



ECONOMIC AND SOCIAL SURVEY OF ASIA AND THE PACIFIC

2014

REGIONAL CONNECTIVITY FOR SHARED PROSPERITY



ESCAP is the regional development arm of the United Nations and serves as the main economic and social development centre for the United Nations in Asia and the Pacific. Its mandate is to foster cooperation between its 53 members and 9 associate members. ESCAP provides the strategic link between global and country-level programmes and issues. It supports Governments of countries in the region in consolidating regional positions and advocates regional approaches to meeting the region's unique socio-economic challenges in a globalizing world. The ESCAP office is located in Bangkok, Thailand. Please visit the ESCAP website at www.unescap.org for further information.



The shaded areas of the map indicate ESCAP members and associate members.

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United Nations publication
Sales No. E.14.II.F.4
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Printed in Bangkok
ISBN: 978-92-1-120675-3
e-ISBN: 978-92-1-056695-7
ISSN: 0252-5704
ST/ESCAP/2693

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FOREWORD

The Asia and the Pacific region is the most economically dynamic in the world, yet despite significant progress in recent years it still possesses the largest number of people who need to overcome extreme poverty. Development outcomes in Asia and the Pacific will therefore be central to the progress of the world towards implementing the sustainable development vision of the United Nations beyond 2015.

The 2014 edition of the *Economic and Social Survey of Asia and the Pacific* tackles the important issue of increasing government revenue to finance sustainable development. The *Survey* demonstrates that there is significant potential for Governments in the region to increase financing by better mobilizing domestic resources and by strengthening the relevant institutional frameworks. The *Survey* also shows that the burden on individual citizens does not have to rise in order to achieve this objective, since improvements in efficiency and the reconfiguring of priorities can provide significant welfare gains for all.

Enhanced regional economic cooperation and partnerships will also be crucial for the success of the new development framework and goals. The *Survey* suggests how the countries of the region can more effectively spread the benefits of public policies across borders by focusing on linkages in the areas of transport, energy and information and communications technology.

I commend this publication to the widest possible audience as a useful input to the region's deliberations during this important year as we work together to address climate change and shape a bold and inspiring future development agenda that leads the world on a more sustainable, equitable, peaceful and prosperous path.

A handwritten signature in black ink that reads "Ban Ki-moon".

BAN Ki-moon
Secretary-General of the United Nations

July 2014



PREFACE

This 2014 edition of ESCAP's flagship *Economic and Social Survey of Asia and the Pacific* has the added significance of being published during the 70th session of the Commission – and in a period of great transition for the countries and people of the Asia-Pacific region.

Responding to the mandate first given to the secretariat by our member States in another time of turmoil – the immediate aftermath of the Second World War – the *Survey* has been a regional authority on socio-economic development, examining issues of special concern and providing policy recommendations, since 1947.

A key message from the 2014 *Survey* is that, while the impacts of the global financial crisis may be starting to moderate, aggregate growth prospects for Asia and the Pacific remain subdued.

In addition to the importance of mitigating the risks of further capital volatility, the most pressing implication of this continuing malaise is the need for productive and counter-cyclical macroeconomic government support for the levels of sustainable growth required to tackle the socio-economic challenges of the region.

To address rising inequalities and the urgent need for greater and more sustainable formal sector employment, for instance, Governments are urged to consider a range of policy interventions such as increased spending on social protection; greater investment in youth employability; reducing key infrastructure deficits; and addressing the environmental degradation which constrains future growth.

Limited government resources, exacerbated by high levels of public debt and falling levels of development assistance, present clear obstacles to such interventions. This is why the mobilization of domestic resources, and options for increasing government revenues, are presented as special focus of Part I of the *Survey*, with a clear emphasis on increasing tax revenues.

ESCAP's analysis reveals that, in some countries of the region, the gap between appropriate levels of tax collection and actual tax revenues amounts to more than

5% of GDP, and that by embracing their tax potential, and closing existing tax gaps, some Asia-Pacific economies could raise their tax revenues by more than 70%.

A key recommendation of the 2014 *Survey* is the establishment of a regional tax forum, under the auspices of ESCAP, which could monitor tax legislation and regulations across Asia and the Pacific, help to develop regional best-practice, and create mechanisms to address issues ranging from avoiding tax competition for foreign investment, to double taxation, and preventing the illicit transfer of funds.

This is also the first edition of the *Survey* to incorporate ESCAP's annual *Theme Study*, the subject of which for 2014 is *Regional Connectivity for Shared Prosperity*, which is presented as Part II.

Connectivity is a cornerstone of regional economic cooperation and integration – and has become a major priority for the countries of Asia and the Pacific, especially in the context of efforts to find new drivers of regional economic growth, and to create additional domestic and aggregate regional demand.

To best unlock the potential of ever-more closely interlinked production networks and value chains, a broader perspective on connectivity will be key. This kind of connectivity should not be considered sector by sector, but rather as part of an integrated whole, encompassing the development of corridors of prosperity through networks of trade, transport, ICT, energy, people, and technology.

The 2014 *Survey* makes, in other words, a valuable contribution to the important development dialogues underway in the Asia-Pacific region and beyond. It provides fresh data, new perspectives, and policy guidance on issues which are critical to fostering more inclusive and sustainable development.



