160.6	11
China-Africa Development Fund	5.0	52
Singapore		
Government of Singapore	320.0	8
Temasek Holdings	173.3	9
Hong Kong, China		
Hong Kong Monetary Authority	326.7	7
Russian Federation		
National Welfare Fund	88.0	13
Reserve Fund	86.4	14
Russian Direct Investment Fund	13.0	39
Kazakhstan		
Samruk-Kazyna JSC	77.5	15
Kazakhstan National Fund	68.9	19
National Investment Corporation	20.0	31
Australia		
Australian Future Fund	90.2	12
Western Australian Future Fund	0.3	68
Republic of Korea		
Korea Investment Corporation	72.0	17
Iran (islamic Republic of)		
National Development Fund of Iran	58.6	22
Malaysia		
Khazanah Nasional	40.5	25
Brunei Darussalam		
Brunei Investment Agency	40.0	26
Azerbaijan		
State Oil Fund	34.1	27
New Zealand		
New Zealand Superannuation Fund	20.3	30
Timor Leste		
Timor-Leste Petroleum Fund	14.6	38
World (Total)	6,365.8	
Asia-Pacific (In total)	2,854.8	(44.8%)

Source: ESCAP, based on data from Towers Watson, "The world's 500 largest asset managers", 2013; Towers Watson, "The world's 300 largest pension funds, 2013; and OECD and SWF Institute, "Sovereign wealth fund ranking". Available from www.swfinstitute.org (accessed 5 May 2014).

Table 5.2 reveals important differences across the three categories of institutional investors. Of the $68.30 trillion in assets under management by the world's top 500 asset management firms, the share of Asia and the Pacific was only 9.7%, or $6.65 trillion, at the end of 2012. The vast majority of this amount was managed by firms from the region's developed countries: $4.82 trillion (72.4%) by Japan; and $850 billion (12.8%) by Australia. Among the region's developing countries, the Republic of Korea had the largest share (7.3% or $488 billion), followed by China (5.8% or $390 billion) and India (1.4% or $90 billion). It should be noted that none of the Asia-Pacific companies in the world's top 500 were among the world's 20 largest. The largest one in 2012 was Nippon Life Insurance which, with $663 billion in assets, was ranked 23 in the world that year.

In contrast, in the category of sovereign wealth funds (SWFs), the Asia-Pacific region had a larger global presence — $2.85 trillion, or 45% of the world's total assets under management. In addition, SWFs from developing countries represented 96% of the region's total assets under management, of which China represented $1.31 trillion, or 45.8%; Singapore, $493 billion, or 17.3%; Hong Kong, China, $327 billion, or 11.4%; and the Russian Federation, $187 billion, or 6.6%. In addition, smaller countries, such as Timor-Leste, Azerbaijan and Brunei Darussalam, had SWFs with assets exceeding $10 billion.

The share of Asia and the Pacific in the assets under management of the world's top 300 pension funds was 26.3%, or $3.68 trillion, at the end of 2012. Although the developed countries from the region represented the lion's share of this amount (Japan, $2.03 trillion or 55%; Australia, $478 billion or 13%), developing countries, including the Republic of Korea, China, Singapore, Malaysia, the Russian Federation and India, represented 31.5% of the total. In 2012, the region was home to 7 of the world's 20 largest pension funds, including the world's largest, Government Pension Investment (Japan), with $1.29 trillion in assets4) and the number 4, (Republic of Korea National Pension, with $369 billion in assets.

Asset managers, pension funds and SWFs in Asia and the Pacific can contribute to financing infrastructure. For example, pension funds trustees are under intense pressure not only to deliver good returns, but even more importantly to protect the capital. As a result, risk aversion can drive them outside some markets. Thus, a proper risk framework has to be in place to reassure investors. Investors look into where they will place their capital and what are the opportunity costs of not doing so. They have a philanthropic view as well, but profitability and security are key factors. In sum, policymakers need to create an enabling environment in the financial market in order to provide a good investment plan.

Globally, the portfolio allocation of institutional investors has tended to shift from equities to investments in bonds and the so-called alternative asset classes. The shift from equities to bonds started in the early 2000s, but accelerated after the global financial crisis, as investors sought to reduce risks. However, the low-yield environment prevailing in recent years pushed some institutional investors to take additional risks in the search for higher returns by investing in alternative assets, such as hedge funds, real estate, private equity and most recently infrastructure (OECD, 2013c).

Pension funds have traditionally invested in infrastructure through listed companies and fixed income instruments. However, over the last two decades they have started to recognize infrastructure as a distinct asset class which, although illiquid, could be beneficial to enhance portfolio diversification. Because of their long investment horizons, pension funds and other institutional investors can afford the risk of investing in less liquid and longer-term assets, such as infrastructure (OECD, 2013b).

For example, the pension fund of the Republic of Korea, launched in 1988, is the single biggest institutional investor in the country. For overseas investment, the fund is subject to a rule that 100% of investment in foreign bonds should be hedged, but this may increase volatility in the foreign exchange market, conflicting with macroprudential objectives. In the Pacific islands, provident funds are well-placed to play a greater role to provide funding for long-term investments, but to support their development plans, they must be allowed to access offshore investments. This is, however, complicated due to exchange rate concerns.

A recent survey of large pension funds and public pension reserve funds by OECD found that their investment in unlisted infrastructure equity was relatively small in 2012, equivalent to $64 billion, or only 3% of the total assets (OECD, 2013b). An obstacle for this type of investment is that their nature and risks, which include high upfront costs and the large scale of projects, require expertise that can take a long time to build and may be beyond the means of smaller pension funds. However, the experience of Chile and Mexico has demonstrated that Governments can assist pension funds' investment in infrastructure by developing infrastructure corporate bond markets (OECD, 2013b).

The main impediments to infrastructure financing arise from the lack of appropriate investment vehicles, such as infrastructure bonds with insurance guarantees (China), structured products (Mexico), collective trust structures (Peru), or joint-owed infrastructure companies (Brazil). Weak governance, limited administrative capacity and lack of objective and high quality data on infrastructure are other obstacles. Factors, such as accounting disclosures, shareholders rights and legal frameworks are important to encourage associated investments by mutual funds in emerging markets. These factors are also key in providing policy support for the development of local institutional investors in emerging Asia-Pacific countries.

It is clear that the disjuncture between the large volumes of available potential financing and their inadequate deployment into long-term projects, including infrastructure, is not a Regional feature alone but a global lacuna. The ICESDF report (United Nations, 2014b) identifies many of the appropriate responses to this lacuna, starting with the observation in paragraph 22 "that needs are huge and the challenges in meeting them are enormous – but surmountable. Indeed, global public and private savings would be sufficient to meet the needs. Yet it is clear that current financing and investment patterns will not deliver sustainable development." It recommends a basket of policy measures, "encompassing a toolkit of policy options, regulations, institutions, programmes and instruments, from which governments can choose appropriate policy combinations" (paragraph 24).

The ICESDF report observes in paragraph 127 that "investors — including those with long-term liabilities, such as pension funds, life insurers, and SWFs — have been hesitant to invest in long-term sustainable development projects across a wide range of policy and regulatory regimes" and highlights the part of the lacuna that emanates on the supply side, in terms of the capabilities of these investors. Many "investors do not have the capacity to do the necessary due diligence to invest directly in infrastructure and other long-term assets. Instead, when they do make these investments, they do so through financial intermediaries, whose liabilities and incentive structures tend to be shorter-term." Long-term investors can try to bypass intermediaries and invest directly and implement a longer-term horizon in their investment decisions, but it is often not cost effective for diversified investors to build this expertise in-house.

As discussed above, an important consideration with regard to the role of institutional investors as an increasingly important source of funding for long-term investment, including in infrastructure, is the identity of the investor base. Although the participation of foreign investors in Asia-Pacific LCY bond markets is likely to have enhanced liquidity and market efficiency, the potential disruptions foreign investors could cause are a matter of concern, as highlighted in a special chapter of the IMF Global Financial Stability Report (GFSR) of April 2014.[2]

This report shows that the increasing participation of global institutional investors in emerging markets, particularly in LCY bond markets, has heightened their exposure to global financial conditions, contagion and herding. It observes that sudden large capital outflows can still induce financial distress through their effects on exchange rates and the balance sheets of banks, firms and household despite large volumes of international reserves and flexible exchange rates arrangements, which can buffer the impacts of those shocks in emerging markets. In addition, the report warns that large capital inflows driven by global financial conditions can generate credit booms that sow the seeds of a future crisis (IMF, 2014).

Considering the risks of relying too much on global institutional investors for the development of domestic capital markets, an IMF report emphasizes the importance of developing a larger local investor base and better institutions. For that purpose, a recent report by G20 and OECD provides valuable guidelines to policymakers about how to design policies and a regulatory framework to encourage institutional investors to provide a stable source of capital for long-term investment purposes (IMF, 2014).

These principles, which include policies to promote the development of long-term savings and institutional investors, governance and regulatory arrangements, are general and thus need to be refined according to specific country and institutional contexts. Nevertheless, they provide a basis for discussions and regional cooperation to promote the development of institutional investors in Asia and the Pacific.

[2] The chapter is entitled "How do changes in the investor base and financial deepening affect emerging market economies?"

Some countries in the region could consider the development of innovative finance institutions, such as Islamic banking (see box 5.2).

Box 5.2. Islamic banking finance: a new source of development finance

Islamic finance (Shari'ah-compliant finance, which is known as ethical banking) has the potential to be one of the innovative sources of bond financing, especially with regard to infrastructure projects. The defining principle of Islamic banking prohibits the charging and paying of interest, but promotes profit-sharing mechanisms. Therefore, by developing innovative profit-sharing frameworks, this financing mechanism can provide investors with new instruments that minimizes risks in long-term investments.

The World Islamic Competitiveness Report 2013-2014 reported that the combined Islamic banking assets with commercial banks reached \$567 billion in 2012, based on 20 Islamic banking markets. It further estimated that Islamic banking assets would exceed \$1.7 trillion in 2013, after growing at an annual rate of 17.6% in the previous four years. The assets are further estimated to exceed \$3.4 trillion in 2018. The Banker (2013) noted that the Shari'ah-compliant assets of major Islamic financial institutions increased from \$1.16 trillion in 2012 to \$1.3 trillion in 2013, with 1.47% aggregate return on assets.

In 2013, Islamic banks were serving consumers globally, including some from the high-growth countries (Islamic Republic of Iran, \$416 billion, Indonesia, \$20 billion, Malaysia, \$125 billion and Turkey, \$39 billion) of the Asia-Pacific region (figure B5.2.1). Those countries' share constituted about 13.5% of total global Islamic banking assets. According to the Islamic Finance Country Index (IFCI), the Islamic Republic of Iran tops the list, followed by Malaysia and Saudi Arabia (figure B5.2.2). Also, there is potential for increasing the sector in Pakistan, Kazakhstan, Tajikistan and Azerbaijan. Also of note, in 2013, the Reserve Bank of India granted a licence to a non-banking financial company to run Sharia-compliant finance.[a]

Figure B5.2.1: Islamic banking global shares, 2012

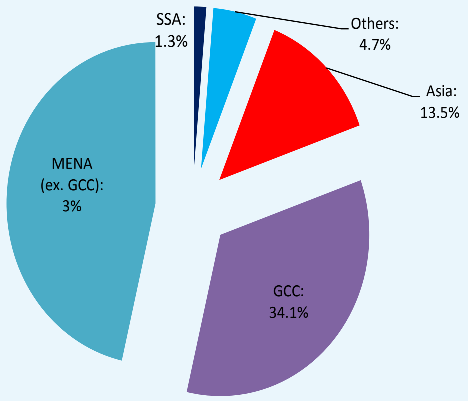
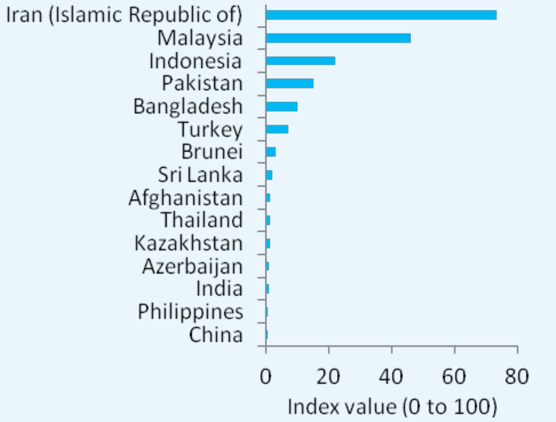


Figure B5.2.2: Ranking of IFCI in Asia-Pacific, 2013



Sources: IFSB(2013); Edbiz consulting (2013).

With the implementation of Basel III, increased capital requirement ratios will put pressure on Islamic banks to restructure and seek innovative ways to provide financing for businesses, as well as to have instruments of diversifying risk-based performance assvessments. Owing to differences in Islamic banking vis-à-vis traditional commercial banking, national and regional regulatory frameworks may need to identify ways to improve surveillance and to customize institutional mechanisms that suit international banking standards, including that of capital adequacy ratio, accounting standards and risk management practices.

[a] For more information and discussions, see Ernst & Young (2013) and Edbiz Consulting (2013).

Policy options

Financial markets in Asia and the Pacific should provide a framework capable of being implemented for channelling savings and reserves efficiently to productive investments to support the real economy, which, in turn, will create jobs and foster economic growth.

As far as equity and bond markets are concerned, an important challenge is how to achieve greater regional financial integration among them. Specific obstacles for such integration include (Yu, Fung and Tam, 2010, pp. 2874-2885):

- Financial infrastructure: Lack of linkages between jurisdictions across the whole spectrum of financial infrastructure, including trading, payment, clearing, settlement and custodian systems which would facilitate movements of capital and savings across jurisdictions. Lack of harmonisation of standards in the capital markets, including, for example the adoption of minimum acceptable international standards, is limiting investor confidence and reducing the flow of capital within the region;
- Harmonization of standard and tax rules: Lack of harmonization of standards in the capital markets, including, for example the adoption of minimum acceptable international standards, is limiting investor confidence and reducing the flow of capital within the region. Furthermore, development bond markets would further require harmonizing tax rules, setting common standards for bond issuance, developing cross-border clearing, settlement and payment, and depositary systems, as well as regional credit rating agencies.
- Cooperative mechanism: Weak cooperative efforts in financial system development limit the diversity of financial intermediation channels in individual jurisdictions, while non-supervisory restrictions is limiting access of foreign financial intermediaries to the domestic financial markets.

- Regulatory framework: There is a need to enhance countries' capacities to set up and improve the functioning of capital markets institutions and regulatory frameworks, especially in the case of countries with special needs.
- Linking capital markets: For several small economies, it may be challenging to develop all aspects of capital markets. However, capital markets can be linked to other, larger markets in the region through the adoption of harmonization rules, as is the case of the ASEAN Trading Link project. That way, they could have access to large stock exchanges in neighbouring countries. In addition, smaller economies require assistance, capacity-building and training to support their financial development.

Institutional investors manage very large volumes of assets. Owing to this and the structure of their liabilities, they could play a larger role in the financing of long-term projects, including infrastructure.

- Potential of asset management industry: Although many developing countries in the region have large sovereign wealth funds capable of providing long-term financing for such projects, the degree of development of their asset management industry is rather low. However, in line with the growing number of high-net-worth and mass affluent individuals in the region noted in the previous section, there is a large potential for the asset management industry to develop in years to come.
- Promote domestic institutional investors: This development would be highly desirable towards boosting the level of financial intermediation and the availability of funding for investment projects in the region. In addition, as also noted in the previous section, a stronger presence of domestic institutional investors in the region's capital markets would reduce the potential for disruptive capital flows by international investors. A major challenge for the development of domestic institutional investors is setting up appropriate institutional and regulatory frameworks.
- Engage alternative asset class: Although there is a trend to invest more in long-term assets, such as the so-called alternative asset class, that includes infrastructure and represents 15% of the global portfolio of pension funds, some of these investments go to secondary intermediaries, such as hedge funds, private equities, or infrastructure, real estate or commodity funds. While large institutional investors are acquiring expertise in investing in infrastructure, this expertise is not available for small institutional investors. To remedy this problem, public policy may be directed towards extending assistance in setting up institutions that help small institutional investors intermediate funds for infrastructure development.

B. Infrastructure investment by leveraging public-private partnerships

In recent years, apart from creating enabling conditions for investment through appropriate regulations, taxes and incentives public-private partnerships (PPPs) have become one of the key mechanisms to support long-term investment, particularly in infrastructure development in the Asia-Pacific region. Furthermore, the region has now seen the emergence of new institutional mechanisms to support infrastructure development.

At the regional level, there is a clear urgency to underscore the critical role of infrastructure in accelerating inclusive growth and sustainable development. The region must focus on tackling the deficit in key infrastructure sectors including transport, ICT, energy access, water and sanitation. These sectors are also considered as a prerequisite for taking advantage of growing regional and global value chains through trade and investment linkages, the latter ones being able to contribute to an increase the competitiveness of production and services and thus sustaining the region's growth and jobs creation.

Infrastructure is essential to providing access to landlocked and transit countries and distributing the benefits of growth across boundaries, as it enables the efficient delivery of public services to the population. Infrastructure is, therefore, an important enabler to induce inclusive growth and achieve the sustainable development targets.

Traditionally, the Asia-Pacific economies have relied mostly on domestic resource mobilization and traditional ODA to finance infrastructure investments. Multilateral financial institutions, such as the World Bank/IFC and ADB, have extended loans and grants, including technical assistance for infrastructure development. Attracted by rising demand for quality infrastructure and expectations of high returns, private participation in infrastructure development has been made possible through different variations of PPPs in the region. PPPs have, thus, emerged as a viable, although complex, procurement method for infrastructure development in the region over the last few decades. By its nature a PPP involves a long-term contractual arrangement between a governmental body and a private firm. Both central and subnational governments are involved in PPPs. It is important to understand that subnational government's contractual obligations in PPPs have the potential to become unexpected obligations on the part of the central government.

Many governments are attracted to PPPs because of their potential to close gaps in national and regional infrastructure development financing. In addition to mobilizing private sector resources, PPPs are seen as a way to take advantage of private sector efficiency and innovation capacity, while shifting some risks to the private partner. By deploying more efficient management practices of the private sector, the PPP approach has the potential to generate more efficient project outcomes.

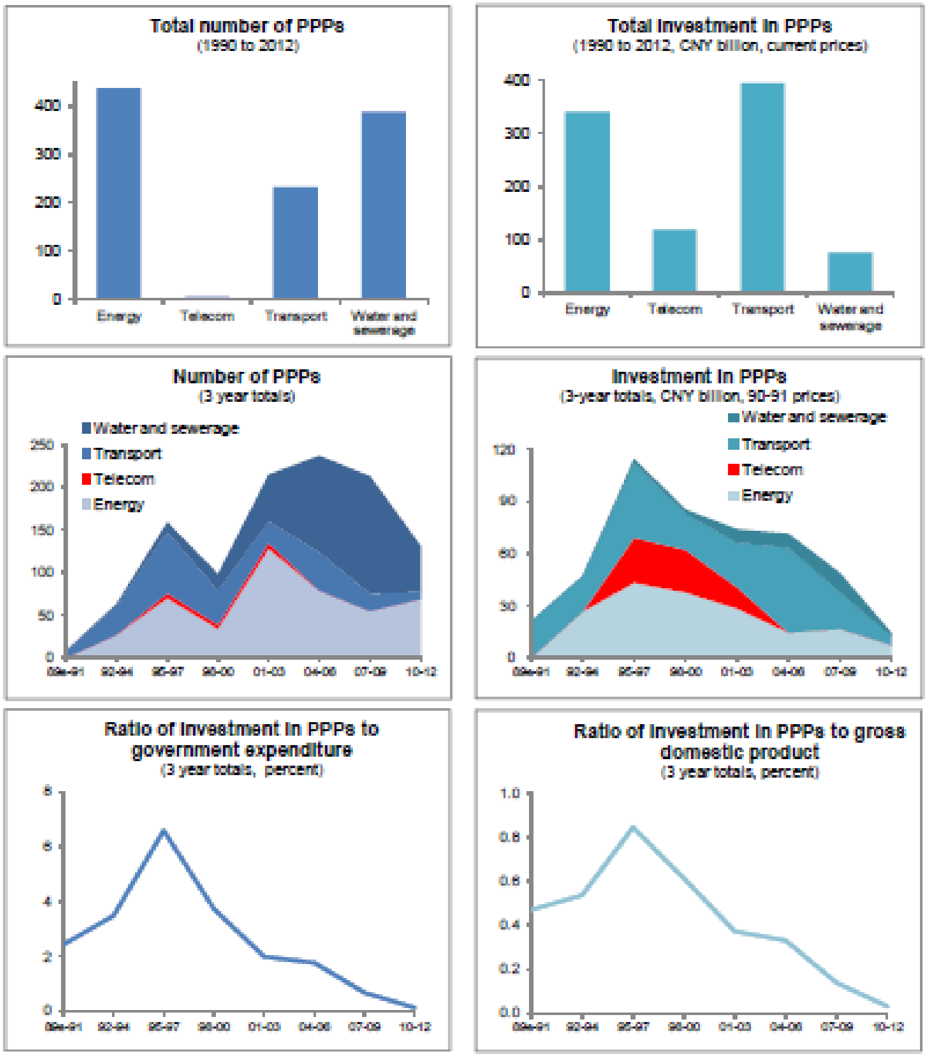
PPPs have the potential to upgrade the quality of public services to the benefit of users/consumers. They can reduce the burden on taxpayers of public services or at least ease the time-profile of the tax-payers' burden. Thus, PPPs are potentially important to public authorities with the responsibility to provide basic infrastructure and services. However, a positive outcome is possible only if the public sector can harness the technical expertise and the financial access of its private partner. The relationship must, therefore, be configured so that the risks of the project are assigned between partners so that each partner takes on the costs and the risks that it is most capable of bearing.

For the public authorities, the first concern of PPP is the capability to choose a suitable private partner in a relationship that can be inherently complicated. Through the growing record of PPP projects, both government and the private sectors draw on lessons learns on how best to exploit these partnerships so that they achieve their stated social objectives, which generally includes a healthy private return as a reward for risk sharing (Ahmad, 2014). Interestingly, in the case of China, after a period in which PPPs were actively promoted and used, the use of this approach has declined. Figure 5.2 provides a snapshot of the relative decline in the importance of PPPs in China, which is mainly the result of the decision of the central Government to restrain from using them.

Managing information asymmetries between government, on one hand, and potential private parties, on the other hand has turned out to be a key element of success in deploying PPPs in investment programmes.

The nature of information asymmetries depends heavily on the sector that is involved. For example, infrastructure projects involve both construction risks and operational risks. Infrastructure risks include unforeseen ground conditions, failure to obtain necessary logistical support and services, unforeseen ground conditions, and even the impact of citizens' protest or actions. Operational risks emanate from the cost side, such as unexpected interest rate and foreign exchange rate outcomes and from revenue risk, especially from, for example, unanticipated demand conditions. There is strong dependence of operational risk on the construction phase. Better construction, which results in greater consumer use, protects the demand side and reduces operational costs. Thus, PPP contracts must be designed to motivate the private partner to undertake the construction phase in a manner consistent with reducing operational risk. In several projects, the information asymmetry arises in cases in which the government partner has less information or has limited capacity to monitor the quality of construction.

Figure 5.2. Infrastructure public-private partnerships in China



e = estimated

Source: Ahmad and others (2014) based on data originally from ADB (2013b).

Notes: The data show the number of PPP projects and the value of the investment committed to by project. Data for 1989 are estimated as the average of 1990 and 1991. Constant prices estimates use the gross domestic product deflator. The data show PPPs that involve a private partner, where state-owned enterprises or their subsidiaries that remain majority owned by government entities are not considered private sponsors.

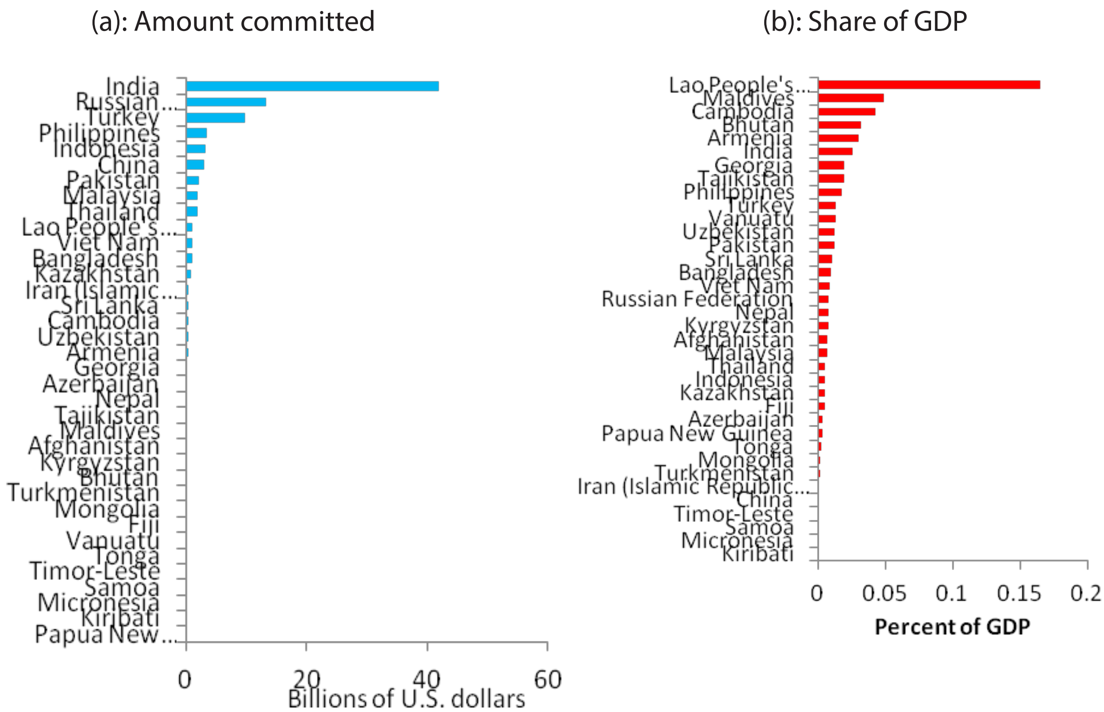
This example illustrates that the proper structuring of PPPs is a complex task. Intensifying the application of the PPP approach in the region requires direct attention to increasing the capacity of public authorities to design and implement PPPs. As many PPPs, are in the domain of local governments, such as in the provision of basic public utilities and services, it is critical that each national jurisdiction have a national policy applicable to all local governments.

In the region, the potential of PPPs is highlighted by the spectacular increase in private investment in infrastructure since 1990. Private investment committed to infrastructure in developing countries of the region grew more than twenty-fold in less than a decade from \$2 billion in 1990 to \$48.9 billion in 1997, before being affected by the Asian financial crisis in 1997-1998. Subsequently, the average annual growth rate of private sector investment reached 25.4% between 2002 and 2008. Stimulus policies adopted by many countries in the region since the global financial crisis of 2007-2008 further boosted private investment, especially those that tackle infrastructure bottlenecks, to an unprecedented level of \$120.1 billion in 2010.[3]

Smaller developing countries of the region, such as the Armenia, Bhutan, Cambodia, Lao People's Democratic Republic and Maldives, registered the highest private infrastructure investment to GDP ratios over the period 2008-2012 (see figure 5.3, panels a and b). Because of their narrower fiscal space, PPPs have more potential in supplementing public expenditure in these developing countries including in the least developed countries. At the same time, due to the overall socioeconomic condition of these countries, such as shallow domestic financial markets or relatively low population bases and market size, the PPP model may need to be adjusted to country specific context. The development of PPPs, therefore, entails a delicate trade-off, based upon the specific situations in a country rather than a universally applicable solution.

Figure 5.3 Private infrastructure investment in Asia Pacific economies, 2008-2012

(Need to fix country names, Russian Federation, Lao People's Democratic Republic, Micronesia (Federated States of))



Source: ESCAP, based on data from the World Bank. Available from http://ppi.worldbank.org.

Several factors have facilitated private sector involvement in infrastructure financing in the region. The most important one is, probably, the active role played by some Governments to establish an "enabling environment" for PPP development. The different elements of this enabling environment are detailed below.

[3] ESCAP, based on data from the World Bank PPI database. Available from http://ppi.worldbank.org.

A clear policy is essential to set out a stable and long-term vision for PPP development in the Asia-Pacific region. PPP projects typically take several years to be developed and are often politically sensitive. As such, PPPs are vulnerable to government change, which could result in a position reversal regarding any PPP project. At the same time, private operators face considerable costs when entering a market. For example, private operators have to carry out full due diligence of the legal and fiscal environment and are unlikely to do so if the policy direction of the Government is unclear.

Against this backdrop, several Governments of countries in the region have developed a national strategy for PPPs, which mitigate such political risk by building broad-based support and a long-term vision for the sector. A few examples in the region are the 2008 Australian National PPP Policy Framework, the 2010 Pakistan Policy on PPPs and the 2010 PPP Policy and Strategy in Bangladesh. Furthermore, an important innovation to promote PPPs in India, which had been tried, was viability gap funding. It covered the Government bridging the gap in the viability of certain projects of high priority that would not be taken up normally for investment by the private sector due to poor commercial prospects. However, the initiative has not been successful.[4]

In this context, legal and regulatory frameworks are critical to protect the rights of the private sector. The legal framework has to be clear with regard to what types of sector are eligible for PPP mechanisms, which authority is mandate with approving PPP projects and what procurement rules have to be followed. Such clarity will limit the risk of challenges to the validity of PPP contracts and will facilitate the work of government officials. The availability of adequate dispute resolution mechanisms are also critical for creating the confidence that private sector rights will be protected. In that regard, some countries have developed a single act dealing with PPP, such as the Act on Private Participation (PPI Act) in the Republic of Korea, which came into force in 1999.[5]

Institutional arrangements that build internal capacity in implementing PPP projects are by nature relatively complex and require specific expertise. To build such expertise, many Governments have established specialized units or programmes to develop and supervise PPP projects. These play a “catalytic” role in promoting and developing PPP solutions as they enable the concentration and availability of required expertise through the accumulation of experience and the possibility of adequate training. Among the countries of the region, the following examples can be mentioned: the PPP Centre of the Philippines, the Kazakhstani Centre of PPP or the Malaysian PPP Unit (3PU, also known as UKAS). For a discussion of others that have been created, see box 5.3[6] .

4 More information is available from www.pppinindia.com/pdf/scheme_Guidelines_Financial_Support_PPP_Infrastructure-english.pdf.

5 UNCITRAL Legislative Guide on Privately Financed Infrastructure projects, adopted in 2000, provide guidance on best international practices regarding legal framework development.

6 For a list of PPP units in the region, please refer to ESCAP, "PPP Units and Programmes in Asia and the Pacific". Available from www.unescap.org/resources/ppp-units-and-programmes-asia-and-pacific.

Box 5.3. Kazakhstan Private-Public Partnership Center

The Kazakhstani Private-Public Partnership Center is a special joint-stock company fully owned by the Government of Kazakhstan that was created in July 2008. Its role includes: (a) examining PPP projects at all stages of their implementation; (b) preparing recommendations for governmental agencies on the development of legislation and methodological frameworks for PPP projects; (c) monitoring PPP projects during the course of development and construction; and (d) organizing seminars, training courses, conferences and other events related to PPPs. As of the time of writing, more than 30 projects had been approved by the Kazakhstan Private-Public Partnership Center. They include construction of motor roads, railways, hospitals, polyclinics, parking lots, a bus terminal, a light rail system, a garbage recycling plant and prisons, amounting to about $3 billion. The new law on PPP signed in July 2013 introduced new forms of PPP contracts, such as build-operate-transfer (BOT), build-own-operate (BOO) and design-finance-build-operate (DBFO), as well as availability payments based on meeting specific project milestones or facility performance standards.

The new PPP law provides statutory protection for concession obligations against sequestering. It also provides special tariffs and exemptions from general tariff regulation to concessionaires that are natural monopolies, protecting them from the risk of having their revenues decreased by the Natural Monopoly Agency. Kazakhstan has successfully implemented PPP projects in the electrical energy sector. In 2005 the concession agreement between the Government of Kazkhstan and JSC Batys-Transit, a Kazakhstani company, was signed to build and operate of interregional overhead electric power transmission line for 500 kW in the North Kazakhstan-Aktobe area. The project attracted financing through the issuance of infrastructure bonds with a government guarantee. In view of the wide land mass of the country, and the need to connect the electricity grids of regions, such as West-Kazakhstan, Atyrau and Mangystau oblast (region), there is a large potential for the implementation of additional PPP projects in the field of electrical energy.

Currently, the Eurasian Economic Commission is conducting preliminary work towards the creation of a common electrical market for the Common Economic Space (CES) countries. To keep Kazakhstan competitive vis-à-vis partner countries, the country needs to focus on the development of its domestic energy infrastructure, for which PPPs have proved to be very useful.

In addition to the above, a body of financial support measures is needed to ensure that projects are sufficiently profitable and safe for attracting private investors. Financial support measures can take various forms.

With the objective of bringing more bankable projects to the market, some countries have established project development facilities (PDF) to fund required preparatory activities, such as feasibility studies or recruitment of transaction advisors who help governments to structure PPP deals. Some countries have also developed mechanisms to facilitate the acquisition of land, which is often a major obstacle in infrastructure projects. For instance, the Government of Indonesia has been operating land funds to partly cover the risk faced by private operators if land acquisition costs turn out to be significantly higher than projected.

Some Pacific economies, such as Fiji, Papua New Guinea and Samoa, are actively pursuing legislative and policy reforms to facilitate PPPs. However, they face structural impediments due to their smallness and geographical isolation. Such impediments have created obstacles to the inflows of private investment inflows, except in sectors such as mining and tourism.

Box 5.4. Eurasian Development Bank and public-private partnerships in North and Central Asia

The Eurasian Development Bank (EDB)[a] ensures that the supported projects have a significant social and economic impact; and it calculates that they are capable of generating an average of $4.27 billion gross output per year in EDB member state economies. The Bank's investment portfolio is also characterized by its multiplier effect — the additional output and production projects generate in associated sectors of the economy. In the long term, projects supported by the Bank — on the condition that they continue to be operated directly — will be able to generate $5.21 billion in additional output in member State economies.

One important indicator of the social impact of the Bank's investment activities is the new jobs such projects create. Estimates based on feasibility studies of projects financed by the Bank suggest they have already resulted or will result in the near future in the creation of more than 22,000 permanent jobs in EDB member States. It is important to note also that the implementation of EDB-supported projects should increase tax and other State and local exchequer revenues. Average annual payments generated by such projects should reach $763 million while they are being financed by the Bank.

The EDB realizes several (PPP) projects. One of them is the econstruction of Pulkovo Airport in St. Petersburg, Russian Federation. Pulkovo Airport is the only air hub in the Russian Federation's northern capital and the only airport in the north-western part of the Russian Federation with significant potential to increase transit traffic; and it had a considerable investment prospect. The region's authorities decided to upgrade the airport using the PPP model — an unprecedented solution in the country at that time. This meant that the airport was placed into concession. An international consortium was set up to implement the project: Northern Capital Gateway comprises VTB Capital, Fraport AG (a global airport operator) and Copelouzos (a Greek investment group). In April 2010, Northern Capital Gateway signed a 30-year PPP agreement with the St. Petersburg authorities. The agreement governs the construction, reconstruction and operation of Pulkovo Airport in St. Petersburg and transferred operational control over to the consortium.

7 VGF is a construction subsidy designed to reduce part of the construction costs through a "one time" payment. This approach has been one of the factors behind the success of PPPs in India whereby it can contribute up to 40% of capital expenditures (the exact percentage is defined through bidding competition).

8 Due to limited availability of long-term financing in local currency, project companies might have to borrow in United States dollars while their revenue stream is in the local currency thereby creating a currency mismatch. An exchange rate guarantee is aimed at protecting the private partner from local currency devaluation.

9 "Default guarantee" means that the Government agrees to carry out the obligations of the PPP company vis-à-vis its lenders upon default, in order to enhance the creditworthiness of the operation.

Box 5.4. *(continued)*

Project financing agreements were also signed in 2010 between the parties to the PPP agreement and a group of banks, including (EDB, the European Bank for Reconstruction and Development, the International Finance Corporation, the Nordic Investment Bank, the Black Sea Trade and Development Bank, Vnesheconombank and a number of commercial banks). The total financing package is worth approximately 692 million euros ($744) with the share of EDB being 66 million euro ($66). Experts have assessed the Pulkovo reconstruction as the country's most successful transport PPP project. It stands out partly because all the financing has been provided by the private partner, that has also taken on 100% of the risk associated with demand. The credit margin and banking fees were determined on purely competitive terms on the international financial markets. This was the Bank's first PPP project in the Russian Federation.

Because of the project's structure, and taking into account its scale and the number of participants, a transparent investment mechanism needed to be put into place after the PPP agreement had been signed. The mechanism makes it possible for partnering banks to coordinate their operations and for the agent bank to factor in the individual requirements of each of the lenders when finalizing transactions.

Another example of PPP project with participation of EDB is the construction of the Western High-Speed Diameter toll road (WHSD) in St. Petersburg. WHSD is the world's largest public-private partnership in toll-road construction. Total investment in the project is expected to reach $6 billion. WHSD is a being undertaken by the municipal authorities in St. Petersburg together with Northern Capital Highway, a consortium comprising the VTB Group (the main shareholder) and Gazprombank.

[a] More information is available from www.eabr.org/e/.

Overall, the guarantees provided in connection with PPP projects may have substantial financial implications in the long run and should be carefully assessed. Therefore, it is important to ensure good governance to ensure that these financial support mechanisms are provided. Some countries have established a dedicated risk management unit (RMU) to assess and monitor contingent liabilities born by the public authorities, while other countries have created specific guarantee fund for isolating the risk.

There is also growing demand and need to ensure that these guarantees are correctly reflected in national accounts. Monitoring and publishing the value of contingent liabilities, such as those arising from revenue guarantees, and introducing contractual clauses to restrict government risks should be assessed to avoid potentially disruptive future budget implications.[10]

PPP projects are heavily reliant on the availability of long-term financing. Commercial banks may, however, be unable to provide sufficient long-term loans because of potential asset-liability mismatches. Therefore, some countries have created specialized institutions, such as the Indian Development Finance Company (IDFC), to boost the provision of long-term financing (mainly in local currency). Institutions such as the India Infrastructure Finance Company Ltd. (IIFCL), have also provided a refinancing option for the banking sector to free up funds for investing in newer infrastructure projects. In addition, dedicated infrastructure funds have been established to offer other long-term financing options.

Credit enhancement mechanisms are also being experienced to try to capitalize more on resources from institutional investors such as insurance companies or pension funds. Through

[10] See e.g. Irwin and Mokdad (2010) for a useful discussion.

these credit enhancement mechanisms, the idea is to issue project bonds with a higher credit rating thereby making these bonds more acceptable to this type of investor. What can be concluded from the above is that Governments have to take appropriate actions to create an enabling environment for PPP development. With a strong enabling environment, the potential of private financing in infrastructure development in the region can be unlocked. In that respect, best practices have emerged from successful experiences in the region. Promoting exchange of information and cross-country learning is therefore critical and can be done through participation in knowledge networks.[11]

Given the diversity of countries in the region, it is clear that there is no "one size fits all" approach to investing in infrastructure for sustainable development. In fact, evidences on the effectiveness of PPPs have been somewhat mixed in the region, with some good examples of PPPs, but also some failures. The sharing of experiences and best practices will therefore be important to fully benefit from PPP opportunities.

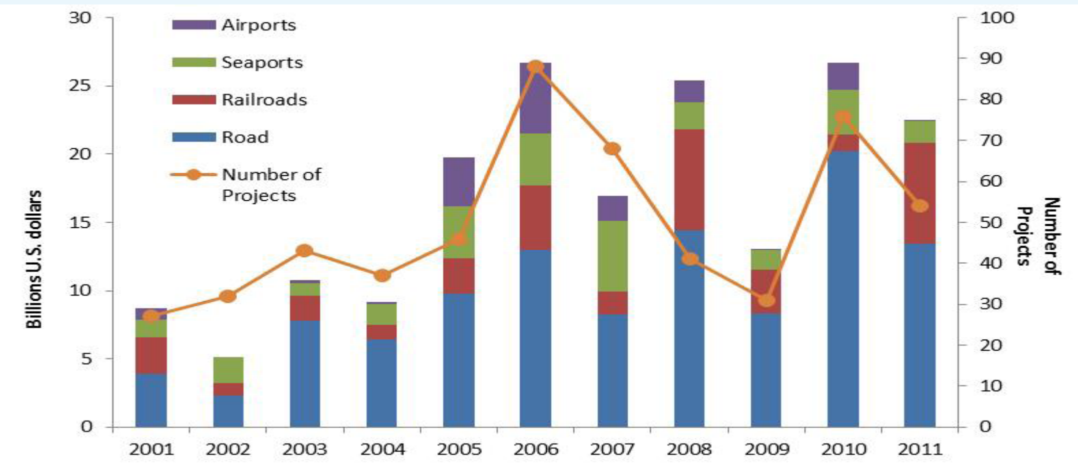
While developing their policies, Governments have to keep in mind that PPP solutions are not suitable for all type of projects. Even in countries where PPPs have been intensively pursued, they rarely reach 20% of public infrastructure projects (ESCAP, 2013c). In this respect, it is worth noting that PPP has been a particularly promising avenue in revenue-generating sectors, such as energy, ICT and transport, where user charges can be used to repay the investment (see box 5.5).

Box 5.5. Public-private-partnerships for transportation services in Asia and the Pacific

Globally, PPPs have been a promising avenue for transport infrastructure development. As illustrated in the chart below, countries in the Asia-Pacific region have also managed to mobilize significant resources through PPPs, with private funding for transport infrastructure projects amounting to over $20 billion in 2011.

The geographic distribution of transport PPPs in the region remains, however, somewhat unbalanced with India, the Republic of Korea, Australia and China accounting for more than 80% of the total investments. In that regard, other countries may learn from these leading countries in PPPs.

Figure B5.5.1: Trends in PPPs for transport infrastructure in Asia and the Pacific, 2001-2011



Source: ESCAP, based on data from the Public-Private Infrastructure Advisory Facility (PPIAF) Database, the Korea Development Institute's Public and Private Infrastructure Investment Management Center (PIMAC) and the Infrastructure Australia website. Available from www.infrastructureaustralia.gov.au.

Note: For high-income countries, only projects for the Republic of Korea and Australia were included in the analysis.

[11] ESCAP projects

Emergence of new development finance institutions

Recently, the region has seen an emergence of new financial institutional arrangements as sources of development finance, especially for infrastructure development, including the Asian Infrastructure Investment Bank (AIIB), the Silk Road Infrastructure Fund of China, the New Development Bank (NDB) (or the BRICS Development Bank), and the ASEAN Infrastructure Fund (AIF). These new institutional arrangements are, in principle, taking centre stage as complementary sources of finance for the region's enormous infrastructure needs (see box 5.6).

Box 5.6. Closing the financing gap: Does the region need an Asian Investment Bank?

ESCAP (2005), "In Implementing the Monterrey Consensus in the Asian and Pacific region: achieving coherence and consistency", in the way forward section "Closing the financing gap: Does the region need an Asian investment Bank?", two proposals were made for consideration: The possibility of setting up an Asian Investment Bank adapted from the European Investment Bank model to meet the region's infrastructure needs and promote economic integration merits further study. Its mandate could be to raise substantial capital from financial markets and other sources and direct investment capital towards the projects of participating countries. The region's large foreign exchange reserves and ample liquidity increase the feasibility of the idea. An Asian Investment Bank would be able to address the special and urgent needs of the region's weaker countries, particularly least developed countries, , for financing crucial infrastructure development.

It was further noted that such a bank "could enjoy its own legal personality and financial autonomy within the mandate given to it by its shareholders. Its mission could be to further regional integration by providing long-term finance for specific capital projects in keeping with strict banking practice. As a bank, it would work in close collaboration with the banking community, both when borrowing on capital markets and when financing capital projects."

It was also emphasized that "just as the Commission at its twenty-first session, in 1966, mandated the secretariat to establish the Asian Development Bank, it could issue a similar mandate to undertake a study of the feasibility of setting up an Asian Investment Bank in the context of the region's infrastructure financing needs. ESCAP could constitute a working party comprising both government and private sector representatives to prepare a report on the need for such a Bank and to deliver its findings to the Commission".

ESCAP (2006), "Enhancing regional cooperation in infrastructure development, including that related to disaster management", further noted that "the limited range of effective cooperative initiatives and the need for financing of intraregional, cross-border infrastructure projects underline the need to consider innovative institutional arrangements for funding infrastructure in the region". It was noted that "the possible cooperative initiatives to intermediate the region's surplus savings for infrastructure investment include the following: setting up a new institution, such as an Asian investment bank, similar to the European Investment Bank (EIB), for cross-border financial intermediation".

AIIB aims to help augment the financing resources of Asia-Pacific countries for their respective infrastructure projects. Twenty-one member countries formally launched the bank on October 24, 2014 in Beijing[12], China and provided an initial capitalization of $40 billion, which is 80% of the authorized capital of $50 billion. As of 31 March 2015, other countries have signed up as prospective founding members. Improving infrastructure pipeline and the capacity to deliver projects is a regional imperative to boost infrastructure investment. The emerging

[12] The 21 member countries are: Bangladesh, Brunei Darussalam, Cambodia, China, India, Kazakhstan, Kuwait, the Lao People's Democratic Republic, Malaysia, Mongolia, Myanmar, Nepal, Oman, Pakistan, the Philippines, Qatar, Singapore, Sri Lanka, Thailand, Uzbekistan and Viet Nam. According to official sources, the number of founding members will be confirmed on 15 April. Available from http://news.xinhuanet.com/english/2015-03/31/c_134113875.htm.

AIIB has the potential to improve access to finance for large-scale infrastructure.[13] As for the governance structure, negotiations for a mutually acceptable Articles of Agreement (AOA) among the prospective founding members are currently ongoing, with a target to complete the negotiations, sign and ratify the Articles of Agreement, and start banking operations within 2015. The start of operations of AIIB would not necessarily be immediate and there are advantages to a process of deliberate design and establishment. This process can draw on many lessons that have been learned in the operations of the existing international financial institutions. For example, the AIIB operational procedures could incorporate lessons learned from the experience in applying social and environmental safeguards of international financial institutions. AIIB could improve on these procedures as a critical element in ensuring that its funded projects achieve their potential and provide the expected returns both to the target populations and to the institution itself. The target first loan is financing a pan-Asian gas pipeline, which is planned to connect a series of joint energy resource development areas in the South China Sea.

Similarly, China has proposed the Silk Road Infrastructure Fund[14] which will aim to finance projects that will establish a modern-day "Silk Road" or infrastructures linking markets across Asian and Eurasian territories. While AIIB will cater to more general infrastructure projects, the Silk Road Fund will be used to fund projects that would help break the connectivity bottleneck in Asia. This fund was established as part of the efforts of China to revive the old Silk Road, not only to address issues on Asian connectivity but also to tap the economic potential in the Eurasian territories. China established the Fund in November 2014 with $40 billion capitalization, which is 40%of the authorized capital of $100 billion.

The other big development was the setting up of the New Development Bank (NDB) which evolved from the annual summit of the BRICS group of countries, namely Brazil, the Russian Federation, India, China and South Africa. The BRICS members created the bank on 15 July 2014 during the Sixth BRICS Annual Summit.[15] The main objective of NDB is to mobilize resources for infrastructure and sustainable development projects in BRICS and other emerging economies and developing countries, and complementing the existing efforts of multilateral and regional financial institutions for global growth and development.[16] Importantly, NDB has an initial capital funding of $50billion, contributed equally among the members, of which $10 billion or 20% will serve as paid-in capital. In addition, the BRICS members established a Contingent Reserve Arrangement (CRA), which aims to make available a US$100 billion emergency reserve fund for addressing short-term liquidity needs, promoting further BRICS cooperation, strengthening the global financial safety net, and complementing existing international arrangements.