Shamshad Akhtar
Under-Secretary-General of the United Nations and
Executive Secretary, United Nations Economic and Social
Commission for Asia and the Pacific

EXECUTIVE SUMMARY

The *Economic and Social Survey of Asia and the Pacific 2014* is divided into two parts. Part I contains a review of the current socio-economic situation in the region and key challenges, as well as relevant policy recommendations. A special focus is domestic resource mobilization through government revenues. Part II contains the Theme Study on Regional Connectivity for Shared Prosperity for the consideration of the seventieth session of the Commission. It contains a discussion of the importance of regional connectivity for trade and development in the Asia-Pacific region and highlights priority areas where regional cooperation could further enhance such connectivity.

I. GROWTH PROSPECTS AND CHALLENGES

Growth and inflation prospects in 2014

The average growth rate of the developing economies of Asia and the Pacific is forecast to rise moderately in 2014 to 5.8% from 5.6% in 2013.

In line with the diversity of the region, economic growth momentum in 2014 will likely be varied across subregions. In South and South-West Asia, the forecast is for a significant increase in growth, to 4.7% from 3.9% in 2013, driven by progress in the global economy and improved household consumption and investment. Pacific island developing economies are also forecast to record a notable increase in growth, to 4.9% from 4% in 2013, mainly influenced by ongoing recovery in developed economies. East and North-East Asia is forecast to post stable growth in 2014, at 4.1%, as exports to developed countries strengthen and domestic demand in most economies remains firm. Growth in South-East Asia is projected to moderate further to 4.6% as domestic demand in major economies is likely to soften. North and Central Asia is forecast to experience growth decline to 1.3% in 2014 from 2.1% in 2013, due primarily to the impact of ongoing geopolitical instability on the economy of the Russian Federation and its spillover to neighbouring economies.

The inflation outlook in 2014 is generally moderate and headline inflation in the region is projected to be 4.8% in 2014, down from 5% in 2013.

However, a number of major economies, such as India, Indonesia and Pakistan, are forecast to continue to face significant price pressures. One positive factor for inflation in the region is that most commodity prices are likely to remain flat or decline over the next 12 months, due to slow global recovery and the winding back of quantitative easing by the United States Federal Reserve. However, this prospect may change due to geopolitical factors and supply shocks in major producing countries.

Key socio-economic challenges

- *While growth in the developed economies is improving, their slow pace of recovery is restraining the growth potential of the Asia-Pacific region.* Given the importance of these economies in terms of trade and investment linkages, their growth performance remains a key concern for the region.
- *Policies in the developed economies are having a significant impact on the region through spillovers from the normalization of monetary policy by the United States.* ESCAP analysis suggests that, under a worst-case scenario, the effects of further financial market turbulence could cut annual GDP growth by up to 0.7-0.9 percentage points in the most-affected countries.
- *Export growth is being hampered by non-tariff trade protectionist measures globally and in the region.* ESCAP analysis shows that these trade-restrictive policy measures resulted in an estimated reduced opportunity of merchandise exports of more than \$255 billion in the Asia-Pacific region over the period 2009-2013, translating into a cumulative decline of more than 1.6 percentage points of regional output.
- *Formal sector job creation remains low in many economies.* Both before and after the recent global financial crisis, growth in GDP in the region has not been accompanied by commensurate expansion in formal sector employment. Particular concerns are the prevalence of vulnerable employment and youth unemployment. In 2013, 63.1% of women and 56% of men in the region were in vulnerable employment, while the youth unemployment rate is almost three times higher than the adult rate.
- *Inequality is widespread in the region and continues to grow in many economies.* ESCAP analysis of 40 countries in the region indicates that the poorest 20% of the population currently accounts for less than 10% of national income, with the poorest in some major developing economies experiencing a falling share of national income between the 1990s and 2000s.

Policy options to deal with the challenges

Productive government spending to support sustainable growth

The obstacles to higher growth in Asia and the Pacific are partly related to slow economic recovery in the developed world, but also to long-term structural impediments to growth. This highlights the need for productive and countercyclical government macroeconomic support. Such policies can support growth in the short term while helping remove structural impediments in the long term. Some possible supportive measures are highlighted below.

Social protection spending: Increasing the spending on social protection would help to support growth as well as reduce inequality. The social protection floor is a United Nations initiative and features prominently in the discussion about the development agenda beyond 2015. Public social security expenditure remains low at less than 2% of GDP in half the countries where data are available. More than 60% of the population of the Asia-Pacific region remain without any social protection coverage. An important challenge to increase the coverage and depth of social protection measures will be their sustainable financing. The private sector must also contribute and partner with Governments. Macroeconomic stability can be compromised without sustainable finance.

Infrastructure spending: Governments need to address the significant shortage in infrastructure provision across the region. Infrastructure gaps are a significant barrier to national and regional connectivity. A recent ESCAP study estimated the infrastructure financing gaps in the Asia-Pacific region to be approximately \$800-900 billion per annum. Existing forms of infrastructure investment in the region could be complemented with a new large-scale lending facility for infrastructure using innovative development financing sources. Apart from shortfalls in financing, it is clear that significant improvement is required in legal and regulatory frameworks for infrastructure investment across much of the region.

Environment-related spending: Governments will need to undertake spending to address environmental factors which would otherwise hamper growth prospects. Environmental degradation was estimated in 2012 to cost India almost 6% of GDP annually. The health costs of air and water pollution in China is estimated at about 4.3% of its GDP. Economic potential has also been affected by widespread loss of natural ecosystems and biodiversity. Apart from reducing environmental damage, policies are required to improve access to modern energy sources. Another area for action to ensure the sustainability of growth is better addressing climate change through improvement of climate finance. Public finance could focus on leveraging private funding to tackle climate challenges.

Investment in youth

Governments in the region are facing the enormous challenge of securing employment for the largest generation of young people in history. Nearly 717 million of the region's population are young women and men aged 15 to 24. The transition between secondary and tertiary education is particularly important. Active labour market programmes will be required to effectively link education, training and skills development systems with the requirements of employers. To improve education systems will require paying special attention to gender inequalities. Although gender inequalities in education have fallen in the region over recent years, there are still significant disparities that translate into untapped productive potential for both medium and long-term growth.

Mitigating risks from capital volatility

Countries should improve the methods they use to mitigate the volatility of capital flows in three areas: ensuring adequate national foreign exchange reserves; moving towards a regional reserves mechanism; and complementing such policies with capital flows management measures. ESCAP analysis indicates that some economies in the region may currently have insufficient foreign exchange reserves to cover the exit of foreign funds from their financial markets. The lack of sufficient reserves at the national level to respond to the risks from capital flows volatility highlights the need for greater regional support. An alternative to current arrangements could be a comprehensive Asia-Pacific financial support mechanism using part of the sizeable foreign reserves available to some of the Governments of countries in the region. The use of foreign reserves does not deal with the negative impact on asset markets of any sudden outflow. Therefore, an important additional supportive measure could be capital flows management at the national level to deal with inflow surges in asset markets, as well as sudden large outflows. A general guideline should be for such measures to be a component of long-run policies to prevent economic booms and busts. These measures may be quantitative controls or market-based and some combinations of both depending on country-specific circumstances.

Domestic resource mobilization: options for expanding fiscal space

To adequately fund the development needs of the region, Governments need to expand fiscal space. There are several options for doing so, including higher levels of borrowing, making existing expenditure more efficient or reprioritizing expenditure to orient it more towards development. However, Governments should focus particularly on increasing tax revenues.

Tax collection in Asia-Pacific developing countries is currently neither sufficient nor equitable. Although many countries have been able to strengthen tax revenues over the past decade, central government taxes in developing Asia and the Pacific averaged only 14.8% of GDP in 2011, compared with 17.1% in Latin America and the Caribbean and 16.3% in sub-Saharan Africa. Only a few countries collected tax revenues of more than 20% of GDP in 2011, whereas in several others, tax-to-GDP ratios were close to single digits. This is far from the 25-35% of GDP that is considered one of the prerequisites for being able to provide the financing and expenditure to become a developed country.

The composition of tax revenues matters as much as does the level of revenues. Many economies have shifted from trade taxes, which remain a substantial component of indirect taxes, particularly in the Pacific, to taxes on goods and services, such as value added taxes (VAT) or general sales taxes (GST). Yet, in many countries revenues from VAT or GST have not been able to offset declining revenues from taxes on trade.

Indirect taxes are the largest source of tax revenue in more than half of all countries in the region; however, their contribution to total tax revenue has been declining in most countries. This shift is generally desirable as indirect taxes affect prices and thus influence resource reallocation, whereas direct taxes are more equitable as they can be progressive, with higher rates at higher levels of income.

Personal income tax revenues are low in many countries. This is in part due to untaxed activities in the informal sector or in agriculture. In many countries tax avoidance and non-compliance are also a concern.

Between 2007 and 2012, tax revenues increased at a higher rate than output in 12 of 20 countries; yet in many countries tax collection is below potential. In some countries, the gap between actual revenues collected and the level that would be appropriate given the economy's structure is equivalent to 5% of GDP or more.

Countries are often not using their tax potential to the fullest extent due to the liberal use of exemptions and concessions. For instance, some countries offer preferential tax treatment for entire sectors. Also, at the individual level, taxpayers in most countries can take advantage of tax deductions and credits for a wide range of items. By embracing their tax potential and closing existing tax gaps, some economies could raise their tax revenues by more than 70%.

Policy options to enhance tax revenues

This Survey contains a number of policy options to enhance tax revenues.

Rationalize and extend tax systems to create larger tax bases. While relatively low tax rates would not create distortions in the allocation of resources, countries should also review their indirect taxes and retain only exemptions or concessions that are achieving their stated objectives. GST and VAT systems should be made simpler and could be extended to sectors that are currently exempt, while measures to offset the

disproportionate impact on low-income persons must be maintained. There is also a case for expanding the base for customs duties to the import of services, as has already been done in some countries.

Strengthened revenues from direct taxes. This would require implementing mechanisms for taxing more widely capital gains in securities or property. Furthermore, various tax concessions should be reviewed for their costs and benefits and removed if found causing net loss. This also includes harmonizing tax rates so that ideally the rate is the same for companies and high-income individuals to preserve tax progressivity and prevent income shifting to reduce tax liabilities. It may be appropriate to eventually move to a dual income tax system that taxes labour and capital income separately.