Policy options

The analysis shows the policies are needed to (i) build sound governance and an institutional framework for an enabling environment (ii) strengthen planning and project design capacities to generate viable and bankable projects and (iii) expand and diversify PPP financing channels and risks. For example, Asia-Pacific countries are converging on the potential for new regional financial institutions or mechanisms to facilitate large-scale mobilization of resources from countries with large savings to fund investment, particularly in regional infrastructure to enhance connectivity.

13 Andrew Elek, ANU, "The potential role of the Asian Infrastructure Investment Bank", East Asian Forum, 11 February 2014, Available from www.eastasiaforum.org/2014/02/11/the-potential-role-of-the-asian-infrastructure-investment-bank/.

14 Bloomberg News, "China's Xi pledges $40 billion for Silk Road Infrastructure Fund", 8 November 2014. Available from www.bloomberg.com/news/articles/2014-11-08/china-s-xi-pledges-40-billion-for-silk-road-infrastructure-fund. The Economic Times, 16 February 2015. See China Merchants Securities (2015).

15 The Economist, "The BRICS bank: an acronym with capital", 19 January 2014. Available from www.economist.com/news/finance-and-economics/21607851-setting-up-rivals-imf-and-world-bank-easier-running-them-acronym.

16 Available from http://ndbbrics.org/agreement.html.

Therefore, countries in the Asia-Pacific region need to identify projects and programmes at the sectoral level to engage the private sector in infrastructure development.

In this context, multilateral agencies are also a source that can be tapped to provide funds for infrastructure investment. Yet, the required investments far outweigh the resources of existing agencies. Recognizing this mismatch between supply and demand, momentum has gained towards creating a well-endowed Asian Infrastructure Investment Bank that would specifically target investments in infrastructure. Under the leadership of China, the establishment of the Bank is moving forward.

Relevant policy issues may include the following:

- PPP project pipeline: Governments need to support proactive and effective policy actions to mobilize private resources through PPPs in long-term development projects. Policymakers should also institutionalize policies to set up conditions for generating a steady flow of PPP projects and to stimulate government contracting agencies (GCA), such as ministries, to consider PPP solutions for infrastructure development.
- Institutional frameworks: Governments must establish institutional frameworks that support project identification and preparation, promote good governance in procurement and ensure adequate monitoring. Designing institutional arrangements is necessary for countries to understand the viability and their impact on development.
- PPP cost-sharing and risk-sharing mechanisms: Typical PPP projects rely heavily on debt financing. Notably, the private sector faces higher borrowing costs than the public sector. This suggests that there should be better public sector policy support for risk- or cost-sharing mechanisms that will facilitate access to finance for PPP projects at a reasonable cost, while keeping the impact on public finance sustainable in the long run.
- Harmonize PPP legislation: National policies relevant to PPP projects should be harmonized to eliminate contradictory national policies and to reduce policy uncertainty for the private sector. In particular, effective coordination of policies among PPP laws, land acquisition and environment impacts should be established to avoid unexpected difficulties and delays in the implementation stage.. This will help create mechanisms to harmonize national policies, especially related to dedicated PPP laws.
- Inclusive PPPs: Policies need to ensure that PPP mechanisms can benefit all citizens and do not result in more exclusion. In particular, policies need to ensure that the "user-pays" mechanisms do not exclude the poorest citizens from basic public services or that less densely populated areas with a lower commercial potential are not underserved by PPPs.

C. Foreign direct investment

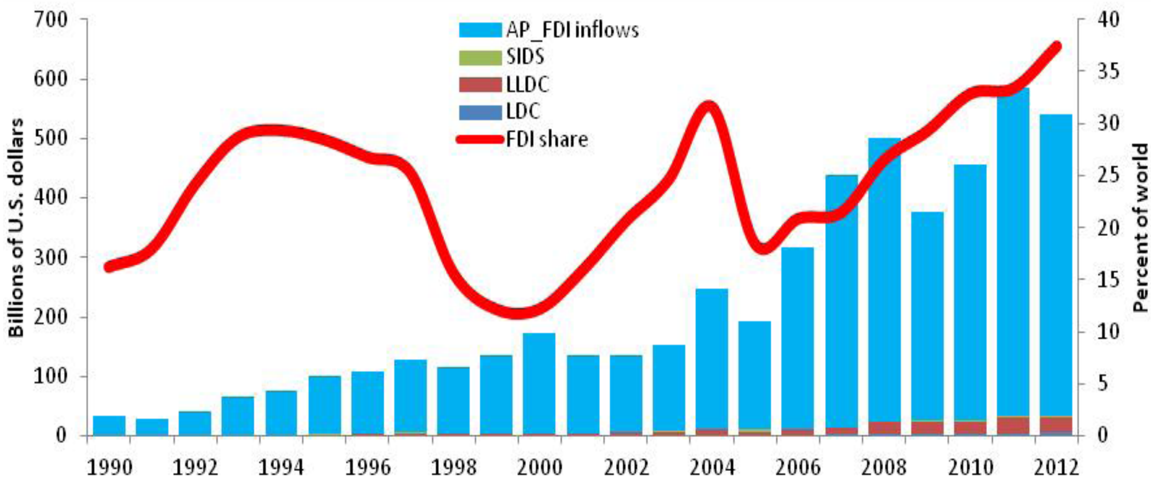
In this changing FDI scenario, Governments of Asia-Pacific countries regularly promote policies to ensure that FDI projects foster inclusive growth by investing more in Greenfield FDI, which can create employment and increase the technological capacity of national economic sectors. However, as FDI inflows are driven by market fundamentals and profit motives, often too little investment are directed to social and environmental projects, as these sectors do not yield sufficiently high economic returns.

FDI flows to the region are larger than those of ODA. These flows were also affected during the global financial crisis, dropping from $469 billion to $330 billion between 2008 and 2009. They subsequently recovered to $506 billion in 2012.[17] In 2013, developing Asia-Pacific economies accounted for more than one third of global FDI of $1.46 trillion (UNCTAD, 2014a).

[17] ESCAP, Statistical Yearbook for Asia and the Pacific (Bangkok, 2011; 2013).

The region's share of global FDI inflows increased from 16.2% in 1990 to 37.5% in 2012, which was much higher than in Europe (21.4%), Latin America and the Caribbean (18.1%), North America (15.8%) and Africa (3.7%). However, these flows were highly skewed towards larger emerging countries and in resource sectors. FDI flows generally do not reach the countries that need them most: least developed countries and fragile States (see figure 5.4).

Figure 5.4. Foreign direct investment inflows in Asia-Pacific economies, 1990-2012



Source: ESCAP statistics online. Available from www.unescap.org/our-work/statistics.

Note: It measures workers' remittances, compensation of employees and migrant transfers and credit. AP: Asia and the Pacific, SIDS: small island developing States.

Despite the importance of FDI, unless proper regulatory measures are put in place to strengthen social and environmental pillars, the extent to which FDI can contribute to sustainable development is therefore likely to remain limited.

The most important contribution of FDI has less to do with its associated financing and foreign exchange flows and more to do with the possibility that such flows can fill gaps in technology and management in developing countries. While the initial contribution of FDI to the balance of payments most likely will be positive, these benefits are reduced by the import content of the imports of capital goods and subsequently by the relatively high import content of its production, if the FDI project is of a more advanced technology than what is available in the host country. In the medium-term of course host countries must expect that eventually all of the initial investment will be repatriated. Countries that experience a spurt of FDI might actually realize a net negative balance of payments impact overall a few years after such an event.

Thus, just like developed countries, less advanced countries must view FDI as a means for filling gaps in technology and domestic capabilities not necessarily as a way to generate balance of payments financing. Within this view, FDI can be looked upon as an important element in sustainable development strategies.[18]

A concerted regional strategy to facilitate FDI in social and environmental projects could be very worthwhile. To start, this could involve a regional information clearing house of potential investment projects from an annotated compendium which is based on the national programmes on Intended Nationally Determined Contributions (INDCs) which are to be negotiated and created the United Nations Framework Convention on Climate Change (UNFCCC) in 2015.

[18] UNCTAD(2014) and Trade and Investment Board/ UN reports

It must be noted that certain projects involving the social sector are not susceptible to private investment and thus would be applied to the account of the public sector, precluding the need to seek FDI. In other cases, the returns on social and environmental projects are initially not viable commercially for a variety of reasons, but over the life of the project can generate a good private return. One example would be renewable primary energy supply. Regional efforts could be directed at facilitating greater participation by private investors. For many environmental projects, the initial capital costs can be prohibitive, but the long-term returns can be highly remunerative. Thus a regional effort can be launched to make available subsidies on the cost of financing for upfront costs for projects clearly within this category to spur private investment. The discussion below contains considerations pertaining to risk-sharing as it applies for PPP could inform the scale of the subsidy. If properly designed, public financing from regional facilities are capable of providing returns to public funds and private investors.

Policy options

FDI flows to developing economies and least developed countries are critical in Greenfield projects to further increase growth-enhancing activities. FDI policies should be articulated to advance the sustainable development agenda in the region. Also, performance requirement need to be set to ensure that multinational corporations contribute to sustainable development.

D. Remittances

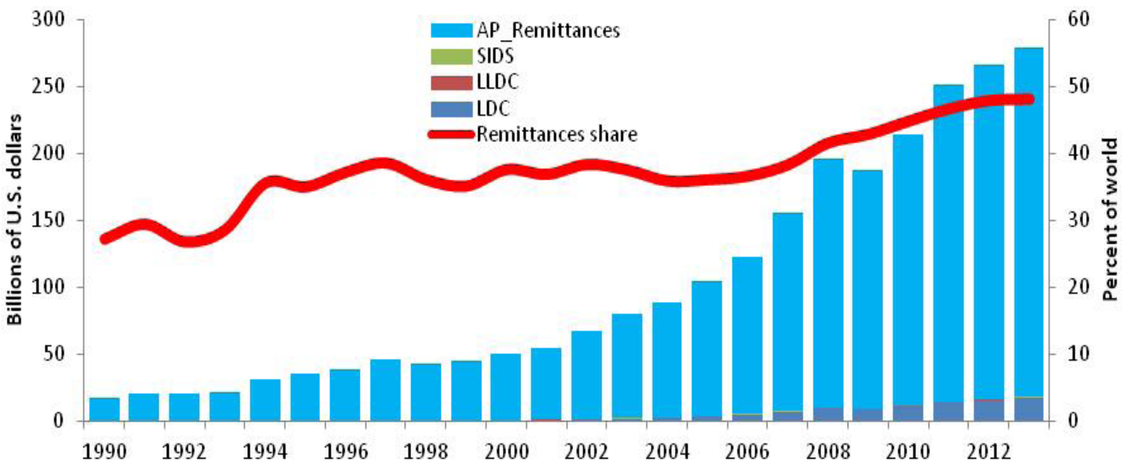
There has been a burgeoning discussion centred on remittances as a source of development finance. The level and rate of growth of remittances are often contrasted to the inflows of ODA and FDI. Undoubtedly, remittances play an important role in supporting the incomes of the poor in recipient countries, but given the private nature of such flows, the possibilities of utilizing them for the financing of public goods are limited.[19] However, besides the quantity of remittances, there are issues related to their overall cost to human lives. These are mostly linked to conditions of migrant workers' quality of life and labour rights and protection, as well as safe working and pay conditions

However, remittances of workers employed overseas to the region did not decrease during the global financial crisis, but rather increased from $114 billion in 2008 to $117 billion in 2009. Migrant remittances to developing economies increased from $200 billion in 2010 to $260 billion in 2013 (see figure 5.5).[20] In terms of numbers, this amount is larger than total inflows of ODA to the region. For some economies, such as Kyrgyzstan, Nepal, Samoa, Tajikistan and Tonga, remittances account for t more than 20 % of GDP.

[19] An interesting scheme to encourage investments in public goods using remittances income is the s 3x1 programme of Mexico, by which the municipal, state and federal governments matched funds sent to Mexico by migrant organizations abroad to fund the provision of public and social infrastructure in the migrants' communities of origin. See e.g. Rivera-Salgado, Bada and Escala-Rabadán (2005).

[20] ESCAP, Statistical Yearbook for Asia and the Pacific (Bangkok, 2011; 2013).

Figure 5.5. Migrant remittances inflows in Asia-Pacific economies, 1990-2013



Source: ESCAP, based on data from the World Bank, Annual Remittances Data (updated as of April 2014). Available from http://econ.worldbank.org/.

Note: It measures workers' remittances, compensation of employees and migrant transfers and credit. AP: Asia and the Pacific, SIDS: small island developing States.

There are several ways in which the economies in the region could significantly raise financial resources for addressing development needs (see box 5.7) (World Bank, 2013).

Some recent studies indicate that the focus on remittances as sustainable development finance is misplaced because remittances are income and not by nature a form of development finance. Despite high and rising levels, the potential for remittances to finance sustainable development is limited. A major use of remittances by recipient households is to fund consumption expenditures, including durable consumption, although they also occasionally fund investments in homes or improvements to family farms. In economic terms, remittance inflows are classified as net factor income. There is an important source of income payments in the opposite direction – the payments for royalty and the use of intellectual property rights that are owned by corporations and other income earners most of whom are resident in developed countries. For all developing countries, this amounts to about one-seventh of remittance income (Hewage and Montes, 2014).

Policy options

Remittances provide a financial cushion to many households and economies in the region. Governments should facilitate transactions by reducing the costs of sending money and providing mechanisms that would enable them to tap those resources through, for instance, diaspora bonds or other remittance-backed bonds.

It's noteworthy that the feasibility of significant finance from diaspora bonds depends on (i) the credibility of the issuing government and the projects associated with the bonds and (ii) accommodation by regulatory authorities in overseas markets to permit the sale of these bonds. As a matter of regional cooperation, Asia-Pacific countries that serve as hosts to diasporas could assist in facilitating the flotation of these bonds in their financial sectors.

Box 5.7. The Potential of Diaspora Bonds

SDG Goal 10.c by 2030, highlights the need to "reduce to less than 3% the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5%" (United Nations, 2014a, p. 13). This noteworthy goal is one of the means of implementation under Goal 10 on inequality. However, it is also important to highlight potential mechanisms which draw on a country's diasporas to contribute to sustainable development. Some countries with large diasporas have already been able to draw on the these to help raise public finance through "diaspora bonds".[a] A diaspora bond is a debt instrument issued by a country to raise financing from their citizens resident overseas.

By convincing their diaspora to invest in bonds especially designed for them, "India and Israel have raised over $35 billion by tapping into the wealth of their diaspora communities).[b] Since 1951, the Government of Israel has offered a menu of diaspora bonds, with a variety of features. One simple and direct purpose of the Israelis diaspora bonds are to sustain a relationship with its overseas diaspora. However, at least in the earlier periods, these bonds afforded a significant price premium, often called a "patriotic" or diaspora discount, which provided a significant cost advantage to the Government. For example, in the 1980s, Israel sold 10 and 15 year maturities at a fixed interest rate of 4% %when the average of the fluctuating US 10-year yield was 6.8%. Over the long period, the Israeli diaspora discount has dwindled to almost nothing.

In contrast, Indian diaspora bonds have not been issued regularly. Indian diaspora bonds have relied on the instrument for balance of payment support for financing during periods of difficulty in accessing international capital markets. In 1991, India raised funds from its diaspora during a balance of payments crisis and again in 1998 after the nuclear explosion when it faced sanctions.

Apart from patriotism, diaspora bonds can be potentially attractive to overseas citizens as a vehicle for their own savings and to manage their risk. Many diaspora investors have current or contingent liabilities in the home country or are exercising their own home bias. Some diaspora members do not have access to the formal banking system because of their legal status; others seek to avoid the situation when their earnings are drawn down mainly for consumption purposes by their relatives back home. Diaspora members are thought to have an informational advantage on the risk of the issuing government defaulting.

For the issuing authorities, diaspora bonds can provide a stable and less expensive source of external finance. In the case of Israel, the impact of this advantage has been so often, the demand for these bonds increases in times of emergencies, drawing on nationalistic fervour. By having this source, a country could help secure its sovereign debt rating.

[a] See Sharma and others (2011).

[b] Ketkar and Ratha (2010, p. 251).

E. Financial inclusion

Financial inclusion is one of the critical enablers and accelerators of inclusive growth and jobs creation. In many developing countries, however, large proportions of the population are excluded from the financial system. An inclusive financial system is part of essential infrastructure in a given country. Importantly, fostering financial inclusion will be critical factor in strengthening domestic demand in the region to rebalance the global economy and to address rising inequality and social progress.

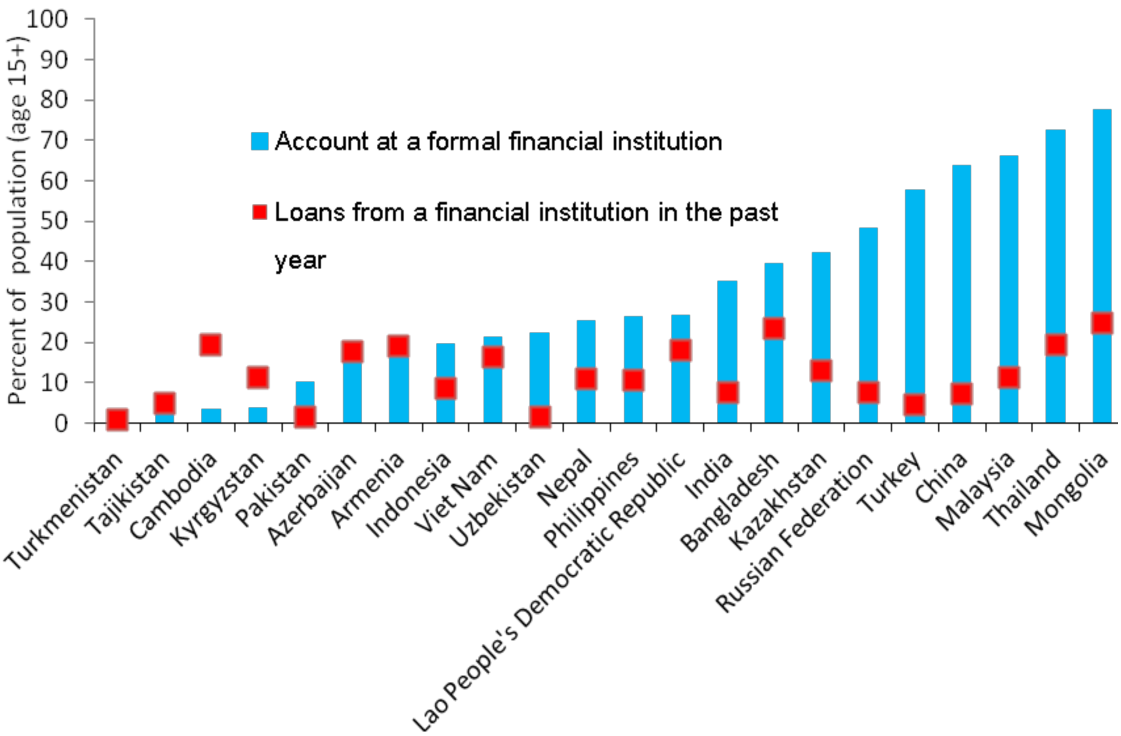
Universal access to finance will enable all households and businesses to not only have access to but also effectively use a wide-range of financial services. This requires a set of responsible and sustainable institutions that can operate in a well-regulated environment at a reasonable cost.

Recent global financial inclusion data show that about 9% of the adult population has financial access to formal financial institutions.[21] Among female adults only 2.6% of them women have an account with a formal financial institution, while 15.4% of male adults male have accounts in formal financial institution. A comparison of rural and urban adults shows that about 26.5% of urban adults have access to financial institutions while only 5.6% of rural adults have a financial account. To reduce poverty and the gender gap and foster equitable growth, a robust financing approach may be scaled up.

A large majority of the adult population, particularly those that are poor and fall into vulnerable sections of society, is typically excluded from core financial services — savings, credit, insurance and remittances in the Asia-Pacific region. Despite progress, large proportion of adults in Asia-Pacific region still lack access to reliable financial services and suffer from low financial literacy and capability.

In particular, data indicate that 50% of adults worldwide have an account at a formal financial institution, such as a bank, a credit union, a cooperative, a post office, or a microfinance institution, but most developing Asia-Pacific countries fall below this average (see figure 5.6).

Figure 5.6. Adults (age 15+) with account at a formal institution, and adults with loans in the past year (%)



Source: ESCAP, based on World Bank, G20 Financial Inclusion Indicators dataset (accessed 10 March 2014).

Note: (1) Most of the data were collected in 2010-2011 period. (2) Contrary to what would be implied by definition, loans are reported higher than accounts in countries such as Cambodia.

21 Available from http://datatopics.worldbank.org/financialinclusion/.

The cross-country variation in access to financial services can be partly explained by factors such as per capita incomes, urbanization and financial depth, but this is not the whole story. Countries such as Thailand and India, for instance, have higher-than-predicted penetration rates. Financial inclusion differs by individual characteristics, such as gender, education level, age, and rural or urban residence. In India, for instance, women are 41% less likely than men to have a formal account, compared with 22% in the rest of the developing world (Demirguc-Kunt and Klappe, 2012).

Lack of awareness about available financial services and the mismatch of what is on offer to specific needs are two other factors that driving exclusion from social services.. Also, banks may be concerned about the potential profitability of poorer customers, the risks they are thought to present, and the costs of dealing with a larger number of small transactions. It should also be noted that while basic consumer protection requirement is on the books in most economies in the region, law enforcement mechanisms are weaker than legislative requirements and institutional structures.

One of the key messages from the microcredit revolution is that the poor need not only credit, but also savings, insurance, remittances and other services to make the most of their resources. An innovative way to enhance access to those services is through branchless banking. A survey conducted by the Technology and Business Model Innovation Program of the Consultative Group to Assist the Poor found that at the end of 2011, there were 148 active branchless banking businesses worldwide, with 26 of them have more than one million customers. In developing Asia and the Pacific, countries such as the Philippines have been particularly successful with mobile-phone based models.[22]

Recently, financial inclusion initiatives have led to new and innovative ways of providing banking solutions to people who did not previously have access to banking services in the Pacific. One growing channel has been the use of mobile phone banking. ICT use has supported the rollout, given the estimated 60% of Pacific Islanders who now have access to mobile phones (in 2006 the region's mobile phone penetration was under 10%). The roll-out of "rural banking" and "mobile banking" solutions have required banking regulators to adapt requirements, including for example anti-money laundering and counter-terrorism financing compliance, and banking via "agents", in new ways (see box 5.8) (Olivier and Kelly, 2013).

[22] UNDP's Pacific Financial Inclusion Programme website (www.pfip.org) has more examples and information, as necessary.

Box 5.8. Mobile banking for financial inclusion

The application of mobile and agent banking in the Asia-Pacific region shows that it is an effective tool to outreach unbanked /underserved people in remote areas. The trend in mobile and agent banking in the region indicates that mobile financial services are being scaled up at a very rapidly rate. Mobile technologies serve as a catalyst to reach the vast unbankable lower income segment of the population, youth, women, and rural people in the Asia-Pacific region. Smartphone penetration reached 40% in 2014 and projected to rise to 65% by 2020. Although penetration of mobile technology is expanding in the region, the mobile financial market size and depth are very low.

Prudential regulation can ensure the role of mobile money in boosting financial inclusion and growth. For example such regulation was passed in Colombia, Kenya, India and Liberia in 2013. The biggest single barrier, however, is the absence of a licensing authorization framework for non-banks. This can slow down or even prevent companies from setting up mobile money services. Other regulatory obstacles include transaction and balance limits that are too low, onerous customer identification requirements, rules preventing companies from earning interest on pooled funds, and restrictions on international remittances, particularly outgoing remittances.