Tackle tax evasion and tax fraud. This is a priority, especially considering that the region accounted for more than 61% of the \$5.9 trillion of illicit capital outflows from developing countries between 2001 and 2010. Legislation should be strengthened to regulate transfer pricing and to apportion domestic and foreign operations of multinational corporations properly so that there is no loss of tax revenues, especially in the presence of treaties for avoidance of double taxation. They could address evasion through withholding or advance taxes and could increase incentives for compliance through simpler procedures and faster processing of refunds. They should consider the creation of special tax courts to tackle tax evasion and tax fraud.

Create a tax administration that is free from corruption, political interference and pressure from vested interests. This is needed to make the tax systems equitable and efficient. Human capacity must be expanded; administrations should be organized along functional lines; and information technology systems should be integrated. Also, tax assessments could be based on collateral evidence collected across government departments.

Regional cooperation should be strengthened for mobilizing tax revenues. For instance, effective regional cooperation can be used to help avoid double taxation, to combat transfer pricing by multinational corporations and to deal with tax havens. Tax harmonization and elimination of tax competition among countries, especially those belonging to such regional associations as the Association of Southeast Asian Nations or the South Asian Association for Regional Cooperation, may further foster revenues.

Countries should consider establishing an Asia-Pacific tax forum, under the aegis of ESCAP. Such a forum could monitor the tax legislation of member countries and publish a regular review of tax reforms. It could also act as a repository of tax laws, and hold seminars/workshops on emerging tax-related issues with a view to sharing best practices in tax policies, tax administration and tax reforms, and avoiding tax competition in order to attract foreign direct investment.

II. REGIONAL CONNECTIVITY FOR SHARED PROSPERITY

The role of regional connectivity in supporting economic growth and development

Over the past 50 years, the Asia-Pacific region has experienced unprecedented economic growth. That growth, along with better standards of education and health, has contributed to dramatic falls in poverty. However, the region's growing prosperity has not been shared equally, and there are clear signs of rising income inequality, both within and between countries. Inequality is also becoming more pronounced in other ways, in terms of access to transport, information and communications technology (ICT) and energy resources, for example.

The region's recent economic growth has been driven largely by international trade, foreign direct investment and the emergence of global and regional production networks, as well as global value chains. These drivers, in turn, were facilitated by the progressive liberalization of trade, expansion of the maritime transport sector and diffusion of information and communications technologies and the Internet. These processes enabled multinational companies and smaller producers to connect with each other and develop new types of production and distribution networks. Meanwhile, Governments have supported these processes by investing in infrastructure and human capital development.

Enhanced connectivity has therefore played an influential role in shaping regional integration in Asia and the Pacific. Clearly, the contribution of “hard”, or physical, infrastructure networks to economic and social development has depended on “soft” infrastructure, including the policy, legal, regulatory and institutional frameworks in which they are located. In the current study, regional connectivity is regarded as the level and effectiveness of regional networks to facilitate flows of goods, services, people and knowledge. This extends the traditional focus of public policies beyond either physical or non-physical parameters to encompass both dimensions.

Into the future, trade and transport connectivity within the region will continue to be important, particularly as countries look towards regional markets to counterbalance the slowdown in the global economy. At the same time, new drivers of growth are expected to shape future patterns of economic and social development in the region, and with them, other types of regional networks will become increasingly important. Given that the effectiveness of each network is increasingly dependent on the connectivity of other networks, it is clear that any analysis of regional connectivity can no longer be confined to one or other type of network.

Key drivers shaping the future of regional connectivity

Trade and transport connectivity remains a priority: The recent economic slowdown has exposed the region's vulnerability to fluctuations in the global economy and has shifted attention to domestic and regional markets as a means of stimulating growth and raising living standards. Despite significant investment in transport infrastructure at the national level, however, cross-border and regional land transport infrastructure networks remain underutilized for international trade. In addition to increasing investment in “hard” infrastructure, countries in the region can improve the “soft” infrastructure underpinning trade and transport, as well as implement other means of reducing logistics costs. In particular, countries can capitalize on various technological advances – which requires trade and transport connectivity to be pursued in conjunction with other forms of connectivity, such as information and communications technology (ICT).

ICT as an enabler and driver of growth: The Internet and mobile communications connectivity will continue to radically transform ways in which businesses operate and people interact, as they drive productivity and efficiency improvements in almost every sector of the economy. Increased ICT connectivity is also opening doors on knowledge generation and sharing, particularly for people living in remote or rural areas. Instant communications will be increasingly important in determining the efficiency of trade, including financial services, information and data management services and transport and logistics services.

Growth in trade in services: The Asian and Pacific region has become an important player in commercial services exports, broadly categorized as transportation, travel and other commercial services, as reflected in its growing share of world exports of commercial services. Tourism in particular has been expanding rapidly, with the region capturing nearly one quarter of total global tourist arrivals in 2013. As these

service sectors will rely more and more on access to fast and reliable Internet and telecommunications systems into the future, they offer alternative sources of growth for countries which are physically located away from regional production and consumption centres.

Energy connectivity and security: The region's recent economic growth and rising affluence has resulted in a growing demand for energy resources and with that expanding demand, higher levels of greenhouse gas emissions. The region accounted for more than half the global total of such emissions in 2010. The Asia-Pacific region as a whole is well endowed with energy resources, but they are distributed unevenly. Access to clean energy also varies widely from country to country and even within countries. Against the backdrop of rising fuel prices, countries need to consider new forms of energy cooperation which will help balance the gaps in supply and demand across countries.

Responding to population dynamics: The Asia-Pacific region is undergoing population change of a magnitude and pace never before witnessed in human history. Although the size of its population has almost tripled in 60 years, nearly all countries in the region are now experiencing population ageing, albeit at different paces. As such, the region has countries with both ageing and shrinking populations, as well as countries with large populations of young people. Meanwhile, improved access to transport and information has led to greater cross-border mobility; the region is now host to 59 million international migrants, or one quarter of the world's total stock of migrants. The implications of these trends are significant for the future social and economic development of the region, and point to the urgent need for effective policy responses.

Transitioning to knowledge-based economies: In order to diversify their economies and move up value chains, countries need people who have the skills and knowledge, as well as the innovative spirit, to develop both new products and processes. Strengthening knowledge networks for tertiary education, knowledge generation and knowledge sharing can help build the region's knowledge and skills base. Sharing of knowledge and research between universities, researchers and industry also contributes to the development of "high-tech" clusters in some industries, such as those developing computer software. Recent economic history shows that "knowledge clusters" initially emerged in lower-cost countries with good availability of skilled labour that responded quickly to the global demand for standardized, less firm-specific knowledge services. By strengthening regional knowledge-sharing networks, more countries could participate in different types of clusters.

Regional strategies for enhancing regional connectivity

The issue for the Asia and Pacific region is not so much whether connectivity will increase across countries, but what forms those connections will take. While countries in the region have made significant progress in improving their domestic connectivity, the future of regional connectivity depends on how closely they can work together to strengthen networks in four critical areas: trade and transport connectivity; ICT connectivity; energy connectivity and people-to-people connectivity.

Regional connectivity is multifaceted, with the connectivity of one sector influenced by the connectivity of others. This gives rise to new challenges in terms of the need for greater coordination, not only across borders but also across sectors involving all stakeholders, including business and trade associations, social networks and civil society organizations. At the same time, it creates new opportunities for different elements to be combined in ways which will enhance the quality of these networks.

As they are still in the development stage, countries in the Asian and Pacific region have the chance to develop regional networks in an integrated and coordinated manner, which can reduce the costs and spread the benefits to a wider group of countries. Regional approaches can help countries look beyond their national boundaries and consider the “public goods” aspects of networks, while at the same time, help to identify and harness synergies across sectors. In this context, countries in the region need to put into place regional strategies for developing critical regional networks.

Trade and transport connectivity: While there are wide variations across countries in the quality of infrastructure, the region is already relatively well connected in terms of its transport infrastructure networks. However, its transport networks are not fully operationalized or integrated, leading to underutilization of networks, especially railways. Non-physical barriers at borders also persist, increasing trade and transport costs and delaying the movement of goods and people. By investing in intermodal facilities, such as dry ports, as well as in better physical linkages between different modes, Governments could increase transport options for shippers and traders. Regional intermodal transport networks will play a particularly important role in trade from landlocked developing countries and small island developing States, supporting these countries in participating more actively in international and regional trade. Greater use of ICT applications for trade and transport facilitation, both behind and at borders, would also improve the efficiency of freight movements and pave the way for the development of paperless trade and e-logistics.

ICT connectivity: While ICT connectivity is rapidly improving in the region, there is still a large “digital divide” both within and between countries. This is partly due to the region’s reliance on submarine cables and lack of sufficient terrestrial fibre-optic cables. A cohesive “meshed” regional network, combining terrestrial with submarine optical fibre, would provide cost-effective broadband access on both an intraregional and intercontinental basis as it would link Asia to Europe. Such an “Asia-Pacific information superhighway” should be based on a set of common principles; its development would require the active involvement of private sector partners and international organizations. There are also significant opportunities for the “co-habitation” of ICT and transport infrastructure networks. Already, fibre-optic cables are being laid along some national highway and railway systems. Such synergistic approaches can reduce the cost of developing a regional ICT network and facilitate maintenance of the network.

Energy connectivity: With recent advances in high-voltage transmission technology, it is now possible to envisage a regional energy network, which could reduce the gap in supply and demand by transferring power from energy-rich or lower-cost power countries to energy-poor or high-cost power countries. An “Asian energy highway” network could combine different types of energy transmission networks, including pipelines and cross-border power grids. The most efficient may be the development of a regional electricity power grid, connected to a regional electricity market. A regional grid could also link renewable energy sources to a large enough market to justify investments, thereby enhancing the viability of such projects.

People-to-people connectivity: Increased mobility across borders, as well as greater ICT connectivity, would open up vast new opportunities for international labour migration but also raise new challenges. Migrant origin and destination countries need to work together to take advantage of such labour flows and mitigate the risks which may accompany greater labour mobility. Meanwhile, improvements in ICT connectivity and transport links are making it easier for people to study abroad or enroll in distance learning programmes, as well as contribute to the growth of business and civil society networks. By promoting people-to-people connectivity, Governments could help their people access the region’s vast knowledge resources, as well as foster better understanding about the region’s diverse cultures and value systems.