In the light of the importance of mobile banking, the Bangladesh Bank issued guidelines on mobile financial services in 2011 that prescribed a bank-led model. This is the first mobile financial services guideline in the region. In mobile banking and payments, all licensed banks are not active and a few banks dominate the market. Daily transactions through mobile banking has increased tremendously, however, knowing your customer (KYC) of mobile account remains a challenge. Use of technology has become helpful in handling fraud, but has also exposed banks to IT-related fraud. Lack of financial literacy and awareness are major barriers of financial inclusion and online banking in the context of Bangladesh. It is also true for many countries in the Asia-Pacific region. For example, in India, policies are being implemented by harnessing the potential of mobile technology, especially through the use of electronic banking services.[a]

[a] Reserve Bank of India, “Mobile banking, report of the Technical Committee”, Mumbai, January 2014.

Financial inclusion is an important tool in achieving the objectives of sustainable development. Therefore, different types of domestic financial institutions, such as commercial banks, microfinance institutions, development financial institutions and, post have a role to play in serving the poor and addressing the growing income and social inequality (see box 5.9). The financial markets need to improve efficiency and financial allocation of resources. To move forward it would be useful to identify lessons learned in countries of the region on innovative approaches to providing financial services for the poor and on successful regulatory and policy approaches.

Box 5.9. Microfinance institutions in the Asia-Pacific region

Microfinance covers a wide range of financial services geared towards the poor and low-income household group and micro, small and start-up enterprises. Microloans, savings and microinsurance are examples of such financial services, which aimed at providing access to formal finance and financial inclusion for these businesses and borrowers that are often excluded from the official credit market, must resort to more informal, unstable and expensive alternative sources of capital.

Overall, the microfinance sector in Asia and the Pacific has showed impressive growth rates over the past few years. Among the notable large-scale microfinance projects in the region, the Microfinance Initiative for Asia stands out. KfW Development Bank of Germany and the International Finance Corporation (IFC) agreed to invest $1 billion during the course of three to five years. Using debt and equity investments, structured finance and consulting services for Asian micro-financing institutions (MFIs), the Microfinance Initiative for Asia targets two main objectives: (a) the creation and enhancement of the institutional capacity for sustainable microfinance delivery; and (b) the strengthening of linkages between domestic and international capital markets.

Many types of organizations provide microfinance: MFIs, not-for-profit organizations and NGOs, self-help groups, inclusive businesses and social enterprises, state-owned and private commercial banks, government "policy banks" and others operate microfinancing schemes. While these organizations differ considerably in their operating models, they often share one important common characteristic: high repayment (and interest) rates. The nominal interest rates charged by most MFIs in the Asia-Pacific region range from 30 to 70% per year, which are very high compared with the rates of commercial banks and subsidized lending organizations. The high nominal interest rate is mainly due to the high cost of funding, inflation, and high cost of administration and operations associated with MFIs. By applying innovative solutions, such as a shared liability model and collateral-free lending, default rates can be surprisingly low for such an apparently poor sector of the market.

An apt example is the Group Model applied by the Grameen Bank of Bangladesh. In this model, the borrowers are divided into five member groups, and each group jointly assumes debts. Consequently, peer pressure and collective responsibility also helps to control the default risk. Many MFIs have successfully proved that the poor are "bank-able", and that the so-called "base of the pyramid" is a financially viable — and even lucrative — market.

Nonetheless, microfinance remains attractive to SMEs because it specifically caters this sector, is accessible, and most loans are still cheaper than informal or black market financing sources. A Recent concerns over the serious problem of market saturation and over-indebtedness has led to more stringent scrutiny of microfinance activity. Nonetheless, microfinancing remains a powerful tool for financial inclusion, particularly for smaller micro, small, and medium enterprises (MSMEs) and those located outside the main banking areas.

Policy options

Despite significant success in widening access to financial services, challenges remain. For instance, in several economies, geographic characteristics and topography can act as barriers to increasing access to financial services. This is, for instance, relevant for countries such as small island developing States or the ones that are mountainous. In other countries, especially larger ones, a lag between implementation of policies and putting them into practice at the local level has inhibited broader financial inclusion.

Relevant policy issues may include the following:

- Inclusive financial system: Policies need to ensure that an inclusive financial system is also efficient, fair, predictable and secure. They should be adopted to maximize access and increase effectiveness in microcredit and other types of institutions.
- Institutional framework for responsible business practices: Appropriate institutional frameworks and regulations that reinforce responsible business practices are important. Efficient institutional frameworks and modalities are critical to create such an enabling environment in the region.
- Financial literacy: Efforts to improve financial literacy and measures for consumer protection have increased in recent years. However, wider programmes to provide access, and then enforcement and monitoring mechanisms remain weak. Many countries in the region lack policies to increase financial literacy and rules for consumer protection. Countries need to increase financial literacy and to enforce consumer protection for improving access to financial services.

F. Trade finance for small and medium size enterprises

The economies in the Asia-Pacific region have been able to enhance and widen the use of trade finance to the benefits of business, especially SMEs. The progressive increase in the usage of trade finance by volume and demands is indicative of the importance the Asia-Pacific region attaches to trade finance as a prime mover to growth. SMEs account for 80-90% of the Asia-Pacific businesses, but are less likely to export than larger enterprises.[23] SMEs in the region have limited access to trade finance, making it difficult for them to engage in international trade or to participate in international supply chains. Several factors are often identified as the major barriers preventing SMEs from accessing trade finance, including high transaction costs, imperfect information, high default risk and limited collateral (ITC, 2009).

In the region, trade finance assistance flows mainly from the commercial banks and development financial institutions (DFIs). The other actors are specialized financial institutions, such as export and import banks, rural banks, microfinance banks and non-bank finance companies; Government programmes or agencies for rural finance, microfinance or SME finance; membership-based cooperative financial institutions; postal savings banks or institutions; and public and private credit guarantee institutions

Inter-firm trade transactions within the private sector are gradually gaining acceptance as the second channel supplementary to the bank intermediated trade finance due to several factors, including availability of new financial instruments and credit lines. Bank intermediated trade finance serves as the lifeline for trade and commerce, especially in the field of international trade. Inter-firm trade credit is slowly emerging as a non-banking channel of trade finance. Firms' ability to directly extend credit, however, primarily depends on inter-firm business relationships and is generally backed by purchasing trade credit insurance to mitigate payment risks. Supply chains systems, factoring and forfeiting have yet to emerge as emerging non-banking channels for transacting international businesses.

A commercial bank acts as a trusted third party to guarantee delivery of goods and services from the exporter and payment by the importer. National DFIs and export credit agencies (generally State-owned) are also major actors in international trade and investments. They generally provide long-term loans, project finance, guarantees, and insurance to corporations and SMEs. Many Asia-Pacific countries have set up national SME Banks (such as, BRAC Bank-Bangladesh, SIDBI-India, Philippines SME Bank Inc., SME Bank of Thailand) which, among other things, , provide trade finance and offer risk mitigating products (Abe and others, 2012).

[23] Estimates by IFC suggest that only 15% of regional SMEs are already exporters. See IFC (2010).

Trade finance is the lifeline of trade because more than 90% of trade transactions in the world involve some form of credit, insurance or guarantee (Abe and others, 2012). Buyers and sellers both face credit risks, but their needs related to financing are different. In this context, there is no comprehensive single source to determine and measure the global and regional size as well as composition of the trade finance market. Different sources use their own modalities and conduct surveys to measure the bank intermediated trade finance size, structure and developments (see box 5.10).

Box 5.10. Estimates of market size of trade finance in Asia-Pacific economies

Entities tasked with measuring bank intermediated trade finance size, structure and developments use their own modalities. Available statistics, however, show a significant variation across countries and regions.

At the global level, the Committee on the Global Finance System (CGFS) based on national statistics, SWIFT and ICC Trade Register survey estimated that trade finance directly supported about one-third of the global trade, with letters of credit (L/Cs) covering about one-sixth of total trade.[a] The Survey mentions that bank-intermediated products are primarily used to finance trade involving emerging markets economies, particularly in the Asia-Pacific region. Global banks appear to provide about one-quarter to a third of the global trade finance, and almost half of their exposure is to firms in emerging economies of eh Asia-Pacific region. The global market size is estimated by CGFS at a flow of $6.5 trillion-8 trillion of bank-intermediated trade finance during 2011, of which around $2.8 trillion was through L/Cs. The International Monetary Fund (IMF jointly with the Bankers Association for Finance and Trade (BAFT) and the International Financial Services Association (IFSA) (2009, 2010, 2011) estimated that about 40% of global trade was supported by bank-intermediated trade finance, while industry studies (ICC 2009) have estimated it at around 20%.

National data show wide variation measured in terms of trade finance for stocks, annual flows of trade finance and percentage of merchandise trade, which range from 2% for Mexico to more than 40% for China (47%), India (41%), Italy (47-63%) and Korea (56%) as compared to global estimates at 36-40%. The percentages of the measured intensity of trade finance over trade ranged from 29 to 56% for major Asia-Pacific countries.

[a] BIS (2014).

In particular, trade finance gaps noticeably changed in the onset of the 2008-2009 global financial crisis. The Asia-Pacific region also experienced the same trend of a widening gap in trade finance, which has persisted. Among others, anti-money laundering regulations and lack of awareness about trade finance options and innovations are key factors behind the gap (ADB, 2014b). In 2013, the global trade finance gap was estimated at $ 1.9 trillion. Of that amount , $1.1 trillion can be attributed to developing economies in Asia and the Pacific. with $99 billion of it attributed to India and the China. Geographically, the Asia-Pacific region recorded the highest share of proposed transactions at 57% of the global trade and also had the highest percentage (79%) of global rejections- with India and China jointly recording 35% of the rejected transactions (ADB, 2013e). Estimates indicate that an increase of 5% in the availability of trade finance could result in an increase of 2% in production and employment (ADB, 2013e).

In another report, it was highlighted that in comparison to the previous survey of 2012, the global outlook regarding the availability of trade finance in 2013 was more positive. Of the $6 billion worth of proposed trade finance transactions globally, the share of proposals (as percentage of the total) emanating from a selected few Asian countries covered under the 2013 Survey was as follows: Russian Federation- 9.30%, other- v9.41%, advanced Asia (Hong Kong, China; Japan, Republic of Korea, Singapore)- 27.22%, developing Asia (excluding India and China)- 14.50%, India and China- 28.30%. India and China combined with advanced Asia topping the list with a 55% share, followed by Europe (Western, Central and Eastern) at 30%. However, the surveyed banks reported a 20.9% rejection rate for 2013 (ICC, 2014).

Many developing countries in the region have limited capacity to address trade finance shortages on their own as they lack the required national trade finance institutions and infrastructure. Government-backed export credit insurance and guarantee institutions and/or export-import banks are still inefficient or missing in many developing countries of the region. Similarly, credit rating institutions are also weak or absent in some developing countries in the region.

Credit information in almost all developing countries in the region has improved significantly between 2009 and 2014.[24] The most noticeable improvement was made in Bhutan, Cambodia, Tajikistan, Mongolia, the Lao People's Democratic Republic and Papua New Guinea. Interestingly, most of those countries are either landlocked developing countries or least developed countries. Reliable information on importers' or exporters' creditworthiness is indeed essential for trade finance providers to accurately assess the risk associated with a given transaction and offer affordable trade finance products.

However, in most of the countries, inadequate infrastructure and weak networks of financial institutions and poor coverage of banking facilities inhibit the timely availability of trade finance to the private sector, especially to SMEs. In addition, smaller banks are often not in a position to provide timely assistance, which is essential to sustaining exporting customers' and their trade commitments.

Within the region, apart from financing the trade activities of SMEs, a number of financial institutions have are offering non-financial technical assistance to SMEs in the form of for capacity-building. For example, the SME Bank of Pakistan offers a range of business development services in the areas of marketing, accounting, product design and business planning, while the SME Bank in Malaysia provides comprehensive advisory services to complement products offered by commercial banks. Some specific examples of these services are in-depth entrepreneurship training programmes for graduates, vendors, mentors and women. Indonesia Eximbank has developed an initiative to extend technical assistance that includes quality improvement of products, product processing, packaging and marketing. Through the initiative, capacity-building is given to stakeholders in the form of training and guidance in connection with export and trade financing activities.

In this context, technological innovation can also reduce the costs of trade financing and increase availability. For instance, electronic trade finance (ETF) offers an integrated and paperless process that reduces costs and enhances efficiency, from purchase to delivery. ETF provides all participants with the same data, including purchase orders and invoices, thereby enhancing transparency and information flows. This makes assessments of credit worthiness easier, which is especially important for SMEs given their often limited records.

[24] See the World Bank's Doing Business database. The credit information index measures the scope, accessibility and quality of credit information through either public or private bureaus in a country. The index ranges from 0 to 6, with a higher value indicating that more credit information is available to facilitate lending decisions. Available from www.doingbusiness.org.

In particular, SMEs in least developed countries are faced with a number of challenges in accessing affordable trade finance. This is gradually resulting into a "trade finance divide" between the least developed and the developing economies of the region. The banking sector is generally wary of entertaining credit proposals in least developed countries, as it tries to insulate itself against risks of loan defaults by charging higher interest rates backed by high collaterals and guarantee conditions. The small borrowers find it rather difficult to afford and service the institutional credits with such unaffordable stipulations. Such high fees are out of line with risk statistics revealed by the ICC Trade Finance Loss Register.[25] Given the importance of affordable trade finance in least developed countries, the World Trade Organization (WTO) supports the provision of easy access to affordable trade finance in such economies as part its development agenda for strengthening trade finance facilitation measures with priority to such areas in Asia and the Pacific (and Africa), where such measures are lacking.

At the regional and global levels, many of the trade finance facilitation schemes launched by development banks have effectively helped SMEs and developing economies to get access to trade finance. In the Asia-Pacific region, the ADB Trade Finance Program (TFP) supports billions of dollars of trade throughout the region, which, in turn, helps create sustainable jobs and economic growth in in the developing countries of Asia.[26] In addition to traditional trade finance, broader financial and technical assistance to developing countries is needed so that they can fully benefit from trade. In this context, continued support and expansion of the global Aid for Trade initiative is important. This initiative helps mobilize resources to address the trade-related constraints identified by developing and least-developed countries. In 2012, Aid for Trade commitments reached $41.5 billion, up 20% from the year before 2011 and 110% since 2002-2005 baseline. Of this, 57% was for economic infrastructure and 40% went to building productive capacity; but support for trade policy and regulations have stagnated (OECD, 2014).

Africa is the region with the highest share of Aid for Trade commitments, followed by the Asia-Pacific region. On an individual-country basis, India, Turkey and Viet Nam were the largest recipients of commitments in 2012 with $4.0 billion, $3.3 billion and $2.6 billion, respectively. The largest increases in Aid for trade commitments were in middle income countries which in 2012 received $31 billion (58% of the total and 38% higher than in 2011). In contrast, commitments to least developed countries have fallen 2% from 2011 and account for only 24% of the total raising concerns that they are at risk of being left behind.

This situation calls for urgent attention to trade finance and the development of innovative trade financing mechanisms, including supply chain and non-bank financing, as well as better ways to assess risks in developing country markets. A key underlying issue in that regard is the lack of data and information on trade finance making it more difficult to devise effective policy and regulations in that area. In that regard, the Asia-Pacific Trade Facilitation Forum 2013, considered the establishment of an Asia-Pacific export credit agency or Asia-Pacific trade Finance fund.[27]

The private sector is increasingly being recognized as a stakeholder and as a partner in the delivery of Aid for Trade, and, in some cases, as a provider of capacity-building support. The establishment of PPPs, however, remains challenging in terms of roles and expectations.

[25] Available from www.iccwbo.org/products-and-services/trade-facilitation/icc-trade-register/.

[26] More information is available from www.adb.org/tfp.

[27] Meeting was organized by ESCAP and ADB in Beijing, China in 2013.

Policy options

The Asia-Pacific region needs policies that enable services to become more flexible and tailored to the requirements of poor and vulnerable communities, as well as for the trade finance for SMEs. The policy discussions may include the following:

- Government active participation: A Government-wide approach can be effective to create a financial system in which financially excluded people get access to finance. Also, central banks may set up their own goals and specific programmes for increasing financial inclusion. The Asia-Pacific region needs to create an enabling environment for SMEs and developing countries to have better access to trade finance and to support the development of capacity to identify and overcome wider constraints to trade.
- Inclusive trade finance system for SMEs: Appropriate institutional frameworks and regulations are critical to develop trade finance for SMEs. They require models of export credit insurance and guarantees for organizations that are most appropriate for developing countries of the region. Therefore, countries need to undertake measures to build capacity of SMEs in relation to trade finance. Furthermore, there is an opportunity to learn from successful lessons of microfinance to devise similar microtrade finance programmer.
- Inclusive trade finance system for developing countries: As many developing countries in the region have limited access to trade finance, regional trade finance cooperation mechanisms would be most effective in improving trade finance capacity. In addition, there is need to establish and develop credit rating institutions that monitor the process. The mechanisms should also promote cooperation among regional development partners to work to develop trade finance.
- Set up an Asia-Pacific trade finance fund: The fund can provide support for trade finance-related resources through activities aimed at building the capacity of developing countries to tackle constraints on trade, including through Aid for Trade. Financial resources as well as effective policies are needed to make trade finance in the region more effective. This, in turn, would support efforts to raise resources for trade finance.

G. Philanthropy

In line Asia and the Pacific being the most dynamic growth region globally, the net worth of individuals has also increased at a rapid rate, with a number of billionaires notably higher. This has created the potential to raise funds for sustainable development financing through philanthropy, both at the national and regional scales.

According to the Forbes List of Billionaires for 2015, the Asia-Pacific region has more over 683 billionaires (37 % of the world total), with total wealth of more than r $2.1 trillion (30 % of the world total). In particular, the number of billionaires in some of the emerging economies in the region staggering — 301 in China; Hong Kong, China; and Taiwan Province of China combined, 90 in India, 88 in the Russian Federation and 32 in Turkey. This mammoth wealth of individuals as well as families has produced a significant rise in number of philanthropic organizations with diverse objectives which are related to different aspects of sustainable development. These organizations have designed and implemented unique programmes through innovative financing mechanisms, and have also helped shape public awareness on issues of critical importance for development. Thus, philanthropy is being seen as a source of private finance in the Asia-Pacific region.

Apart from the national foundations, several international philanthropic organizations have been very active in the region, many of which have partnered with the United Nations system, including ESCAP. The partnership with international philanthropic organizations has been providing support in promoting social sector financing and urban sector resilience building, especially through investments in areas such as health, education, water and sanitation, and disaster and environment management (see box 5.11). Among these organizations are the Bill and Melinda Gates Foundation, the Rockefeller Foundation, the Clinton Global Initiative, the Giving Pledge, the Global Impact Investing Network and the Hilti Foundation. Importantly, the financing mechanisms affect development outcomes and often provide financial resources to mobilize national and regional awareness-building.

Box 5.11. International philanthropic organizations and the Economic and Social Commission for Asia and the Pacific

The Bill and Melinda Gates Foundation has provided funding for the ESCAPs multi-year project aimed at supporting sustainable solid waste management in secondary cities and small towns in Asia and the Pacific, Implemented in in partnership with Waste Concern, an NGO in Bangladesh, the project is assisting local and national governments in Bangladesh, Cambodia, Indonesia, Pakistan, Sri Lanka and Viet Nam in developing decentralized and low cost models for solid waste management that provide employment opportunities for the urban poor, in particular waste pickers, and in linking them with climate financing.

The Rockefeller Foundation has provided financial support to ESCAP and UN-Habitat for the development of the Quick Guide for Policy Makers on Pro-poor Urban Climate Resilience in Asia and the Pacific. The Quick Guide has been developed to enhance the understanding of local government officials and policymakers across Asia and the Pacific of climate change, appreciate how it affects their cities and decide on what actions they can take to make their populations — and especially the urban poor communities — more resilient to climate change impacts. Moreover, the Rockefeller Foundation provided financial support to the organization of the Fifth Asia-Pacific Urban Forum, which was convened by ESCAP in 2011.

The Hilti Foundation has provided funding to ESCAP for research and development of affordable, sustainable and resilient building materials and housing concepts for cities in Asia and the Pacific. The applied research was undertaken in the Philippines and included product R&D, participatory design workshops with communities and architects, construction of prototypes and the development of social enterprises. At the same time, recommendations were made for developing a more enabling policy and regulatory environment for the construction of low-cost, high-quality housing using alternative and green building materials.

However, in the age of growing inequality, Asia-Pacific philanthropy needs to be innovative – learning from best practices globally and adapted to local needs and the social and political context (UBS, 2011). For example, In China, Chen Dongsheng, Chairman and CEO of Taikang Life Insurance has given 12% of his income to charity (mainly education causes) over the past for years. Others, such as Hui Ka Yan, Founder and Chairman of the Evergrande Real Estate Group, donated $62 million in 2012 to poverty relief and education.[28]

[28] “48 Heroes of Philanthropy,” Forbes Asia, 29 May 2013. Available from www.forbes.com.

In India, Azim Premji, Chairman of Wipro Limited, donated $2 billion, mainly to improve school education, in 2103; and Anil Agarwal, Chairman of Vedanta Resources Plc., has pledged to donate 75 per cent of his family's wealth towards charitable causes.[29] Similarly, the Infosys Foundation has been working to create opportunities, with the intent to promote create a more equitable society in different states of India. In particular, almost 80 per cent of the donations go to the education sector, with remain funds directed for rural development, health care and environmental protection in India.

In Singapore, the Tan Chin Tuan Foundation is a family philanthropy with a wide variety of motivations for its giving, including supporting medical care and a basic education. In Thailand, the Buddharaksa Foundation, which was founded by Tipaporn Chearavanont, helps underprivileged children attain an education and develop intellectually and spiritually the teachings of, Buddhism in tandem, which was founded by.

It must be noted that the Asia-Pacific philanthropists have preferred to be personally involved in the grant-making process, in contrast to the more formalized approach of the Western corporate and family foundations (Sharma, 2013). In this context, with favourable government policies, including through tax incentives and breaks, the scope for financing for development through various innovative mechanisms can be increased significantly in the region.

Over the past decades with the phenomenal growth of the wealth, venture philanthropy has grown rapidly, which combined grants and loans or quasi-equity is expected to have a dual impact through social and financial returns, unlike in the case of traditional philanthropy.

[29] Dhanya Ann Thoppil, "India's Premji Gives USD2.3 Billion to Charity," The Wall Street Journal, 22 February 2013. Available fromwww.wsj.com.

International public financing

6

External resources are important to augment domestic financial resources to meet the development financing requirements. In many developing economies, especially in least developed countries and fragile States, substitution of domestic resources for foreign exchange is often difficult in short-to-medium-term development policymaking. Developing economies, especially low income and vulnerable economies, therefore, continue to require substantial external funding.

In this context, it is important to discuss the potential of other traditional sources of external financing, such as ODA and multilateral development financial institutions. Also, South-South cooperation and triangular development cooperation are important channels for funding development programmes in the Asia-Pacific region.

A. Official development assistance

The discussion of sources of finance for development is often premised on the notion that ODA is declining and consequently alternatives to aid need to be found. While this indeed is the case, it disguises the need for ODA to continue to be provided as a necessary source of finance in particularly vulnerable environments where alternative sources of finance are unlikely to be forthcoming in the short, medium and even longer-term and to ensure the truly vulnerable are supported today. ODA also has a critical role to play as a catalyst for development and other financial innovations for development.