Strengthening institutional coordination and regional cooperation

The private sector has been leading the economic integration of the region, as the individuals, institutions and companies compete to boost productivity, relocate production activities to take advantage of cost differentials between countries, and try to gain access to major markets in the region. Ultimately, however, the main driving force behind regional connectivity is the political will of national Governments. To support the further integration of the region, therefore, Governments must take the lead in establishing robust institutional frameworks to plan and implement the regional connectivity agenda.

Strengthening institutional responses to regional connectivity

The increasingly complex nature of regional networks requires Governments to reach across sectoral boundaries to develop cross-sectoral policies, both at the national and regional levels. To achieve this, they will need to strengthen institutional mechanisms and make better use of existing forums, such as those provided by intergovernmental organizations. The Asian and Pacific region is home to a wide variety of intergovernmental organizations, many of which are already implementing various initiatives relating to regional connectivity. With the emergence of so many subregional initiatives, policy coordination among these organizations has become an urgent challenge. In this regard, regional institutions such as ESCAP have an important role to play in supporting and coordinating subregional integration efforts, as well as in serving as a vital link between subregional and global initiatives.

The experience of ESCAP shows that there are a variety of mechanisms, ranging from formal intergovernmental agreements and international conventions, to voluntary commitments by Governments which can be used to move the region's connectivity agenda at the regional level. Given the significant role played by the private sector and civil society in shaping the region's economic and social development, Governments also need to explore ways to reach out and involve other stakeholders in the development and implementation of such mechanisms.

Statistical standards for strengthened accountability and better policymaking

Official statistics help Governments to track progress and ensure that their decisions are based on evidence. They also enable Governments to develop a shared understanding of trends, issues and bottlenecks, which is fundamental for building consensus on cross-border issues, such as trade, labour mobility, immigration, educational qualifications, transport and tourism. However, in order to be comparable across countries, over time and across different data sources, statistics must adhere to internationally agreed standards.

To move forward the regional connectivity agenda, national Governments are strongly encouraged to adopt global statistical standards and build their capacities for collecting and disseminating their official statistics. They should also work more closely together through established forums, such as the United Nations Statistical Commission and the ESCAP Committee on Statistics, to define the type of statistics needed by policymakers, as well as identify new and innovative sources for these data.

Regional solutions for financing regional infrastructure networks

Infrastructure development invariably involves high capital costs, with benefits accruing over the longer run. The pace of infrastructure development is therefore progressing unevenly across the region and tends to be directed towards satisfying domestic needs. Yet the benefits of regional infrastructure networks extend over and

beyond national borders, pointing to the need to reconsider the networks as a type of “regional public good”. Such approaches can target the “weakest links” of these networks which affect the efficiency and coherence of the whole network, while at the same time enhancing the connectivity of the disadvantaged countries.

Countries should therefore explore regional mechanisms to pool the region’s financial resources, such as a regional infrastructure fund, a regional project preparatory facility, or an “Asian multi-donor platform”. There is also scope for greater private involvement in financing infrastructure projects, but most countries still lack the appropriate policy frameworks to develop and manage public-private partnership projects effectively. In this regard, Governments can learn from each other’s experiences in such partnerships, as well as how to manage and maintain their infrastructure networks more effectively.

Next steps in strengthening regional connectivity

This report looks at the ways in which better regional connectivity can contribute to the sustainable and inclusive development of the Asian and Pacific region. It finds that regional connectivity is inherently multifaceted, and that the benefits of this connectivity may be enhanced by combining different elements. Moreover, it suggests that networks are likely to become more integrated and interdependent as they evolve. Governments therefore have to develop cross-sectoral policies on connectivity, at national, subregional and regional levels.

Into the future, connectivity will certainly increase across countries. But what forms will those connections take and who will they benefit? The aim should be to ensure that they open new opportunities for all, especially for the region’s disadvantaged countries – the least developed countries, the landlocked developing countries, and the small island developing States.

These countries may wish to consider how to use their current endowments to build up their capacities in those industries which have the potential to grow. By taking advantage of new technologies, disadvantaged countries can become more integrated into the global economy. In particular, they should make greater use of communications technology, and particularly the Internet, to develop commercial services, such as transport, telecommunications, and financing, as these sectors in turn can support trade and manufacturing. Meanwhile, all countries in the region can support the disadvantaged countries by enhancing people-to-people connectivity – for example, by encouraging more interactions between students and workers.

As globalization continues, the region’s future will depend on how countries work together. Developing and managing regional networks therefore requires cross-country consensus. Governments need to further study and refine the strategies outlined in this study, and agree on the most appropriate sequencing of actions. And to better respond to the rapid evolution of these networks, national Governments and international organizations alike will have to strengthen institutional coordination. This should extend to people-to-people networks involving academia, the private sector and civil society – which can influence the direction and effectiveness of intergovernmental cooperation.

Ultimately, national Governments must take the lead in forging regional connectivity, both by making the necessary changes in their national policies, as well as by actively participating in regional initiatives on connectivity. ESCAP can support their efforts by providing a neutral platform for frank and informed discussions among relevant stakeholders. In this regard, the multi-sectoral Expert Working Groups being established in accordance with the 2013 Ministerial Declaration on Regional Economic Cooperation and Integration in Asia and the Pacific can help Governments to identify the best approaches for implementing these regional strategies.