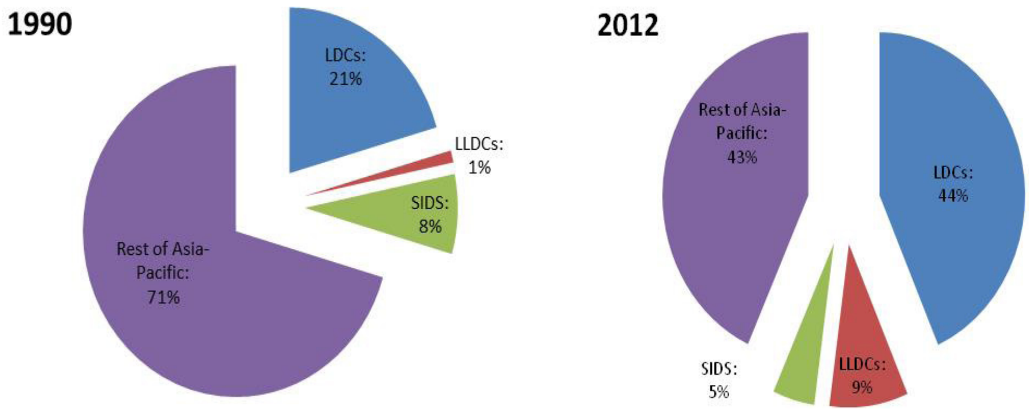
With regard to development, namely to alleviate poverty, arguably by achieving more inclusive growth, ODA has an ongoing role in the sources of financing for development

According to OECD, ODA reached an all-time high of $134.8 billion in 2013. At this level of investment, ODA clearly remains an important source of finance for many nations and "particularly for countries dealing with widespread extreme poverty and/or conflict – in the foreseeable future."[1]

In the region, traditional external sources of financing, including ODA, only partially contribute to meeting the region's resource requirements for sustainable development. ODA flows to the Asia-Pacific region reached $30 billion in 2012, representing only 23% of the global ODA flows. However, ODA remains a significant source of development finance for least developed countries and small island developing States in the Asia-Pacific region. The least developed countries in the region received $12.4 billion in 2012, or 44% of the region's ODA, doubling from their share of 21% in 1990 (see figure 6.1).

[1] OECD statement on Financing for Development on ODA. Available from www.un.org/esa/ffd/wp-content/uploads/2015/02/1ds-ipf-Statement-oecd-Jan2015.pdf.

Figure 6.1. Distribution of official development assistance in Asia-Pacific economies, 1990 and 2012



Source: ESCAP statistics. Available from www.unescap.org/stat/data/statdb/DataExplorer.aspx.

Notes: LDC: least developed countries, landlocked developing countries (LLDCs): small island developing States (SIDS):

ODA has helped leverage global partnerships which have extended to some critical social financing, including offering innovative solutions for health financing. The AIDS global PPP is one such response that is well known for its significant successes in leveraging finances (see box 6.1).

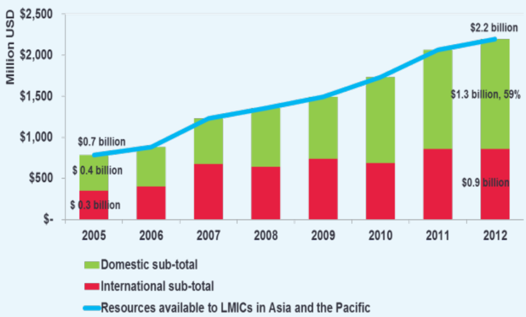
Box 6.1. Health financing strategies: a case of AIDS response

In just over a decade, global financing for AIDS increased significantly, reaching the highest levels ever in 2012 at $19 billion. The Asia-Pacific region has mirrored this global trend, with estimated regional spending related to HIV rising from $700 million in 2005 to $2.2 billion in 2012. Globally and regionally, international funding for HIV has been, and continues to be, critical to sustaining the initial momentum for funding HIV programmes. Through intense and focused advocacy over the last decade — including the calling for shared responsibility as a mechanism to achieve AIDS targets and commitments under the 2011 Political Declaration on HIV/AIDS - the international community is now negotiating new partnership compacts based on shared responsibility and global solidarity for a more sustainable HIV response.

To achieve globally agreed targets, UNAIDS estimates that approximately $5.4 billion must be mobilized in low- and middle-income countries in Asia and the Pacific—a shortfall of $3.2 billion on current spending levels. Many countries in the region continue to rely heavily on international assistance. Notably, the BRICS countries (Brazil, Russian Federation, India, China, and South Africa) contribute to more than half of all domestic spending on AIDS in low- and middle-income countries. As the region's economic growth continues, further reducing eligibility for a shrinking pool of international donor funding, the importance of assured sustainability of domestic funding is clear, particularly given the life-long need for treatment.

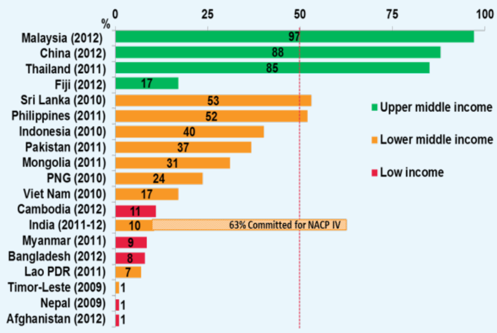
Since 2005 there have been steady increases in domestic public spending from $400 million in 2005 to $1.3 billion in 2012 (figure B6.1), representing 59% of total AIDS spending compared with the global average of 53%. Of the 10 countries with the highest HIV burden, three of them, namely Malaysia, China and Thailand, fund most of their AIDS response domestically. India has committed to finance more than 60% of its response from domestic sources from 2014 (figure B6.1.2).

Figure B6.1.1: Resources available for AIDS response in Asia and the Pacific, low-and middle-income countries (LMIC)



Source: UNAIDS estimates 2012, Global Report: UNAIDS Report on the Global AIDS Epidemic 2013.

Figure B6.1.2: HIV expenditure from domestic sources, Asia and the Pacific, latest available year, 2009-2012



Source: Prepared by www.aidsdatahub.org based on www.aidsinfoonline.org, India Global AIDS Response Progress Report 2012, and Kumar, U. A., 'Azad Launches Rs 14,295 Crore Phase IV of NACP', The New Indian Express, 13 February 2014).

However, there is an urgent need to explore and implement innovative financing mechanisms, such as PPPs, tax levies and pooled procurement, that could help in adopting "investment approaches" for achieving greater impact through prioritizing cost-effective and cost-efficient interventions. For example, in 2013, Thailand developed an investment case aimed at ending AIDS by 2030, based on detailed epidemic analysis and modelling. The investment needed to treat every HIV-positive person regardless of CD4 cell count, and to strengthen adherence support is relatively modest (an additional $100 million over the next 10 years), but would prevent 20,000 people from acquiring HIV infections and avert 22,000 deaths. For every additional dollar spent now, the economic return will be three dollars in future savings on treatment and hospitalization costs.

Policies need to be in place to raise not only ODA per se, but the overall aid policies should be discussed in the context of: project aid versus budget support; conditional programme aid versus unconditional/untied budget support; and whether aid should be allocated to countries with "good governance", especially in the context of aid management/coordination. Recent global conferences underscored the importance of aid effectiveness: the Fourth High-Level Forum on Aid Effectiveness, in Busan, the Republic of Korea (2011),[2] the first High-Level Meeting of the Global Partnership for Effective Development Cooperation, in Mexico City (2014) and the first high-level preparatory event for the 2016 Development Cooperation Forum, in Republic of Korea (8-10 April 2015) , to anchor effective development cooperation in the global development agenda beyond 2015.[3]

There is a clear need for countries to renew efforts to fund ODA and agree to a global approach to meet the outstanding challenge to reduce poverty and achieve more inclusive growth. While the Monterrey Consensus target of providing 0.7% of GNI in ODA is challenging for many countries under the current economic and political environment, setting out the post-2015 development agenda financing goals will remain critical to gaining a genuine commitment to development and the alleviation of poverty more generally.

Policy options

If the objective of development is namely to alleviate poverty, arguably by achieving a more inclusive growth, ODA has an ongoing role in the sources of financing for development. All countries must renew their commitment to this as part of the development agenda beyond 2015.

There is no doubt that ODA is important for least developed countries and other vulnerable economies. OECD-DAC members[4] are thus expected to meet their commitments of providing an overall target of 0.7% of GNI for all developing countries and 0.15%-0.20% of GNI as ODA to the least developed countries.[5]

As countries explore alternative and innovative sources of finance for development, ODA will have an ongoing and important role to play.

This is essential to meet the existing financing gaps. Some critical policy issues to be explored are the following:

2 See the outcome document of the meeting High-Level Forum on Aid Effectiveness in Busan. Available from http://effectivecooperation.org/files/OUTCOME_DOCUMENT_-_FINAL_EN2.pdf.

3 See the Communiqué for the first High-Level Meeting of the Global Partnership. Available from http://effectivecooperation.org/2014/03/30/draft-communique-for-the-first-high-level-meeting-of-the-global-partnership/. More information is available from www.un.org/en/ecosoc/newfunct/dcfrok.shtml.

4 Suggest footnote listing the countries ****

5 See United Nations Integrated Implementation Framework. Available from http://iif.un.org/content/official-development-assistance.

- Countries must be united to focus on effectiveness and allocation mechanisms for increasing ODA support, especially for least developed countries and fragile States (United Nations, 2011). Given that sectoral patterns are critical for development, policymakers could think of new forms of ODA and how they can be aligned more with countries' developmental requirements. In addition, countries could strengthen the institutional structure of aid effectiveness and delivery to produce long-term national sustainable development objectives. Furthermore, the region's share of global ODA is significantly lower than its share of the world's poor, a fact that deserves more attention in global forums.
- In the drive to come up with alternative and innovative sources of finance for development, ODA will have an ongoing and important role to play.

B. South-South and triangular cooperation

The growing diversity of the developing world has created new opportunities for South-South cooperation and triangular development cooperation. Within the Asia-Pacific region, economic linkages among countries have significantly strengthened partnership and development cooperation in areas such as trade, investment, finance, technology and capacity-building.

South-South cooperation has provided new opportunities to share best practices, skills and expertise among developing countries in the region. Such skills and capabilities are often more appropriate to recipient countries than those available from developed countries due to shared development challenges and economic structures with the donors, such as labour-intensive production, infrastructure bottlenecks, geography, market size and cost structures. For the same reasons, triangular development cooperation can achieve greater effectiveness per unit of resources spent compared with traditional North-South development partnerships.

From the point of view of developing countries, South-South cooperation goes way beyond the provision of resources and is rooted in the conception that genuine development means greater diversity of economic activities and greater freedom of action for developing countries. This is why cooperation and concerted actions among developing countries in achieving reform in global rules and the external environment are intimately part of South-South Cooperation. Some of these reforms can be achieved in negotiating forum, while others can be attained through self-organization and developing countries-led efforts to create new mechanisms and institutions that can increase the influence of developing counties, especially those most disadvantaged by global rules and markets.

In 2008, in Yamassoukro, the G77 and China agreed on the fundamental principles for South-South cooperation as the exercise "of solidarity among peoples and countries of the South that contributes to their national well-being, their national and collective self-reliance and the attainment of internationally agreed development goals[. .]" (G77 and China, 2008, para 4). According to these principles, "[c]ooperation between countries of the South must not be analyzed and evaluated using the same standards as those used for North-South relations" and "[f]inancial contributions from other developing countries should not be seen as Official Development Assistance from these countries to other countries of the South" (para. 2).

In the Yamassoukro conception, "[t]he North has an obligation, both in its own national interests, and in the interest of global harmony, equity, and development, to fulfill its commitments through North-South cooperation. In this context, the current international architecture for development cooperation needs to be reformulated in order to respond to the new realities and opportunities for development including triangular cooperation" (para. 1). From this approach, political leaders in the Region can undertake groundbreaking practice in triangular cooperation, recognizing that the Asia-Pacific region is a promising grouping of developing and developed countries. Triangular cooperation can play a catalytic role in bolstering and facilitating cooperation among developing countries in the region.

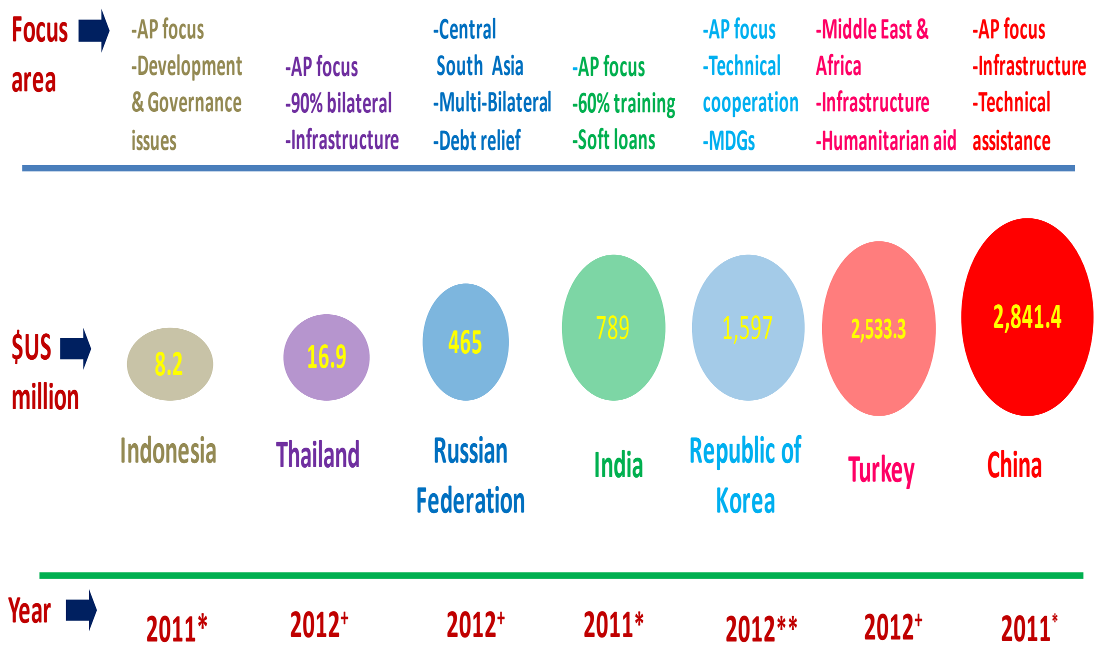
The region can seek to showcase how South-South cooperation has different features from North-South cooperation, including (1) provision of resources with no policy conditionality; (2) sharing of policy experience in the face of similar or common challenges; and (3) common focus on infrastructure and the development of productive sectors.

The expansion of South-South cooperation has enormous potential in the region for generating mutual benefits in the creation of new markets both in terms of production and consumption. Even when China is excluded, global South-South trade has been growing at an average rate of 17.5% a year over the past decade, with trade in manufactured goods expanding as rapidly as trade in commodities. Developing countries now provide 33% of global investments. South-South investment flows dominated in the landlocked developing countries, and the share of Greenfield investment projects from developing economies jumped from 41% of total projects in 2011 to 66% in 2012.

The region needs to recast North-South economic relations in terms of trade and finance to promote inclusive growth and economic diversification to the mutual benefit of both developed and developing countries (ESCAP, 2014d). This, however, requires increased State-to-State cooperation oriented toward harnessing markets and facilitating cross-border private sector investment that does not pit one country against another in competing for foreign investment and in undermining each others' industrial upgrading policies. To achieve this, more intense cooperation among public authorities is needed. It is important to recognize that the region has a golden opportunity to expand South-South cooperation and triangular development cooperation in ramping up the financing of investment projects and coordination in monetary and financial matters.

Developing countries of the region have undertaken South-South cooperation activities over the past decades with varying degrees of engagement and size. The two largest contributors to South-South cooperation activities in the region, China and Turkey, have spend more than $2.8 billion and $2.5 billion, respectively, on South-South cooperation-related activities in recent years (see figure 6.2). Other important contributors to South-South cooperation activities in the region include the Republic of Korea, India, the Russian Federation, Thailand and Indonesia.

Figure 6.2. South-South cooperation activity of selected Asia-Pacific economies



Sources: + Thailand, Russian Federation and Turkey, based on data from OECD non-DAC providers of concessional development co-operation (net disbursement in current prices). Available from www.oecd.org/dac/stats/non-dac-reporting.htm; *China, India and Indonesia, based on data from OECD estimates of gross concessional flows for development co-operation ("ODA-like" flows) from OECD Key Partners. Available from www.oecd.org/dac/stats/non-dac-reporting.htm; ** Republic of Korea, based on data from OECD DAC Members' Net Official Development Assistance in 2012. Available from www.oecd.org/dac/stats/statisticsonresourceflowstodevelopingcountries.htm.

Notes: AP: Asia and the Pacific

The potential for relying more on South-South cooperation and triangular development cooperation in Asia and the Pacific has increased due to the rapid growth and dynamism of emerging countries, such as China, India, Indonesia, Japan, the Republic of Korea, Singapore and Thailand. The majority of South-South cooperation activities in the region is related to projects, capacity-building and sharing development experiences. Some important areas for cooperation have been trade, investment and technology transfer, especially for least developed countries. Other key areas include poverty alleviation, gender, agriculture and rural development, food security, infrastructure projects, ICT, environment, disaster relief and reconstruction, debt relief, banking, training of civil servants, governance, capacity-building and advisory services, and humanitarian aid (see box 6.2).

Box 6.2. South-South cooperation in transfer of technologies

The Government of India backed "Lighting a Billion Lives Initiative" (LaBL) which is aimed at providing high quality, cost-effective solar lanterns in off-grid villages. The project entails setting up a solar charging station in beneficiary villages and, training a local entrepreneur to charge and rent the lamps for a daily fee to villagers. The project's capital cost is covered by the Government and other benefactors through grants, while its sustainability is ensured by the rent paid daily by the villagers for the lanterns. The initiative has formed a basis for South-South collaboration through capacity-building programmes, technology transfer initiatives and piloting of successful delivery models for replicating and scaling up the model in other developing countries. Internationally, LaBL has effectively overseen the distribution of over 19,000 solar lanterns to rural communities across Africa and Asia.[a]

DONGBAO, a Chinese pharmaceutical firm and VACSERA, an Egyptian firm specialized in biological products recently entered in a cooperation that saw the successful transfer of technologies to Egypt to produce recombinant insulin used to treat diabetes. This product was previously mostly imported and was often in short supply in Egypt. The cooperation resulted in a local production of insulin in Egypt at cheaper cost than the previously imported products.[b]

Source: ESCAP.

[a] See UNCTAD (2012). For further information, see TERI (2013).
[b] See UNCTAD (2012).

Most countries have created a dedicated agency within one of their ministries to deal with South-South Cooperation and triangular development cooperation. Some examples, include in China (the Ministry of Commerce), India (the Ministry of External Affairs administers the Indian Technical and Economic Cooperation Programme), the Republic of Korea (the Overseas International Cooperation Agency KOICA), Indonesia (Ministry of National Development), and Thailand (International Cooperation Agency TICA).

With the emergence of major developing countries in the region, there has been a growing interest in strengthening regional cooperation and integration, for which South-South cooperation and trade development cooperation can play a very important role. It is expected that South-South cooperation and trade development cooperation activities will continue to increase in the region in view of the continued interest of developing countries to partner and cooperate with each other in all three dimensions of sustainable development (see box 6.3). There is great potential for South-South cooperation and trade development cooperation to play an important role for the financing of sustainable development.

Box 6.3. Example of triangular cooperation: nationally appropriate mitigation actions (NAMAs)

Recently, there has been growing interest in nationally appropriate mitigation actions (NAMAs) as tools, for developing countries to promote climate change mitigation actions in the context of national sustainable development strategies. NAMAs were first proposed at the Thirteenth Conference of the Parties (COP-13) of the UNFCCC in Bali, Indonesia in 2007, and are essentially greenhouse gas emission mitigation measures that developing countries choose to voluntary undertake in accordance with their respective capacities and socioeconomic realities. There are principally two ways of financing a NAMA: unilateral or supported NAMAs. Unilateral NAMAs are financed exclusively through domestic resources, while supported NAMAs are to be financed partly through international funding. If associated with a crediting mechanism, supported NAMAs may take the form of "credited NAMAs", although no consensus has been reached yet on the modalities and modus operandi of credited NAMAs. The expectations are, however, for NAMAs to play a key role in channelling international support in terms of financing, technology transfer and capacity-building. A growing number of multilateral and bilateral financing mechanisms are being made available in support of NAMAs.

A specific NAMA facility has been set-up by the Governments of Germany and the United Kingdom of Great Britain and Northern Ireland, and the Green Climate Fund as well as the Global Environmental Facility are expected to play a key role in the financing of NAMAs. Multilateral development banks have traditionally been at the forefront of innovative climate financing mechanisms and should also play an important role.

In order to facilitate the mobilization of international support for NAMAs UNFCCC has recently set up the NAMA Registry, a web-based platform from which developing countries can voluntarily record NAMAs seeking international support with the objective to enable the matching of finance, technology and capacity-building support with these actions. To respond to the growing interest in NAMAs in the Asia-Pacific region, the ESCAP secretariat has been promoting regional knowledge sharing on NAMAs on waste, one of the priority sectors for sustainable urban development in the region. In the context of a regional programme, ESCAP is also currently providing support to Pakistan and Viet Nam for the development of NAMAs in the waste sector.

Regarding regional financial cooperation, it is important to recognize that the modalities for South-South cooperation include a wide range of activities, such as the provision of financial resources, the creation of pools of funds for balance of payments contingencies, the sharing of ideas, best practices and expertise, and cooperation in monitoring and regulation of financial flows.

Among the subregions of the Asia-Pacific, the South-East Asia has a particularly promising potential in building strong national financial institutions, networks among these institutions, and in drawing on the pool of financial resources available from within the region (Almekinders and others, 2015; ADB 2013c). Even within the subregion, the effort cannot be achieved overnight and must draw on the lessons the countries in the region learned during the financial crises of the late 1990s.

As noted earlier, the creation of the AIIB is a formalized form of South-South cooperation using the vehicle of a multilateral development bank with an intended $50 billion capitalization, which is comparable to that of the World Bank.[6]

[6] ESCAP (2005) proposed the establishment of the Asian Investment Bank.

Asia and Pacific has vast finances, much of which is placed outside the region. Among others, AIIB can serve as a mechanism towards steering funds back to the region for infrastructure development. Intraregional cooperation is essential to effectively intermediate long-term financing, which can be arranged through financial institutions and market mechanisms. In particular, many of these initiatives would require the involvement of State-owned financial institutions and the private sector.

Policy options

To expand the scope and magnitude of South-South cooperation and triangular development cooperation financing strategies, Asia-Pacific countries may need to explore some new areas. Policy issues may include the following:

- Food security: South-South cooperation and trade development cooperation can play a role in boosting investment and sharing experiences on agricultural research and development and plant varieties that are tailored for small and marginal farmers. South-South cooperation activities should further be enhanced to cover education and training, joint research and development, exchange of experiences and technologies, cooperation in biodiversity conservation, protection and evolution of biosafety norms.
- Public health: Cooperation can be in the form of developing drugs and vaccines against diseases, such as malaria and tuberculosis. Additional funding resource could be directed to research and development conducted in developing countries to build capacities and strengthen research and development cooperation in the region.
- ICT connectivity: Recently, several subregional institutions such as ASEAN, the South Asian Association for Regional Cooperation (SAARC) and the Economic Cooperation Organization have instituted cooperation mechanisms for improving ICT connectivity. Other developing countries in the region should take advantage of South-South cooperation to share knowledge and resources. Countries could maximize the use of existing investment and cooperation frameworks.
- Climate change: The Asia-Pacific region has been seriously affected by the consequences of climate change. Countries can further engage in South-South cooperation for disaster risk reduction through sharing knowledge, information and good practices, and for sharing the modalities for developing common frameworks of action in the region. The cooperation must pool resources for activities such as satellites and space information and products (ESCAP, 2013a).
- Regional (and global) public good: Proactive South-South cooperation and triangular development cooperation are critical to helping share regional public goods, such as creating space for countries, and increase their voice and concern in regional as well as global financial institutions such as IMF, WTO and G20, especially for the countries with special needs. Regional and global development financial institutions increase the availability of funding to develop regional public goods.

C. Climate finance

Over the years, climate change has become one of the key emerging development challenges in the Asia-Pacific region because of the related negative impact of environmental degradation, such as air pollution and depletion of biodiversity. In particular, Asia and the Pacific is one of the most disaster-prone regions, and the possibility that climate change may exacerbate the frequency and severity of extreme weather events is a real threat to progress made towards sustainable development.

In addition, climate change is likely to have a detrimental impact on food production as a result of the erosion of fertile agricultural land, which will put pressure on food security and require investments and research to increase agricultural yields. The risks to food security are particularly important for the poor and for the most vulnerable populations and communities in the region. Weather-related economic losses that are likely to be associated with climate change, are other areas of concern.[7] In order to secure sustainable development gains and build resilience in the region, there is an urgent need to undertake climate mitigation and adaptation action.