ACKNOWLEDGEMENTS

This report was prepared under the overall direction and guidance of Shamshad Akhtar, Under-Secretary-General of the United Nations and Executive Secretary of the Economic and Social Commission for Asia and the Pacific (ESCAP), and under the substantive direction of Anisuzzaman Chowdhury, Director of the Macroeconomic Policy and Development Division. The core team led by Muhammad Hussain Malik, included Shuvojit Banerjee, Sudip Ranjan Basu, Clovis Freire, Steve Loris Gui-Diby, Alberto Isgut, Zheng Jian, Daniel Jeongdae Lee, Oliver Paddison, Kiatkanid Pongpanich, Vatcharin Sirimaneetham and Marin Yari. Others who contributed from the Division were Aynul Hasan, Syed Nuruzzaman and Katinka Weinberger.

ESCAP staff who contributed substantively include: Rae Kwon Chung (Director), Masakazu Ichimura, Kohji Iwakami, Sungmin Kim, Hongpeng Liu, Aneta Nikolova, Kareff Rafisura, Hitomi Rankine, Donovan Storey and Sergey Tulinov of the Environment and Development Division; Shamika N. Sirimanne (Director), Tiziana Bonapace, Remi Lang and Dominic Leong of the Information and Communications Technology and Disaster Risk Reduction Division; Nanda Krairiksh (Director), Patrik Andersson, Chol O Han, Maren Jimenez, Manuel Mejido, Ermina Sokou and Vanessa Steinmayer of the Social Development Division; Krisana Boonpairoje, Rikke Munk Hansen, Eric Hermouet, Nongnuch Hiranyapaisansakul, Marko Javorsek, Marisa Limawongpranee, Sean Lovell, Nixie Mabanag, Teerapong Praphotjanaporn and Panpaka Supakalin of the Statistics Division; Ravi Ratnayake (Director), Witada Anukoonwattaka, Yann Duval, Mia Mikic and Heini Salonen of the Trade and Investment Division; Dong-Woo Ha (Director), Pierre Chartier, Sandeep Raj Jain, Fedor Kormilitsyn, Yuwei Li, Peter O'Neill, A.S.M. Abdul Quium, Heini Suominen, Mathieu Verougstraete and Fuyo Jenny Yamamoto of the Transport Division; Iosefa Maiava (Director), Sanjesh Naidu, Siope Ofa and David Smith of the ESCAP Pacific Office; Kilaparti Ramakrishna (Director), Yejin Ha and Sangmin Nam of the ESCAP Subregional Office for East and North-East Asia; Nikolay Pomoshchnikov (Director) and Bekhzod Rakhmatov of the ESCAP Subregional Office for North and Central Asia; and Nagesh Kumar (Director) and Matthew Hammill of the ESCAP Subregional Office for South and South-West Asia.

Valuable advice, comments and inputs were received from staff of the United Nations who include: Sukti Dasgupta and Phu Huynh of the International Labour Organization.

The following consultants provided inputs: Filomeno S. Sta. Ana III, Head, Action for Economic Reforms, the Philippines; Derek Atkinson, Australia; Manas Bhattacharya, India; Ahmad R. Jalali-Naini, Chairman, Economics Department, Institute for Management and Planning Studies, the Islamic Republic of Iran; Rina Oktaviani, Professor, Department of Economics, Faculty of Economics and Management, Bogor Agricultural University, Indonesia; Hafiz A. Pasha, Dean, School of Social Sciences, Beaconhouse National University, Pakistan; Biman C. Prasad, Professor and Chair, Oceania Development Network, University of the South Pacific, Fiji; Mahesh C. Uniyal, India; and A. Erinc Yeldan, Professor and Dean, Faculty of Economics, Yasar University, Turkey.

The report benefited from extensive comments and suggestions from an eminent group of policymakers, scholars and development practitioners, acting as external peer reviewers, namely: Prabir De, Professor

and Coordinator of ASEAN-India Centre, Research and Information System for Developing Countries, India; Bakhodur Eshonov, Director, Center for Economic Research, Uzbekistan; Saman Kelegama, Executive Director, Institute of Policy Studies, Sri Lanka; Abu Saeed Khan, Senior Policy Fellow, LIRNEasia, Sri Lanka; Ashfaq H. Khan, Principal and Dean, NUST Business School, Pakistan; Tagir Khuziyatov, Deputy Vice-President for International Affairs, Far Eastern Federal University, the Russian Federation; Sangkyom Kim, Vice President, Korea Institute for International Economic Policy, Republic of Korea; Pisit Puapan, Director of Macroeconomic Analysis Division, Fiscal Policy Office, Ministry of Finance, Thailand; Rathin Roy, Director, National Institute of Public Finance and Policy, India; Peter Warr, John Crawford Professor of Agricultural Economics and Head, Arndt-Corden Department of Economics, Australian National University, Australia; John Weeks, Professor Emeritus, School of Oriental and African Studies, University of London, United Kingdom; Christian Wilk, General Manager, Metacognition Consulting, Thailand; and Shunli Yao, Director, Institute for Applied International Trade, China.

Achara Jantarasaengaram, Pannipa Ongwisedpaiboon and Amornrut Supornsinchai of the Macroeconomic Policy and Development Division; and Srisakul Kanjanabus and Trygve Morset of the Transport Division, ESCAP, provided research assistance.