According to the World Risk Report 2013, among the 15 countries most exposed to natural hazards and climate change-related risks exposure, nine are in the Asia-Pacific region. These countries are Vanuatu, Tonga, the Philippines, Japan, Brunei Darussalam, Bangladesh, Cambodia, Solomon Islands and Fiji (Alliance Development Works, 2013). Least developed countries, landlocked developing developed countries and small island developing States are mostly vulnerable to climate-related disasters due to their exposure to storms, floods, droughts and sea-level rise. The total estimated losses due to natural disasters in the Asia-Pacific region during the period 2003-2013 amounted to $750 billion, representing 49.5% of the global economic losses due to natural disasters during this period. The average annual losses in the Asia-Pacific region over the same period amounted to 48.3% of the global losses.[8]

In order to implement policies and strategies to minimize the economic and human costs of climate change, countries need to adopt smart climate financing mechanisms. Financing related to climate change involves two areas: financing of mitigation, which benefits both donor and recipient countries, and financing for adaptation, which provides support to recipient countries to adapt to the consequences of climate change and to make them more resilient to natural shocks.

In the absence of an internationally acknowledged definition of climate finance, the report follows that UNFCCC definition as "local, national or transnational financing, which may be drawn from public, private and alternative sources of financing" and which target low-carbon and climate-resilient development (see box 6.4). Despite an estimated $331 billion in climate finance international flows in 2013, the gap between available climate finance funds and the financing needs required to limit global warming to two degrees Celsius and adapt to unavoidable impacts of climate change is growing.

7 See HM Treasury (2006). The report noted: "New analysis based on insurance industry data has shown that weather-related catastrophe losses have increased by 2% each year since the 1970s over and above changes in wealth, inflation and population growth/movement. If this trend continued or intensified with rising global temperatures, losses from extreme weather could reach 0.5 - 1% of world GDP by the middle of the century".

8 ESCAP, based on data from EM-DAT. Available from www.emdat.be/ (accessed on February 2014).

Box 6.4. UNFCCC and climate finance

The international community ratified the UNFCCC in 1992, to establish a framework to discuss and design actions to limit average global temperature increases and the resulting climate change. Three years later, to strengthen provisions concerning emission reductions in the Convention, the Kyoto Protocol was adopted. The Kyoto Protocol legally binds developed countries to emission reduction targets and is structured in two commitment periods (2008-2012 and 2013-2020). The 195 Parties to the Convention and 192 Parties to the Kyoto Protocol have been meeting regularly at the so called annual Conference of the Parties (COP) and in 2010, agreed to a milestone target: emissions need to be reduced so that global temperature increases are limited to below 2 degrees Celsius. With the close of the first commitment period of the Kyoto Protocol in 2012, the next goal of the UNFCCC COP process is to negotiate a legally binding global climate agreement on curbing carbon emissions, anticipated to be reached in Paris at COP 21 in December 2015, with a binding effect from 2020.

The whole international community is supposed to take the common but differentiated responsibilities of the financial mechanism. Article 4.7 in fact makes it clear that 'the extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitment under the Convention related to financial resources and transfer of technology'.

The Financial Mechanism is accountable to the COP, which decides on its climate change policies, programme priorities and eligibility criteria for funding. The Financial Mechanism is entrusted to the Global Environment Facility (GEF) and, after COP 17, also to the Green Climate Fund (GCF). The Financial Mechanism under UNFCCC currently disburses less than $1 billion per year, primarily through four funds: the Special Climate Change Fund (SCCF) and the Least Developed Countries Fund (LDCF), both managed by GEF; GCF under the Convention; and the Adaptation Fund (AF) under the Kyoto Protocol.

To underscore the United Nations commitment to this area, the Secretary-General convened the Climate Summit in New York, September 2014 to make key announcement on climate finance, launching an initiative to mobilise more than $200 billion in financial resources from both public and private sources by the end of 2015. This includes new pledges for the Green Climate Fund; the decarbonization of investment portfolios by moving assets out of fossil fuel-based investments; the continued efforts of national banks to invest in new climate activities; and wide support for putting a price on carbon emissions. Subsequently, the first biennial High-level Ministerial Dialogue on Climate Finance was held at the COP 20 in Lima. During the meeting, attention was directed to the need to complement existing market mechanisms with long-term finance in order to reach the goal of mobilising scaled-up climate finance to the GCF of $100 billion per year by 2020.

Critically, to meet the significant financing requirements for adaptation and mitigation, Asia-Pacific economies will have to adopt strategies to increase the efficiency and effectiveness of energy use, among others. They will also need to encourage the development of new technology and innovations in partnership with the private sector. In view of these climate-change-related consequences, several countries in the region, including China, India, Indonesia, Thailand and Viet Nam, have introduced national climate action and finance policies (see box 6.5).

Box 6.5. National climate action and finance policies in China, Kazakhstan and Viet Nam

China: In recent years, China has achieved some important successes in its climate actions, mainly in the form of improvements in energy efficiency and in slowing the rate of emissions growth. Its climate strategy and action is developed and managed by a wide variety of government bodies, such as: the State Council; the National Leading Working Group on Addressing Climate Change; the National Development and Reform Commission (NDRC); the Department of Climate Change; and the Ministry of Finance.[a]

The China Energy Efficiency Financing Program (CHUEE) has achieved some important objectives: 178 loans were disbursed by three partner financial institutions (FIs); a total loan of $783 million; a total investment of $1.77 billion; an annual greenhouse gas emissions reduction of 19.3 million tons CO2; 37% of the project is located in China's frontier regions. The expected impacts of the programme are to achieve a $2 billion cost saving thanks to energy savings of 12.2 million megawatt hours annually, and 7 million metric tons of carbon dioxide emissions avoided in a year.[b] Climate finance in China comes from both domestic and foreign sources, which can be grouped into five categories: public finance (domestic and international); carbon market finance (essentially through the Clean Development Mechanism; mainstream private sector finance (such as domestic and foreign bank loans); direct investment (domestic and foreign); and charitable and NGO finance.

In 2011, the climate finance loan balance from Chinese State-owned banks totalled approximately $294 billion. Direct government climate spending was about $41 billion for the year by comparison, while private sector investment was at least $10 billion. In contrast, overseas sources of climate finance are smaller: OECD government funding in the period 2006-2009 was about $1.68 billion, while multilateral funds provided just $290 million for the period 2008-2012. The extent of foreign private sector debt financing for climate action is unclear, but is estimated to only account for a fraction of the $70.5 billion of total foreign funding. The Clean Development Mechanism has been a more significant source of low carbon financing, pulling in an estimated $9.3 billion.[c]

Kazakhstan: The city of Almaty endeavours to develop an area-wide emission trading bubble as a cost-effective means of achieving its air emission reduction goals. Almaty has a persistent air quality problem. Under the contemplated “cap-and-trade” programme, 1,200 companies that operate with proper authorizations within the city limits will be allocated a five-year stream of emission allowances. To achieve the air quality goal of 7-10% annual reduction from industrial sources in the city, the allocated emission allowances will be reduced by 7% (of initial baseline) per year.

The companies will be required to operate within their emission allowances or purchase additional permits from other companies to cover any excess emissions. Firms that succeed in reducing their emissions by more than 7% a year would be allowed to bank the surplus allowances for future use (up to three years) or to sell them to other firms. The city expects that aggregate emissions will be reduced by 7% as under compliance of high-cost pollution abaters are offset by over compliance of the low-cost abaters. A significant source of capital to finance emission reduction in those companies, that have low-cost abaters but lack the capital would come from new and expanding companies which could buy into the bubble.

Box 6.5. *(continued)*

Participating companies will be charged fees to hold, bank and trade allowances. The revenues collected from these fees will be used to finance monitoring and enforcement, thereby ensuring the financial self-sufficiency and sustainability of the programme. As the programme is still in the design stage, it is not possible to predict if it will work as envisioned; yet, the interest and commitment of the city and national policymakers to effective financing of environmental improvements directly by the polluters is not in question.

Viet Nam: [d] Viet Nam has been remarkably successful in its attempt to integrate climate finance policies with green growth strategies. It is among the countries most vulnerable globally to climate change: over the past decade, climate change-related disasters, mainly in the form of storms and floods, have caused damage estimated to be 2-6% of GDP per year.

The socioeconomic development plan for the years 2011-2015 acknowledges climate change as a threat to development and is committed to improve natural resource and disaster risk management. The Green Growth Strategy is divided into three tasks: The first task is aimed at reducing greenhouse gas emissions by 8-10% by 2020, compared with 2010 levels. The second task targets the greening of production in order to encourage the development of a green industry. The third task entails the greening of lifestyles and the promotion of sustainable consumption. The Government is committed to invest in climate change projects worth $1 billion per year. The main challenge ahead is the implementation of a Green Growth Strategy for which about $30 billion will be needed by 2020.

[a] The Climate Group (2012).

[b] "China energy efficiency financing program (CHUEE)", presentation presented at the Asia LEDS Partnership Workshop on Climate Financing, Manila, 4 April 2013 (William Beloe), Senior Operations Officer, International Finance Corporation. Available from http://lowemissionsasia.org/events/presentations-climate-finance-workshop#sthash.Cd9Jzuuu.dpuf.

[c] The Climate Group (2013).

[d] Highlights of the Viet Nam Green Growth Strategy and financing implementation, by Dr. Pham Hoang Mai of MPI.

In this context, filling the “climate financing gap” not only requires identifying alternative and innovative sources of funds from both the public and private sectors, but also involves developing the appropriate institutional and policy landscape to redirect existing financial flows towards climate mitigation and adaptation activities that also deliver on sustainable development priorities.[9]

The Fifth Assessment Report of the Intergovernmental Panel on Climate Change emphasized the need for transformations in economic, social, technological, and political decisions and actions to enable climate-resilient pathways for sustainable development. The report makes reference to, among others, a range of policy options for enhancing resource efficiency, with highlight on potential co-benefits and synergies among adaptation, mitigation, and sustainable development.[10] Climate finance is, thus, a challenge, globally and in the region, because the financing gap for mitigation and adaptation projects is extremely wide.

[9] ESCAP defines Green Growth as economic progress that fosters environmentally sustainable, low-carbon and socially inclusive development.

[10] http://ipcc-wg2.gov/AR5/images/uploads/IPCC_WG2AR5_SPM_Approved.pdf.

To follow up on the Copenhagen Accord of 2009, and the Cancun and Durban meetings, developed countries committed to jointly mobilize $100 billion a year from public and private sources in climate finance by 2020. Key players in climate finance include private commercial banks and infrastructure funds, which have distributed about $38 billion, including project-level debt and direct investments (Climate Policy Initiative, 2013).

Under UNFCCC, the Green Climate Fund (GCF) has been created to programme the $100 billion commitment. The proposed mechanism must recognize, promote and strengthen the significance of engagement at the country level, based on the principles integral to the creation of the GCF of a country-driven approach, and direct access to funding and to enable local implementation. Based on lessons learned from the operations of existing climate change related mechanisms, the GCF approach must enable a shift from a project-based approach when dealing with proposals for funding, to a programmatic approach in order to make optimal use of the full range of means of implementation available and to allow for implementation at scale.

The operating rules of GCF are still in progress, but a key constraint that must be addressed at the regional level is the capacity of countries to productively engage and absorb global climate change financing that advances their development ambitions. One potential contribution of Asia-Pacific cooperation is to facilitate countries in the region to obtain access to all global climate change oriented financing.

As a mechanism under the Climate Change Convention, GCF financing is available for financing the "full incremental costs for the implementation of developing countries. Commitments" under Article 4.1 of the UNFCCC (United Nations, 1992), including: (a) mitigation: (b) deployment and diffusion of low-carbon technologies: (c) research and development for technologies; (d) capacity-building; (e) preparations of national action plans and implementation; (f) Patents; and (g) adaptation in accordance with Articles 4.4 and 4.9 of the Convention. Articles 4.4 and 4.9 are of particular interest to many economies in the region. Article 4.4 provides that developed country Parties "assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects" and Article 4.9 provides that parties to the Convention "take full account of the specific needs and special situations of the least developed countries in their actions with regard to funding and transfer of technology."

In accordance with Article 4.3 of the Climate Change Convention, GCF should equally be a vehicle to provide developing country Parties with new and additional financial resources, including for the transfer of technology to comply with their obligations under the Convention. The funds can be used for: (a) adaptation and its means of implementation; and (b) mitigation and its means of implementation

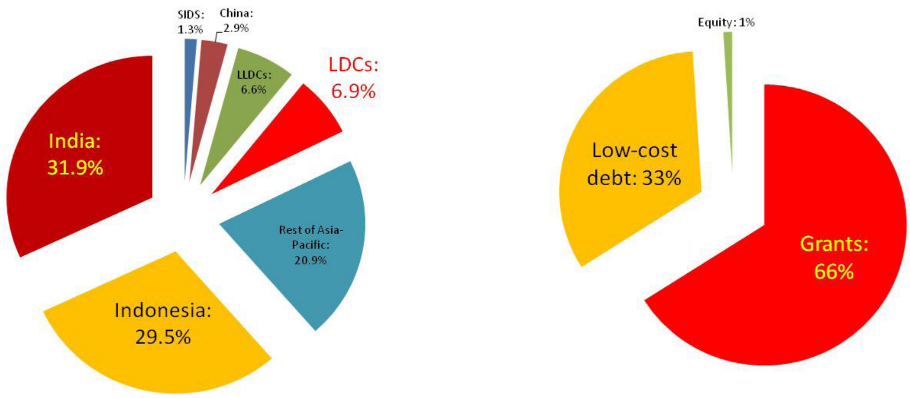
In engaging with global financing mechanisms for climate change, policymakers can advocate for greater coherence among those mechanisms. In particular, this machanism do not have sufficient scale corresponding to the requirement of ensuring that climate change actions promote, and not serve as an obstacle to, sustainable development GCF in particular being the premier mechanism under the Convention must facilitate linkages between the various funding sources and separate funds in order to promote access to the variety of available funding sources and reduce fragmentation.

It is particularly important to underline the point that under the Convention, financing is an obligation of developed countries, not a voluntary public action which is the nature of ODA. Financial and technology transfers to developing countries, where the mitigation potential is greatest and development prospects are significantly harmed by adverse climate events and by compliance with emission ceilings, are logical because climate change is a shared responsibility and there are differential capabilities in responding to the shared responsibility.

For the purposes of sustainable development financing, climate change related financing must be of a long-term tenor. Predictability, stability and the timeliness of financing are also important. A useful precedent is the successful experience of the Montreal Protocol on Substances that Deplete the Ozone Layer which provided financing and mobilized timely actions reasonably independently of other economic and political considerations to countries to substitute for harmful chemicals in industry and consumer goods.

An overview of the Asia-Pacific climate finance landscape highlights the importance of financing requirements to advance the sustainable development agenda. The Asia-Pacific region received about 54% of the total approved spending of global climate funds, which has amounted to nearly $11.5 billion since 2002.[11] Among these climate funds, 66% were from grants, with the European Global Energy Efficiency and renewable Energy Facility (Climate Policy Initiative, 2013). However, the distribution of climate funds in the region has been uneven, and often the most vulnerable countries have failed to receive the necessary financing to address the climate change related impacts (see figure 6.3).

Figure 6.3. Global climate fund in Asia-Pacific economies



Source: ESCAP, based on data from www.climatefundsupdate.org/data.

Note: landlocked developing countries (LLDCs), small island developing States (SIDS).

In 2012, multilateral development banks disbursed $27 billion in climate finance, of which 78%, or $21 billion of it was dedicated to mitigation and 22% or $6 billion to adaptation. Furthermore, $2 billion came from external resources, such as bilateral or multilateral donors, including the Global Environment Facility and the Climate Investment Funds. ADB contributed 12% of the total disbursement, or $3.28 billion. The World Bank disbursed 41% of the total investment, or $11.07 billion. Of the total investment, $3.73 billion, or 14%, was used for projects in South Asia, and $4.32 billion, or 16%, in East Asia and the Pacific. World Bank lending with adaptation co-benefits in South East Asia reached $600 million in fiscal year 2013. Lending with mitigation co-benefits in East Asia and the Pacific reached $1.3 billion.

A total of 21 climate funds and dedicated initiatives are operating in the Asia-Pacific region, including 15 multilateral funds, five bilateral initiatives and one national fund. The largest contributions come from the Clean Technology Fund (CTF) of the World Bank, which has approved $763.25 million to fund 19 projects, mostly in the form of concessional loans. The Governments of Germany, Japan, Australia, Norway and the United Kingdom have altogether provided more than $500 million for

11 www.climatefundsupdate.org/listing.

projects in the Asia-Pacific region through their respective bilateral climate funds and initiatives.[12] More than two thirds of the climate finance directed to Asia and the Pacific since 2003 has been to support mitigation activities. India, China and Indonesia have received 49% of the funding approved for Asia since 2003.

According to one regional report, the amount of climate finance required in the period 2010-2020 amounts to $10 trillion globally or about $1 trillion per year (USAID, 2013). The Green Climate Fund is expected to contribute only $100 billion per year by 2020. With the current level of climate finance ranging between $200 billion and $360 billion, the gap to be filled is $640-800 billion. The geographic allocation of investment is distorted, with India and Thailand receiving more than 80% of the funding alone. The issue of climate financing is of particular interest in the Pacific (see box 6.6).

Box 6.6. Financing climate change adaptation and mitigation in the Pacific[a]

Improving access to and management of climate change resources for addressing national priorities and working to improve national capacity has been the focus of policymakers in the Pacific over the past few years. Pacific island countries have considered a number of different modalities at the national, regional and international levels that may help countries increase their access to climate change resources, as well as provide a framework for flexible management of these resources for more efficient implementation.

It is clear that there is no "one size fits all" approach. With the varying sources of funds available and different capacities of countries, a mix of modalities need to be considered for implementation simultaneously. There are some modalities that have been tested and proven to provide means for more effective access and management while maintaining consistency with best practice principles of aid effectiveness and donor harmonization. For example, the use of country systems and strengthening existing mechanisms to provide better services to Pacific countries and their particular circumstances is critical. Other modalities that may be more effective are also being explored. Some of these modalities include:

- Direct budgetary support (and sectoral support) presents one of the most effective modalities to address climate change challenges in a sustainable way. Use of national systems is the preferred modalityb and policymakers have noted that where national systems have existing or emerging capability gaps, existing technical assistance facilities need to be utilized to assist countries to improve their systems to meet those requirements. This can be achieved either through capacity-building and/or supplementation.

- The degree to which this modality is successful depends heavily on the reflection of climate change priorities and challenges within national and sector plans and budgets. It requires robust, transparent and accountable public financial management systems and a monitoring and evaluation framework that provides accountability at the national level and for development partners.

- National trust fund arrangements have been tried and tested in the Pacific region for some time and offer a very good modality for climate change resources to accrue over time and facilitate disbursement rates that are commensurate with the capacity (human, institutional, and absorptive). In this context, building on existing trust fund arrangements offers a good option, such as augmenting the Tuvalu Trust fund to accommodate climate change funds. In particular, a regional or subregional trust fund can present significant benefits in well-defined sectors/areas, such as infrastructure, specific health challenges and energy.

[12] The Asia-Pacific region received about 40% of OECD-DAC aid to climate change mitigation, based on OECD Data Lab. Available from www.oecd.org/statistics.

Box 6.6. *(continued)*

The application of such models to broad areas, such as climate change, may present more difficulties in designing the appropriate governance, equity, financial management and instruments. It is clear that the design of any fund must be based on clearly articulated needs and requirements by participating recipient and donor partners.

Given the limited institutional capacity of some smallPacific nations, a subregional fund also has the potential to provide economies of scale and reduced overall administrative costs of several individual funds, and a regional technical support mechanism (that would identify funding opportunities and provide technical assistance in applications and implementation) is being explored through the Council of Regional Organisations in the Pacific.

[a] See EPO (2012). See also SPREP (2010) for further information.

[b] Joint Communiqué by Ministers on Facilitating Climate Change Financing, Joint Communiqué, Facilitating Climate Change Financing for the Pacific Region Round Table Meeting, Edgewater Resort & Spa, 11-12 April 2013; 2011 and 2012 Forum Economic Ministers' Meeting Action Plans.

The private sector's size of climate finance in 2012 was estimated at $230 billion; therefore, in order to fill the gap, it has to roughly triple in size (Buchner and others, 2011). The public sector's share of climate finance is structured as follows: $35 billion were pledges by donor countries; $26 billion were deposited into climate funds globally; and $9 billion were approved to finance projects globally. Of this, $1.6 billion were approved in the 11 Low Emissions Asian Development (LEAD) focus countries in South and South-East Asia. Public and private sector climate finance in those countries is currently less than $10 billion per year, of which 17.8% comes from the public sector and 3.5% from the private sector. The investment volume needs to increase by 14 times the current level of $144 billion.

Financing action to reduce emissions from deforestation and forest degradation (REDD) synergizes climate action with other sustainable development objectives, including biodiversity and forest protection and sustainable livelihoods. The Asia-Pacific region, despite its significant contribution to greenhouse emissions related to forest loss, receives only a small proportion of global REDD investments. These investments are concentrated in a few countries in the region. Box 6.7 describes some of the governance and capacity challenges that need to be addressed even when finances for climate action are available.

Box 6.7. Reduce emissions from deforestation and forest degradation in Asia and the Pacific

Deforestation and forest degradation contribute more than 10% of global greenhouse gas emissions, of which the Asia-Pacific region is a major contributor. Not only do deforestation and degradation contribute to climate change, they also affect the livelihoods of forest-dependent people and lead to a reduction in global food security. In addition, deforestation threatens the availability of a wide range of ecosystem services and decreases biodiversity. The direct drivers of deforestation and degradation include logging, mining, infrastructure development and agricultural expansion, especially for industrial plantation crops. A key indirect driver of forest destruction is that many services that forests provide do not have a market value. Reduced emissions from deforestation and forest degradation (REDD+), a concept introduced during the discussions of the United Nations Framework Convention on Climate Change Conference of Parties in 2005 (COP 11), is trying to change this by creating a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forest lands and invest in low-carbon paths through sustainable development. “REDD+” goes beyond deforestation and forest degradation to include the role of conservation, sustainable management of forests and enhancement of forest carbon stocks (see paragraph 70 of the 2010 Cancun Agreements).

Since 2007, $2.72 billion has been pledged to five multilateral climate funds (including the UN-REDD Programme, a collaborative initiative involving the Food and Agriculture Organization of the United Nations, the United Nations Development Bank and the United Nations Environment Programme,) and two bilateral initiatives that support efforts to reduce emissions from deforestation and forest degradation. Some 52% of the funding pledged had been deposited in 2013. Through these funds and initiatives, $906.5 million has been approved for REDD activities since 2008. Finance is not only channelled through multilateral organizations. According to the REDD+ Partnership Voluntary Database, the total is in the order of $6.8 billion, but this is for the 2006 to 2018 period and also includes direct bilateral support. Figures on the regional distribution of REDD+ finance are somewhat nebulous, as some sources report disbursed funds while others report committed funds. According to the Climate Funds Update, the Asia-Pacific region received about 6% of the total funding. With the exception of Indonesia and Viet Nam, countries in Asia and the Pacific are still getting ready for REDD+. The UN-REDD Programme is supporting national REDD+ readiness efforts in 51 partner countries, of which 15 are located in Asia and the Pacific. In Viet Nam, the Ministry of Agricultural and Rural Development and FAO, UNDP and UNEP, signed the UN-REDD Viet Nam Phase II Programme document in July 2013, after a thorough and consultative development process. The Programme was officially launched in October 2013 and is assisted by a $30 million grant by the Government of Norway. Other countries in the Asia-Pacific region with full national UN-REDD programmes or receiving targeted support include Bangladesh, Bhutan, Cambodia, Indonesia, the Lao People’s Democratic Republic, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Papua New Guinea, the Philippines, Solomon Islands and Sri Lanka.

Box 6.7. *(continued)*

With support from the UN-REDD Programme, numerous countries have developed REDD+ road maps to guide their efforts in Phase I of REDD+ and to obtain further funding (beyond what the UN-REDD Programme is able to provide). Until the end of 2013, only Indonesia, the Philippines and Viet Nam had developed a National REDD+ Strategy (or Action Programme in Viet Nam). Although a multitude of development partners are involved in capacity-building efforts, capacity remains weak in most countries. Other key challenges include weak cross-ministerial coordination and only embryonic private sector involvement. In addition, in many countries REDD+ is viewed as a forestry project, while key drivers are often in the agricultural sector. Also, the unfulfilled high expectations of "billions of dollars" have led to some fatigue in getting ready. On the other hand, an increasing number of countries have made progress in developing national forest monitoring systems, government agencies are actively engaging civil society and indigenous peoples' representatives in planning processes, and safeguards (see annex 1 of Cancun Agreements) are receiving serious attention. Interest in broader approaches to building natural capital and transforming towards a Green Economy has also increased steadily.

Source: UN-REDD UNEP. Available from www.un-redd.org.

An innovative area in leveraging funds to tackle climate change is the financing raised from green bonds (see box 6.8). In 2013, $11 billion was raised globally through green bonds; this amount is expected to reach about $50 billion by 2015.[13] However, institutional investors contributed globally only about 0.2% of total financing raised for climate change mitigation and adaptation (UNDESA, 2012). At the regional level, Asia and the Pacific received one fourth of all global climate finance investments. Private investment into renewable energy projects in China was $68 billion and India received $5 billion (Barnard and others, 2013).

Box 6.8. Green banking in Bangladesh

Recognizing the important role of the financial sector in creating opportunities for green business and development, the Government of Bangladesh has introduced development strategies that includes directions to the banking sector in this regard, which the Central Bank took a step further by issuing green banking guidelines in 2011. Those introduced disclosure and reporting requirements for environmentally friendly and green financing on quarterly basis and created favourable conditions for investment in environmentally sustainable sectors and stimulated the emergence of green investments.

In the span of two years, these investments have reached various sectors of the economy, from renewable energy projects to green buildings, as well as important funds, such as the Bangladesh Climate Change Trust Fund, the Bangladesh Climate Change Resilience Fund (and green financing to promote solar energy, biogas plants, effluent treatment plants and energy efficient installations. The boom of these investments is in biogas energy plants, which by November 2012 amounted to 850 in more than 5 districts, and are projected to grow to 5,000 plants by 2015, while long-term projections are expected to reach 20,000 biogas plants by 2020.

[13] Seewww.economist.com/news/finance-and-economics/21599400-bonds-tied-green-investments-are-booming-spring-air.

In this context, regional cooperation in building country capacity to identify and design programmes to take advantage of international climate financing facilities can have an enormous positive country and regional impact. In mitigation, technology sharing and adaptation in renewable primary energy supply and in corresponding infrastructure must count as a key sustainable development intervention. In adaption, infrastructure, resilient utilities, and efficient buildings have a strong potential in mobilizing international finance.

The disbursement of global financing can be greatly facilitated by regional cooperative efforts. Regional green bonds can be considered, possibly to be issued by a cooperative of national development banks. The United Nations Report of the Secretary-General's High-Level Advisory Group on Climate Change Financing recognized the significant multiplier role in the cooperation between multilateral development banks and the United Nations system to leverage additional green investments (United Nations, 2010). Giving confidence to countries that such resources will be spent wisely and accessed quickly is raised as an important point in gaining credibility.

In this regard, United Nations agencies[14] are providing technical support to several Asia and the Pacific countries to get a better understanding of public financial management processes and how they relate to climate change, including the resource allocation process for climate actions through the national budget within the context of the Climate Public Expenditure and Institutional Review (CPEIR) methodology.[15]

It should be kept in mind that the progress in increasing funds for climate change will require steady transformation of the global aid architecture; innovation of development assistance modalities and efficient regional partnerships mechanisms. Any first step in mobilizing climate finance that does not address the systemic weaknesses in the international system could prove to be unproductive, overly circuitous financing channels, and likely at greater cost. It should be kept in mind that the progress of increasing funds for climate change will require steady transformation of the global aid architecture; innovation of development assistance modalities and efficient regional partnerships mechanisms. Any first step in mobilizing climate finance that does not address the systemic weaknesses in the international system could prove to be unproductive, overly circuitous financing channels, and likely at greater cost.

Policy options

To meet the growing need of financing, Asia-Pacific countries must strategically identify new and innovative climate financing mechanisms. More importantly, aligning climate and sustainable development national strategies, including through national low-carbon green growth strategies, can transform the deficit of climate finance from a burden to a potential opportunity to facilitate a transformation in the region to ensure poverty reduction and inclusive growth. Aligned national financing strategies and supporting policy frameworks and interventions can help to overcome investment gaps that have thus far hampered efforts to attain adequate resources for climate-resilient development in the region.

Furthermore, there is a critical role of the development banks, including in relation to accountability of development finance and investment, especially in the case of environmental sustainability. Finance for development must increasingly reflect the need for sustainable investment, with development banks, for example, supporting this work through both technical expertise and

[14] UNEP helps countries and their national implementing entities in the Asia-Pacific region to get accredited to and develop projects for the Adaptation Fund. It builds readiness to access financial resources through the Adaptation Fund accreditation process of national implementing entities and formulation of projects. Available from www.unep.org/roap/Activities/ClimateChange/NIESupportProgramme.

[15] See the UNDPs programme on the Governance of Climate Change Finance for Asia-Pacific. Available from http://climatefinance-developmenteffectiveness.org/.

A special focus: Financing development gaps in least developed countries

7

The Asia-Pacific region has witnessed impressive growth as the the real income per capita in the region which has almost doubled since the early 1990s. However, overall progress in the region masks significant variations between country groupings and subregions. In particular, several of the region's countries with special needs have made slow progress in terms of economic growth and development outcomes. The countries with special needs includes the following groups of countries: least developed countries, landlocked developing countries and small island developing States.

In most least developed countries, the low quality of social and physical infrastructure disproportionately affects poor and vulnerable communities and widens the growing rural-urban divide. Since most basic infrastructure services are driven by public sector investment, there is a growing gap between the availability and the demand for services, resulting from population growth, urbanization and climate change consequences. There is now recognition across those countries that the existing approaches, sources and governance modalities are limited in their scope to close the widening gaps for least developed countries. This is reflected in the ongoing discussion of the international community on the contours of the development agenda beyond 2015 for sustainable development, especially in the context of financing for sustainable development.

For example, the 2012 triennial review of the Committee for Development Policy (CDP) noted that that "financing needs also differ across countries and regions. While financing needs are disproportionately large relative to the size of their economies in many developing countries, there are specific needs in least developed countries".[1] In particular, the countries with special needs in Asia and the Pacific would require substantial financing through public investment to fill their development gaps faced, as underscored earlier in the case of several aspects of sustainable development. Therefore, strategies for mobilizing resources for financing the development gaps remain one of the critical areas for the countries with special needs in the Asia-Pacific region.

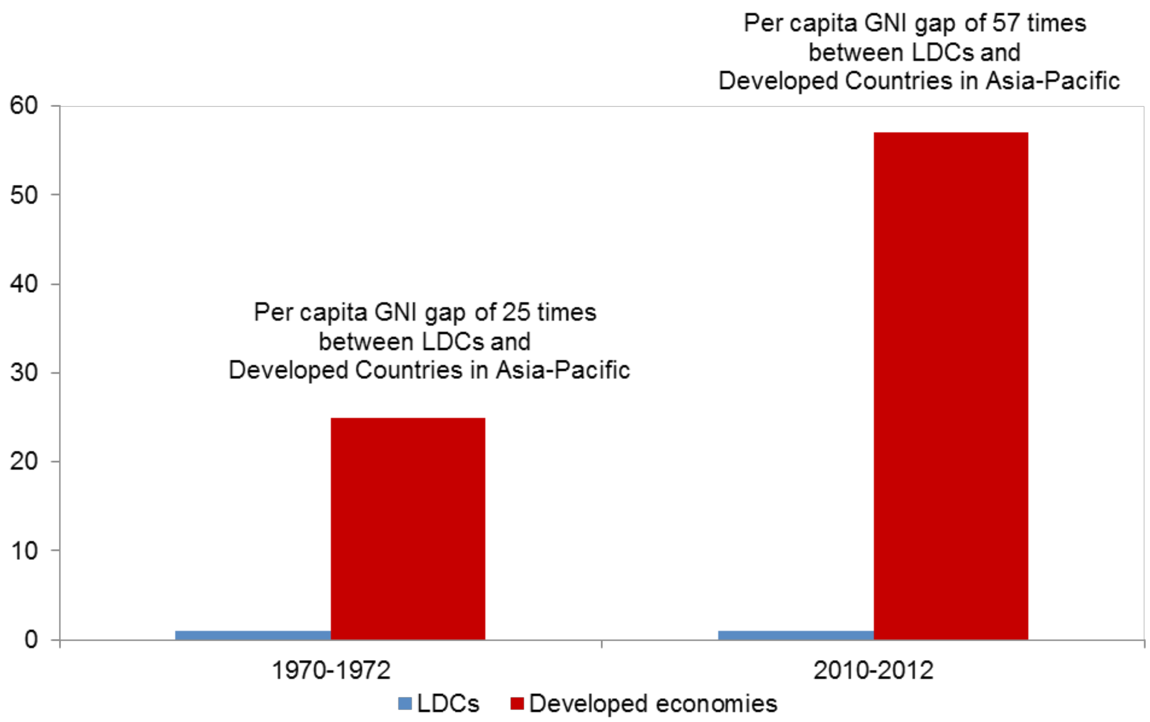
This current report, however, provides some discussion with regards to least developed countries in the Asia-Pacific region.[2] ESCAP (2014c) recognizes that "there is a need to implement specific policies that focus on productive capacity-building related to infrastructure development, broadening the economic base, access to finance and providing assistance in overcoming the risks and shocks of entering into a regional trade block".

The least developed countries continue to have one of the lowest per capita incomes in the Asia-Pacific region. Moreover, the income gap with developed economies has increased significantly in recent decades (see figure 7.1), as the region has also been accompanied by one of the highest population growth rates.

[1] The Committee for Development Policy (CDP), a subsidiary body of the United Nations Economic and Social Council, is – inter alia – mandated to review the category of least developed countries every three years and monitor their progress after graduation from the category. Available from http://unohrlls.org/about-ldcs/criteria-for-ldcs/. For more information, see UNDESA (2014b).

[2] The current list of LDCs includes 48 countries (the newest member being South Sudan); 12 in Asia and the Pacific region. These countries are the following: Afghanistan, Bangladesh, Bhutan, Cambodia, Kiribati, Lao People's Democratic Republic, Myanmar, Nepal, Solomon Islands, Timor-Leste, Tuvalu and Vanuatu.

Figure 7.1. Income divergence between least developed countries and developed economies of Asia-Pacific



Source: ESCAP calculations based on ESCAP Statistics online. Available from www.unescap.org/stat/data/statdb/DataExplorer.aspx (accessed 20 October 2014).

Note: Least developed countries s-Asia and the Pacific consists of 12 countries, developed economies consists of Japan, Australia and New Zealand (US Dollars at current prices)

Therefore, strategies for mobilizing resources for financing the graduation gaps remain one of the critical areas for least developed countries in the Asia-Pacific region (Basu, Gui-Diby and Jian, 2014). In particular, these countries experience lack of availability and access to financial resources, both from domestic and external sources, especially in international capital markets, to finance their overall development gaps. The paucity of financial resources often acts as an obstacle for them to increase their economic activity. It further reduces their potential for investing in human capital and reducing vulnerability from multiple shocks, such as higher energy prices or climate change.

The United Nations LDC IV Conference in May 2011 adopted the Istanbul Programme of Action) for the decade 2011-2020 to address specific needs of the least developed countries and help them improve the living conditions of the people through providing necessary support and a framework for a strong global partnership. The Istanbul Programme of Action contains eight priority areas of action, each supported by concrete deliverables and commitments. These eight development priorities include: (a) productive capacity; (b) agriculture, food security and rural development; (c) trade; (d) commodities; (e) human and social development; (f) multiple crises and other emerging challenges; (g) mobilizing financial resources for development and capacity-building; and (h) governance at all levels.

As underscored in the Istanbul Programme of Action, least developed countries require an urgent action plan to improve their access to finance, which can support their special needs and priorities, together with enhanced policy coordination and development partnership, including in areas such ODA, international trade, FDI and debt relief.

Apart from low levels of per capita income, the key challenges that least developed countries face in terms of mobilization of financing resources are related to low domestic savings and investment, especially in social sectors and physical infrastructures, that are related to transport and trade–related infrastructure, and a small tax base.

Moreover, the commitments of creating a framework for a strong global partnership were only partially realized. The progress in addressing the needs of the Asia-Pacific least developed countries regarding financial and technical assistance, ODA, trade capacity, market access, and debt relief was less than expected. Although the aggregate ratio of ODA to gross national income of Development Assistance Committee (DAC) members slightly increased, it still remains well below the 0.15-0.20% target. As a result, the region's least developed countries face a large financing gap despite some success in increasing domestic resource mobilization. Similarly, full realization of the commitments on duty-free quota-free market access for products originating in the least developing countries in conformity with the Hong Kong Ministerial Declaration adopted by WTO in 2005 is yet to be fully achieved.

Over the years, due to least developed countries' exposure to the global economy through trade, investment and financial markets, the global economic and financial crisis of 2008-2009 combined with food and fuel crises, have adversely affected hard-won development outcome of least developed countries (ESCAP, 2012).

Under these circumstances, many least developed countries in the Asia-Pacific region, from Myanmar to Bangladesh, have undertaken several policy reforms to mobilize domestic resources, both public and private. These reforms are expected to further crowd-in international support measures, including renewed participation of the private sources. If successful, they could significantly increase resources for financing progress towards closing the development gaps.

The financing strategy will also require significant investment in public goods, such as clean air, water and the continued flow of ecosystem services and other forms of environmental sustainability, upon which economies and people depend. The funding of such investments, which are characterized by high social rates of return but low private rates, is more likely to originate and be leveraged from public domestic resources. ODA should remain crucial as it acts as a complementary and mutually reinforcing element. Although least developed countries in the region have been able to attract foreign private financial resources, the availability of existing resources is far from satisfactory.

In this context, least developed countries need to mobilize necessary financing to close their graduation gaps and to simultaneously invest resources to promote the objectives of the development agenda beyond 2015, as highlighted by the Open Working Group. According to the OWG report, Goal 17.2 recognizes that "developed countries to implement fully their ODA commitments, including providing 0.7% of GNI in ODA to developing countries, of which 0.15-0.20% to least-developed countries".[3]

Therefore, harnessing the complementarities between investments in social, economic and climate change areas is critical for obtaining sustainable and efficient outcomes and narrowing the development gaps that prevail in least developed countries. The economic goals are relatively straightforward, but the complementarities between the three broad groups of investments are difficult to implement. However, a good balance among the complementarities is essential for exploiting market forces for positive social change and adapting to climate change impacts, two elements required to effectively open up new frontiers of investments in least developed countries.

In particular, the growing diversity of the developing countries in the region has created new opportunities for South-South cooperation and triangular development cooperation, which can

[3] The report is available from http://sustainabledevelopment.un.org/focussdgs.html.

contribute significantly to enhancing financing the development gaps of least development countries. Other important contributors to South-South cooperation activities in the region are the Republic of Korea, India, the Russian Federation, Thailand and Indonesia. For example, Thailand provides support through several technical assistance programmes in such areas such as sustainable agriculture and food security, climate change adaptation, community health management and community empowerment towards healthy community, among others, in cooperation with national partners for several least developed countries in the region.

Furthermore, many of these cooperation and partnership activities have focused on knowledge building, capacity-assistance and sharing development experiences, which are of direct benefit to least developed countries. In particular, many South-South cooperation activities provide support and enhance cooperation in areas such as trade, investment and technology transfer, especially for least developed countries. Other key areas are poverty alleviation, gender, agriculture and rural development, food security, infrastructure projects, ICT, environment, disaster relief and reconstruction, debt relief, banking, training of civil servants, governance, capacity-building and advisory services, and humanitarian aid. South-South cooperation and triangular development cooperation can provide additional instruments for funding development programmes including those relating to financing for closing development gaps, including graduation-related support to least developed countries.

Importantly, even if ODA commitments to least developed countries rise, most of the growth impetus in those countries will need to come from the private sector. This calls for them to create an enabling policy environment for private sector investment, and to implement broad-based structural reforms to address their wide-ranging structural impediments. Use of alternate sources of finances is, however, critical to leverage private investment, given risk perceptions. In least developed countries, including fragile and post-conflict countries, private sector development is unlikely to take place without the support of an enabling environment. It is particularly relevant in countries in which ODA has an ongoing role. Developed countries cannot walk away from investing in more inclusive growth among the least developed countries.

It is clear that least developed countries in Asia and the Pacific have large financing requirements. There is, however, scope for identifying and tapping resources from a variety of traditional and innovative instruments with appropriate policy reforms and subregional and regional cooperation mechanisms. ESCAP estimates show that least developed countries in the region could raise additional financing of about $34 billion per year.[4]

Through various knowledge and technical capacity development activities, ESCAP is forging the spirit of innovative regional partnerships, especially for least developed countries and other vulnerable countries, with the aim to spread prosperity and development to all. These new forms of development partnerships can support scaling up their size and depth of markets, as well as can help least developed countries receive support in enhancing skills, knowledge and technology, which will be essential ingredients for raising additional financial resources for achieving the sustainable development goals.

[4] For further details, see Basu, Gui-Diby and Jian (2014).

Conclusions

8

This report aims to provide an overview of the landscape and state of play of Asia-Pacific development finance. The region has large financing requirements, but there is also scope for identifying and tapping the regional resource potential. The estimates of regional financing requirements vary depending on the source used. At best, most estimates remain tentative. Financing requirements to strengthen social development are as high as $800 billion per year, infrastructure $900 billion per year, and investments to modernize the region's energy sector, including adaptation of new technologies and renewable forms of energy, $800 billion per year.

These annual estimates represent, however, less than 8% of the assets of the region's mass affluent and high-net-worth individuals in 2012. In addition, the region's foreign exchange reserves amounted to $7.3 trillion in 2012, and its gross national savings were $8.4 trillion, equivalent to 51% of the world gross national savings in 2012. Therefore, the Asia-Pacific region has enough savings to finance its sustainable development. The real challenge, however, is how to mobilize these savings.

Going forward, the region should work collectively to ensure that it nurtures strong and stable financial systems. To achieve this, policymakers and regulators need to work with the private sector to develop more diversified and balanced financial sectors — which are key to reinforcing financial stability and sustainability, as well as to extending finance to meet the people's a and the region's development needs. This calls for:

- Raising tax-to-GDP ratios by broadening tax bases, removing exemptions — be they for individuals, corporations or indirect taxes — and improving collection and administrative efficiency; reorienting public spending by, for example, a, curbing regressive subsidies, in particular those that are related to energy, and using the saved funds to create socially and financially sustainable social protection systems. More importantly, multilateralization of global cooperation in tax affairs to regulate illicit flows and tax avoidance and evasion, and weave tax base erosion and the issue of tax havens in investment agreements. In this context, the proposal of establishing the Asia-Pacific tax forum will be an important step forward.
- Moving from bank-dominated to well-diversified and competitive financial systems, which can be achieved by broadening and deepening equity and debt markets, fostering the development of the institutional investment sector to impart the required liquidity, and strengthening regulatory frameworks to restore investor confidence.
- Strengthening policy frameworks for inclusive, higher and sustainable economic growth and financial market stability. In particular, enhancing the efficiency of legal, regulatory and supervisory systems are of utmost urgency to promote financial inclusion to intermediate finance to low-income groups, women and micro-entrepreneurs. Furthermore, regulators (both central bankers or securities regulators) need to gear financial institutions and intermediation processes to be more supportive of development finance.
- Advocating and positioning PPPs leveraged through well-designed incentive frameworks to encourage financial systems and institutions to finance sustainable development projects; and further the development of regional capital markets, which have the greatest potential for raising the required resources for financing sustainable development.

- Enhancing countries' capacities to set up and improve the functioning of capital markets institutions and regulatory frameworks, particularly in least developed countries and in small island developing States. .
- Fostering the development of domestic institutional investors, particularly in the asset management and pension fund industries. In principle, financial regulatory frameworks need to be more supportive of the following: inclusive finance; infrastructure finance for long-term risk capital; and the other diverse financing strategies.

In parallel, renewed efforts need to be employed to exploit domestic sources of financing and to ensure that ODA commitments and distributions are met. The private sector must also be catalysed and incentivized to support sustainable development. To effectively deploy available financing for sustainable development, measures need to be taken to (a) improve public sector policy support for risk- or cost-sharing mechanisms to facilitate access to finance for PPP projects; (b) identify and leverage new and innovative climate financing mechanisms; (c) tailor financial services more closely to the requirements of the poor and SMEs; and (d) promote South-South cooperation and triangular development cooperation to share knowledge more widely and increase the availability of funding for capacity-building.

The emerging multilateral financial institutions and enhanced buy-in of multilateral development institutions and coordination among development partners are positioned to pay key role in financing for development. Among others, the initiatives to establish AIIB and NDB could augment and reinforce global economic governance and development through competitive forces and bolster national development banks in this endeavour. Therefore, international financial institutions need to be more supportive of domestic resource mobilization, as well as to align its lending policies to support inclusive growth and sustainable development outcomes at the national and regional levels.

Finally, to achieve long-term sustainability of growth, the region needs to have in place a credible and well-developed financial market to ensure access to the full array of sustainable finance instruments. Other critical conditions required for financing sustainable development depending on national characteristics, such as market size, are efficient and macro-prudential regulations and good governance.

ESCAP is well positioned to continue to facilitate intergovernmental dialogues on financing for inclusive growth and sustainable development that also include members of the private sector, civil society organizations and other stakeholders.in the Asia-Pacific region.

References

Abe, Masato, and others (2012). Policy Guidebook for SME Development in Asia and the Pacific. United Nations publication, Sales No. E.12.II.F.2. Available from www.unescap.org/sites/default/files/0%20-%20Full%20Report_7.pdf.

Ahmad, Etisham (2014). Public finance underpinnings for infrastructure financing in developing countries. Paper prepared for the G24. February. Available from http://g24.org/wp-content/uploads/2014/03/Public-Finance-and-Infrastructure_23Feb_2014.pdf.

Ahmad, Etisham, and others (2014). Involving the private sector and PPPs in financing public investments: some opportunities and challenges. Asia Research Centre Working Paper, No. 67 (October). London: London School of Economics and Political Science. Available from www.lse.ac.uk/asiaResearchCentre/_files/ARCWP67-AhmadBhattacharyaVinellaXiao.pdf. Accessed 20 September 2014.

Alliance Development Works (2013). World Risk Report 2013. Berlin. Available from www.worldriskreport.com/uploads/media/WorldRiskReport_2013_online_01.pdf.

Andrés, Luis, Dan Biller, and Matías Herrera Dappe (2013). Reducing Poverty by Closing South Asia's Infrastructure Gap. Washington, D.C.: World Bank. Available from www.worldbank.org/content/dam/Worldbank/document/SAR/Reducing%20Poverty%20by%20Closing%20South%20Asia's%20Infrastructure%20Gap_Web.pdf.

Arcand, Jean-Louis, Enrico Berkes, and Ugo Panizza (2012). Too much finance? Working Paper, No. WP/12/161. Washington, D.C.: IMF. Available from www.imf.org/external/pubs/ft/wp/2012/wp12161.pdf.

Asian Development Bank (ADB) (2008). Managing Asian Cities: Sustainable and Inclusive Urban Solutions. Manila. Available from www.adb.org/sites/default/files/publication/27976/mac-report.pdf.

____ (2013a). Energy Outlook for Asia and the Pacific. Manila. Available from www.adb.org/sites/default/files/pub/2013/energy-outlook.pdf.

____ (2013b). Public-private Partnerships in Urbanization in the People's Republic of China Proceedings of the Public–Private Partnerships (PPP) in Urbanization workshop, Beijing, 22–23 August.

____ (2013c). The Road to ASEAN Financial Integration: A Combined Study on Assessing the Financial Landscape and Formulating Milestones for Monetary and Financial Integration in ASEAN. Manila. Available from www.adb.org/sites/default/files/pub/2013/road-to-asean financialintegration. Pdf.

____ (2013d). The Social Protection Index: Assessing Results for Asia and the Pacific. Manila.

____ (2014a). Proposal on ASEAN+3 Multi-Currency Bond Issuance Framework (AMBIF). Manila. Available from www.adb.org/sites/default/files/publication/31222/proposal-asean3-multicurrency bond-issuance-framework.pdf.

Asian Development Bank (ADB), and Asian Developement Bank Institute (ADBI) (2009). Infrastructure for a Seamless Asia. Tokyo: ADBI. Available from www.adbi.org/files/2009.08.31.book.infrastructure.seamless.asia.pdf.

Akyuz, Yilmaz (2015). Internationalization of finance and changing vulnerabilities in emerging and developing economies. Research Paper, No. 60. Geneva: South Centre. Available from www.southcentre.int/wp-content/uploads/2015/01/RP60_Internationalization-of-Finance-and-Changing-Vulnerabilities-in-EDEs-rev_EN.pdf.

Almekinders, Geert, and others (2015). ASEAN financial integration. Working Paper, No. WP/15/34 (February). Washington, D.C.: IMF. Available from www.imf.org/external/pubs/ft/wp/2015/wp1534.pdf.

Bank for International Settlements (BIS) (2014). Trade finance: developments and issues. Paper, No. 50. Basel, Switzerland: Committee on the Global Financial System Available from www.bis.org/publ/cgfs50.pdf.

Barnard, Sam, and others (2013). Climate finance regional briefing: Asia and Pacific. Climate Finance Fundamentals, No. 8 (November). London: Overseas Development Institute. Available from www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8679.pdf.

Basu, Sudip Ranjan, Steve Gui-Diby, and Zheng Jian (2014). Financing strategies for LDCs graduation in Asia and the Pacific: key sources, trends and prospects. MPDD Working Paper, No. WP/14/02. Bangkok: ESCAP. Available from www.unescap.org/publications.

Baunsgaard, Thomas, and Michael Keen (2004). Tax revenue and (or?) trade liberalization? Working Paper, No. WP/05/112. Washington, D.C.: IMF. Available from www.imf.org/external/pubs/ft/wp/2005/wp05112.pdf.

Beck, Steven, and others (2013). Trade finance survey: major findings. Briefs, No. 11 (March). Manila: ADB. Available from www.adb.org/sites/default/files/pub/2013/trade-finance-survey-major-findings.pdf.

Beloe, William (2013). China energy efficiency financing program (CHUEE). Presentation presented at the Asia LEDS Partnership Workshop on Climate Finance . Manila, 2-3 April. Available from http://lowemissionsasia.org/events/presentations-climate-finance-workshop#sthash.Cd9Jzuuu.dpuf.

Buchner, B, and others (2011). Landscape of Climate Finance. San Francisco: Climate Policy Initiative (CPI). Available from http://climatepolicyinitiative.org/wp-content/uploads/2011/10/The-Landscape-of-Climate-Finance-120120.pdf.

Campi, Alicia (2012). Mongolia's quest to balance human development in its booming mineral-based economy. Brookings East Asia Commentary, No. 56 (January). Washington, D.C.: Brookings Institution.

Cecchetti, Stephen G., and Enisse Kharroubi (2012). Reassessing the impact of finance on growth. Working Papers, No. 381. Basel, Switzerland: Bank for International Settlements. Available from www.bis.org/publ/work381.pdf. Accessed 28 November 2014.

China Merchants Securities (2015). Where will the funds come from for the belt and road strategy? Available from www.iichina.com/arfy/uploads/soft/150119/32320_0914112781.pdf.

Christian Aid (2009). False Profits: Robbing the Poor to Keep the Rich Tax-free. Report (March). London. Available from www.christianaid.org.uk/images/false-profits.pdf.

The Climate Group (2012). Shaping China's climate finance policy: executive summary. November.

Available from www.theclimategroup.org/_assets/files/executive_summary_china.pdf.

The Climate Group (2013). Shaping China's climate finance policy: insight briefing. March. Available from www.theclimategroup.org/_assets/files/Shaping-Chinas-Climate-Finance-Policy.pdf.

Climate Policy Initiative (2013). The Global Landscape of Climate Finance 2013. San Francisco. Available from http://climatepolicyinitiative.org/wp-content/uploads/2013/10/The-Global-Landscape-of-Climate-Finance-2013.pdf.

D. Capital Partners (2013). Impact investing in education: an overview of the current landscape. Education Support Program (ESP) Working Paper Series, No. 59. Budapest, Hungary: Open Society Foundations. Available from www.opensocietyfoundations.org/sites/default/files/impact-investing-education-overview-current-landscape-20140106_0.pdf.

Das, Monica and Sudip Ranjan Basu (2015). Finance and Growth. Forthcoming.

Dasgupta, S., and others (2010). Climate proofing infrastructure in Bangladesh: the incremental cost of limiting future inland monsoon flood damage. Policy Research Working Paper, No. 5469. Washington, D.C.: World Bank.

Demirguc-Kunt, Asli, and Leora Klappe (2012). Measuring financial inclusion: the global findex database. Policy Research Working Paper, No. 6025. Washington, D.C.: World Bank. Available from http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-6025.

Development Committee (2006). Fiscal policy for growth and development: an interim report. Washington, D.C.: World Bank. Available from http://siteresources.worldbank.org/DEVCOMMINT/Documentation/20890698/DC2006-0003%28E%29-FiscalPolicy.pdf.

DiCaprio, Alisa, Steven Beck, and John Carlo Daquis (2014). ADB trade finance gap, growth, and jobs survey. Briefs, No 25. Manila: ADB.

Edbiz Consulting (2013). Global Islamic Finance Report. London. Available from www.gifr.net/gifr_2013.htm.

The Energy and Resources Institute (TERI) (2013). Annual Report 2012-2013. New Delhi. Available from www.teriin.org/index.php?option=com_content&task=view&id=19.

Ernst & Young (2013). World Islamic Banking Competitiveness Report 2013-14: The Transition Begins. London. Available from http://emergingmarkets.ey.com/wp-content/uploads/downloads/2013/12/World-Islamic-Banking-Competitiveness-Report-2013-14.pdf.

Gadenne Lucie, and M. Singhal (2013). Decentralization in developing economies. Working Paper, No. 19402. Cambridge, MA: National Bureau of Economic Research.

Gruić, Branimir, and Philip Wooldridge (2012). Enhancements to the BIS debt securities statistics. BIS Quarterly Review, December, pp. 63-76. Available from www.bis.org/publ/qtrpdf/r_qt1212h.htm.

G77, and China (2008). Yamoussoukro Consensus on South-South Cooperation. Twelfth Session of the Intergovernmental Follow-up and Coordination Committee on Economic Cooperation among Developing Countries Yamoussoukro. Côte d'Ivoire, 10-13 June. Available from www.g77.org/ifcc12/Yamoussoukro_Consensus.pdf. Accessed 20 September 2014.

HM Treasury (2006). Stern review on the economics of climate change. London. Available from

http://webarchive.nationalarchives.gov.uk/+/http:/www.hm-treasury.gov.uk/sternreview_index.htm.

International Chamber of Commerce (ICC) (2014). Rethinking Trade & Finance 2014. Paris. Available from www.iccwbo.org/Data/Policies/2014/Global-Survey-2014-Rethinking-Trade-and-Finance.

International Energy Agency (IEA) (2011). World Energy Outlook: Energy for All – Financing Access for the Poor. Paris. Available from www.worldenergyoutlook.org/media/weowebsite/energydevelopment/weo2011_energy_for_all.pdf.

International Finance Corporation (IFC) (2010). Scaling-up SME Access to Financial Services in the Developing World. Washington, D.C. Available from www.gpfi.org/sites/default/files/documents/G20_Stocktaking_Report_0.pdf.

International Fund for Agricultural Development (IFAD), and World Food Programme (WFP) (2010). The Potential for Scale and Sustainability in Weather Index Insurance for Agriculture and Rural Livelihoods. Rome. Available from www.ifad.org/ruralfinance/pub/weather.pdf.

International Monetary Fund (IMF) (2013). Energy subsidy reform: lessons and implications, 28 January. Available from www.imf.org/external/np/pp/eng/2013/012813.pdf.

___(2014). Global Financial Stability Report. Washington, D.C. Available from www.imf.org/external pubs/ft/gfsr/2014/01/index.htm.

International Trade Centre (ITC) (2009). How to Access Trade Finance: A Guide for Exporting SMEs. Geneva. Available from www.intracen.org/uploadedFiles/intracenorg/Content/Trade_Support_Institutions/Delivering_

services_to_exporters/Evaluating_trade_credit_applications/How_to_Access_Trade_Finance.pdf.

Iossa, Elisabetta, and David Martimort (2009). The theory of incentives applied to the transport sector. In A Handbook of Transport Economics, Andre de Palma and others, eds. Cheltenham Glos, United Kingdom: Edward Elgar Publishing.

Irwin, Timothy, and Tanya Mokdad (2010). Managing Contingent Liabilities in Public-Private Partnerships Practice in Australia, Chile, and South Africa. Washington, D.C.: World Bank.

Islamic Financial Service Board (IFSB) (2013). Islamic Financial Services Industry Stability Report. Available from http://ifsb.org/docs/IFSB%20-%20IFSI%20Stability%20Report%20TEXT%20FINAL%20(OUTPUT).pdf.

Jeanne, Olivier (2014). Capital flow management and macroprudential policies in Asia. In Asian Capital Market Development and Integration: Challenges and Opportunities, Asian Development Bank and Korea Capital Market Institute, eds. Oxford: Oxford University Press.

Kar, Dev (2011). Illicit financial flows from the least developed countries: 1990-2008. Discussion Paper, 28 June. New York: UNDP. Available from http://works.bepress.com/dev_kar/3.

Kar, Dev, and Sarah Freitas (2012). Illicit Financial Flows from Developing Countries: 2001-2010. Washington, D.C.: Global Financial Integrity.

Ketkar, Suhas L., and Dilip Ratha (2010). Diaspora bonds: tapping the diaspora during difficult times. Journal of International Commerce, Economics and Policy, vol. 1, No. 2, pp. 251-263.

Hewage, Kithmina V., and Manuel F. Montes (2014). A delicate truth - remittances and royalty payments in financing development. Draft paper. Geneva: South Centre.

Lim, Mah-Hui, and Joseph Lim (2012). Asian Initiatives at Monetary and Financial Integration: A Critical Review. Geneva: UNCTAD.

Mahul, Olivier, and Jerry Skees (2008). Managing agricultural risk at the country level: the case of index-based livestock insurance in Mongolia. Policy Research Working Paper, No. WPS 4325. Washington, D.C.: World Bank.

McKinsey & Company (2011). Building India: transforming the nation's logistics infrastructure. Available from www.mckinsey.com/~/media/mckinsey%20offices/india/pdfs/building_india-transforming_the_nations_logistics_infrastructure.ashx.

Mitra, Sabyasachi, and Thiam Hee Ng (2014). Managing foreign fund flows into Asia's domestic bond markets. In Asian Capital Market Development and Integration: Challenges and Opportunities, Asian Development Bank and Korea Capital Market Institute, eds. Oxford: Oxford University Press.

Montes, Manuel F. (1997). Private deficits and public responsibilities: Philippine responses to capital inflows. In Papers and Proceedings of the International Symposium on Macroeconomic Interdependence in the Asia-Pacific Region. Tokyo: Economic Research Institute, Economic Planning Agency.

___ (1998). The Currency Crisis in Southeast Asia Updated Edition. Singapore: Institute of Southeast Asian Studies.

___ (2014). Obstacles to development in the global economic system. Research Paper, No. 51. Geneva: South Centre. Available from www.southcentre.int/research-paper-51-july-2014 Accessed 28 November 2014.

Noirhomme, Mathieu, Valéry Ridde, and Florence Morestin (2009). Improving access to health care services for the poorest: the case of health equity funds. Policy Brief, July. Montréal: Université de Montréal. Available from www.usi.umontreal.ca/pdffile/publications/fonds_en.pdf.

Nurkse, Ragnar (1945). Conditions of international monetary equilibrium. Essays in International Finance, No. 4 (Spring). Princeton, New Jersey: Princeton University. Available from www.princeton.edu/~ies/IES_Essays/E4.pdf.

Olivier, Rockwell, and Aisling Kelly (2013). Banking the unbanked in the Pacific, 11 June. Available from www.lexology.com/library/detail.aspx?g=e91c660b-9e85-488c-a645-86d15e5fde97.

Organisation for Economic Co-operation and Development (OECD) (2013a). G20/OECD high-level principles of long-term investment financing by institutional investors. Paris: Task Force on Institutional Investors and Long-Term Financing. Available from www.oecd.org/finance/private-pensions/G20-OECD-Principles-LTI-Financing.pdf.

___ (2013b). The role of banks, equity markets and institutional investors in long-term financing for growth and development. Report for G20 leaders presented at Meeting of the G20 Finance Ministers and Central Banks Governors. Moscow, 15-16 February. Available from www oecd.org/finance/private-pensions/G20reportLTFinancingForGrowthRussianPresidency2013 pdf.

___ (2013c). Report on Pension Funds' Long Term Investments: Survey of Large Pension Funds and Public Pension Reserve Funds. Paris. Available from www.g20.org/sites/default/files g20_resources/library/LargestPensionFunds2012SurveyFINAL.pdf.

___ (2014). Aid for trade in 2012: increasing volumes, hardening terms. Presentation presented at the CTD Session on Aid for Trade. Geneva, 9 April. Available from www.wto.org/english news_e/news14_e/OECD.pdf.

PricewaterhouseCoopers International (PwC) (2014). Asset management 2020: a brave new world. Available from www.pwc.com/gx/en/asset-management/publications/pdfs/pwc-asset-management-2020-a-brave-new-world-final.pdf.

Rivera-Salgado, Gaspar, Xóchitl Bada, and Luis Escala-Rabadán (2005). Mexican migrant social and civic participation in the U.S.: the case of hometown associations in Los Angeles and Chicago. Mexican Migrant Social and Civic Participation in the United States, Washington D.C., 4-5 November.

Secretariat of the Pacific Regional Environment Program (SPREP) (2010). Mobilizing climate change finance for the Pacific. Discussion papers prepared by the Pacific Islands Forum Secretariat for consideration by Forum Economic Ministers' Meetings, 2011-2013.

Seok, Baek, and Pil-Kyu Kim (2014). Determinants of bond market development in Asia. In Asian Capital Market Development and Integration: Challenges and Opportunities, Asian Development Bank and Korea Capital Market Institute, eds. Oxford: Oxford University Press.

Sharma, Bindu (2013). Contextualising CSR in Asia: Corporate Social Responsibility in Asian Economies. Singapore: Lien Centre for Social Innovation. Available from http://ink.library.smu.edu.sg/cgi/viewcontent.cgi?article=1004&context=lien_reports.

Sharma, K., and others, eds. (2011). Realizing the Development Potential of Diasporas. Tokyo: United Nations University Press.

Sheng, Andrew, Chow Soon Ng, and Christian Edelmann (2013). Asia Finance 2020: Framing a New Asian Financial Architecture. Singapore: Oliver Wyman; Hong Kong: Fung Global Institute. Available from www.oliverwyman.com/content/dam/oliver-wyman/global/en/files/archive/2013/Asia_Finance_2020.pdf.

UBS (2011). UBS-INSEAD Study on Family Philanthropy in Asia. Zurich: UBS Philanthropy Services. Available from www.insead.edu/facultyresearch/centres/social_entrepreneurship/documents/insead_study_family_philantropy_asia.pdf.

United Nations (1992). United Nations Framework Convention on Climate Change. Available from http://unfccc.int/key_documents/the_convention/items/2853.php. Accessed 28 November 2014.

____ (2009). Innovative Financing for Development: the I-8 Group Leading Innovative Financing for Equity [L.I.F.E.]. New York.

____ (2010). AGF 2010: report of the Secretary-General's High-Level Advisory Group on Climate Change Financing. New York. Available from www.un.org/wcm/webdav/site/climatechange shared/Documents/AGF_reports/AGF%20Report.pdf.

____ (2011). Report of the Fourth United Nations Conference on the Least Developed Countries, Istanbul, Turkey, 9-13 May 2011. Sales No. 11.II.A.1.

____ (2002). Monterrey Consensus on Financing for Development. New York. Available from www un.org/esa/ffd/monterrey/MonterreyConsensus.pdf.

____ (2013). A New Global Partnership: Eradicate Poverty and Transform Economies through Sustainable Development. The Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda. New York. Available from www.post2015hlp.org/wp content/uploads/2013/05/UN-Report.pdf.

____ (2014a). Open Working Group proposal for Sustainable Development Goals. Available from https://sustainabledevelopment.un.org/content/documents/1579SDGs%20Proposal.pdf.

____ (2014b). Report of the Intergovernmental Committee of Experts on Sustainable Development Financing. A/69/315. Available from http://daccess-dds-ny.un.org/doc/UNDOC/GEN N14/507/26/PDF/N1450726.pdf?OpenElement.

United Nations, Department of Economic and Social Affairs (UNDESA) (2012). World Economic and Social Survey: In Search of New Development Finance. Sales No. E.12.II.C.1. Available from www.un.org/en/development/desa/publications/wess2012.html.

____ (2012). World Economic Situation and Prospects 2012. Sales No. E.12.II.C.2. Available from www un.org/en/development/desa/policy/wesp/wesp_current/2012wesp.pdf.

___ (2014a). World Economic Situation and Prospects 2014. Sales No. E.14.II.C.2. Available from www.un.org/en/development/desa/policy/wesp/wesp_current/wesp2014.pdf.

___ (2014b). Report of the Intergovernmental Committee of Experts on Sustainable Development Financing. Available from http://sustainabledevelopment.un.org/content documents/4588FINAL%20REPORT%20ICESD F.pdf.

___ (2015). World Economic Situation and Prospects 2015. Sales No. E.15.II.C.2. Available from www.un.org/en/development/desa/policy/wesp/wesp_archive/2015wesp_full_en.pdf.

United Nations, Economic and Social Commission of Asia and the Pacific (ESCAP) (2005). Implementing the Monterrey Consensus in the Asian and Pacific Region: Achieving Coherence and Consistency. Sales No. 05.II.F.8.

___ (2006). Theme Study of the Sixty-second Commission Session: Enhancing Regional Cooperation in Infrastructure Development Including that Related to Disaster Management. Sales No. E.06 II.F.13. Available from www.unescap.org/sites/default/files/themestudy-2006-full.pdf.

___ (2010). Financing an Inclusive and Green Future. Sales No. E.10.II.F.4. Available from www unescap.org/sites/default/files/themestudy2010-fulltext.pdf.

___ (2012). Economic and Social Survey of Asia and the Pacific 2012. Sales No. E.12.II.F.9. Available from www.unescap.org/sites/default/files/Survey_2012.pdf.

___ (2013a). Building Resilience to Natural Disasters and Major Economic. Sales No. E.13. II.F.3. Available from www.unescap.org/commission/69/theme-study.

___ (2013b). Economic and Social Survey of Asia and the Pacific: Forward-Looking Macroeconomic Policies for Inclusive and Sustainable Development. Sales No. E.13.II.F.2. Available from www unescap.org/publications/survey/surveys/survey2013.pdf.

___ (2013c). Review of Developments in Transport in Asia and the Pacific 2013: Transport as a Key to Sustainable Development and Regional Integration. ST/ESCAP/2667. Bangkok. Available from www.unescap.org/sites/default/files/TransportReview_2013_full_text.pdf.

___ (2013d). Shifting from Quantity to Quality: Growth with Equality, Efficiency, Sustainability and Dynamism. ST/ESCAP/2675. Bangkok. Available from www.unescap.org/sites/default/files Shifting%20from%20quantity%20to%20quality.pdf.

(2014a). Economic and Social Survey of Asia and the Pacific: Regional Connectivity for Shared Prosperity. Sales No. E.14.II.F.4. Available from www.unescap.org/publications/survey/surveys survey2014.pdf.

___ (2014b). Asia-Pacific Trade and Investment Report 2014. Sales No. E.15.II.F.2. Available from www.unescap.org/sites/default/files/APTIR%202014%20-%20Full%20Report_4.pdf.

___ (2014c). Economic Diversification in Asian Landlocked Developing Countries: Prospects and Challenges. Sales No. E.15.II.F.3. Available from www.unescap.org/sites/default/files Economic%20Diversification_low%20resolution.pdf.

___ (2014d). Implementation of the Bangkok Declaration on Regional Economic Cooperation and Integration in Asia and the Pacific. E/ESCAP/RES/70/1. Available from www.unescap.org/sites default/files/E70_RES1E.pdf.

___ (2015). Economic and Social Survey of Asia and the Pacific. Bangkok. Forthcoming.

United Nations, Economic and Social Commission of Asia and the Pacific, Pacific Office (EPO) (2012). Green Economy in a Blue World, Pacific Perspectives. Fiji. Available from www.unescap.org/sites/default/files/Pacific%20Perspectives%202012.pdf.

United Nations, Economic and Social Commission of Asia and the Pacific (ESCAP), Asian Development Bank (ADB), and United Nations Development Programme (UNDP) (2013). Asia-Pacific Aspirations: Perspectives for a Post-2015 Development Agenda. Asia-Pacific Regional MDGs Report 2012/13. Bangkok. Available from www.unescap.org/sites/default/files/MDG-Report2012-2013%28lowres%29_0.pdf.

United Nations Conference on Trade and Development (UNCTAD) (2012). Technology and Innovation Report 2012. Geneva. Available from http://unctad.org/en/PublicationsLibrary/tir2012_en.pdf.

___ (2014a). World Investment Report 2014 Investing in the SDGs: An Action Plan. Sales No. Sales No. E.14.II.D.1. Available from http://unctad.org/en/PublicationsLibrary/wir2014_en.pdf

___ (2014b). Global investment trends monitor No. 15 (28 January). Geneva. Available from http: unctad.org/en/PublicationsLibrary/webdiaeia2014d1_en.pdf.

United Nations Open Working Group on Sustainable Development Goals (2014). Working document for 5-9 May session of Open Working Group. Available from http://sustainabledevelopment.un.org/content/documents/3686WorkingDoc_0205_additionalsupporters.pdf.

United Nations System Task Team on the Post-2015 UN Development Agenda (2012). Countries with special needs. Available from www.un.org/millenniumgoals/pdf/Think%20Pieces/1_countries_with_special_needs.pdf.

United States Agency for International Development (USAID) (2013). Fast out of the gate: how developing Asian countries can prepare to access international green growth financing. Presentation presented at the Asia LEDS Partnership Workshop. Manila, Philippines, April. Available from http://lowemissionsasia.org/events/presentations-climate-finance-workshop#sthash.jpKa3Q5R.dpuf.

World Bank (2010). Economics of Adaptation to Climate Change - Synthesis Report. Washington, D.C. Available from www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/06/27/000425970_20120627163039/Rendered/PDF/702670ESW0P10800EACCSynthesisReport.pdf.

___ (2013). Financing for Development Post-2015. Washington D.C. Available from www worldbank.org/content/dam/Worldbank/document/Poverty%20documents/WB-PREM%2 financing-for-development-pub-10-11-13web.pdf.

Xuan, Phuc, and Chris Santiago (2010). Vietnam leads Southeast Asia in payments for ecosystem services. Paper prepared for the 17th Katoomba Meeting. Hanoi, June. Available from www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page_id=7593&section=news_articles&eod=1. Accessed 29 May 2014.

Yu, Ip-Wing, Kang-Por Fung, and Chi-Sang Tam (2010). Assessing financial market integration in Asia - equity markets. Journal of Banking & Finance, vol. 34, pp. 2874-2885.

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