The manuscript was edited by Orestes Plasencia, Robert Blackwell, Alan Cooper and John Loftus, Editorial Unit of ESCAP. The graphic design was created by Nattawarath Hengviriyapanich, and the layout and printing were provided by Clung Wicha Press.

Sutinee Yeamkitpibul, supported by Patchara Arunsuwannakorn, Metinee Hunkosol, Chawarin Klongdee, Anong Pattanathanes and Woranut Sompitayanurak of the Macroeconomic Policy and Development Division proofread the manuscript and undertook all administrative processing necessary for the issuance and launch of the publication.

Francyne Harrigan, Katie Elles, Francesca Ross and Chavalit Boonthanom of the ESCAP Strategic Communications and Advocacy Section coordinated the launch and dissemination of the report.

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EXPLANATORY NOTES

Analyses in the *Economic and Social Survey of Asia and the Pacific 2014* are based on data and information available up to the middle of June 2014.

Groupings of countries and territories/areas referred to in the present issue of the *Survey* are defined as follows:

- ESCAP region: Afghanistan; American Samoa; Armenia; Australia; Azerbaijan; Bangladesh; Bhutan; Brunei Darussalam; Cambodia; China; Cook Islands; Democratic People's Republic of Korea; Fiji; French Polynesia; Georgia; Guam; Hong Kong, China; India; Indonesia; Iran (Islamic Republic of); Japan; Kazakhstan; Kiribati; Kyrgyzstan; Lao People's Democratic Republic; Macao, China; Malaysia; Maldives; Marshall Islands; Micronesia (Federated States of); Mongolia; Myanmar; Nauru; Nepal; New Caledonia; New Zealand; Niue; Northern Mariana Islands; Pakistan; Palau; Papua New Guinea; Philippines; Republic of Korea; Russian Federation; Samoa; Singapore; Solomon Islands; Sri Lanka; Tajikistan; Thailand; Timor-Leste; Tonga; Turkey; Turkmenistan; Tuvalu; Uzbekistan; Vanuatu; and Viet Nam
- Developing ESCAP region: ESCAP region excluding Australia, Japan, New Zealand and North and Central Asian economies
- Developed ESCAP region: Australia, Japan and New Zealand
- Least developed countries: Afghanistan, Bangladesh, Bhutan, Cambodia, Kiribati, Lao People's Democratic Republic, Myanmar, Nepal, Solomon Islands, Timor-Leste, Tuvalu and Vanuatu
- Landlocked developing countries: Afghanistan, Armenia, Azerbaijan, Bhutan, Kazakhstan, Kyrgyzstan, Lao People's Democratic Republic, Mongolia, Nepal, Tajikistan, Turkmenistan and Uzbekistan
- East and North-East Asia: China; Democratic People's Republic of Korea; Hong Kong, China; Japan; Macao, China; Mongolia and Republic of Korea
- North and Central Asia: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Uzbekistan
- Pacific: American Samoa, Australia, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, New Caledonia, New Zealand, Niue, Northern Marina Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu
- Pacific island developing economies: Pacific excluding Australia and New Zealand
- Small island developing states: Cook Islands, Fiji, Kiribati, Maldives, Marshall Islands, Micronesia (Federated States of), Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu and Vanuatu
- South and South-West Asia: Afghanistan, Bangladesh, Bhutan, India, Iran (Islamic Republic of), Maldives, Nepal, Pakistan, Sri Lanka and Turkey
- South-East Asia: Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste and Viet Nam

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Many figures used in the *Survey* are on a fiscal year basis and are assigned to the calendar year which covers the major part or second half of the fiscal year.

Growth rates are on an annual basis, except where indicated otherwise.

Reference to "tons" indicates metric tons.

References to dollars (\$) are to United States dollars, unless otherwise stated.

The term "billion" signifies a thousand million. The term "trillion" signifies a million million.

In the tables, two dots (..) indicate that data are not available or are not separately reported; a dash (-) indicates that the amount is nil or negligible; and a blank indicates that the item is not applicable.

In dates, a hyphen (-) is used to signify the full period involved, including the beginning and end years, and a stroke (/) indicates a crop year, fiscal year or plan year. The fiscal years, currencies and 2013 exchange rates of the economies in the ESCAP region are listed in the following table:

<i>Country or area in the ESCAP region</i>	<i>ISO Alpha-3 code</i>	<i>Fiscal year</i>	<i>Currency and abbreviation</i>	<i>Rate of exchange for \$1 as of December 2013</i>
Afghanistan	AFG	21 March to 20 March	afghani (Af)	56.01
American Samoa	ASM	..	United States dollar (\$)	1.00
Armenia	ARM	1 January to 31 December	dram	405.64
Australia	AUS	1 July to 30 June	Australian dollar (\$A)	1.13
Azerbaijan	AZE	1 January to 31 December	Azerbaijan manat (AZM)	0.78
Bangladesh	BGD	1 July to 30 June	taka (Tk)	77.75
Bhutan	BTN	1 July to 30 June	ngultrum (Nu)	61.90
Brunei Darussalam	BRN	1 January to 31 December	Brunei dollar (B\$)	1.27
Cambodia	KHM	1 January to 31 December	riel (CR)	3 995.00
China	CHN	1 January to 31 December	yuan (Y)	6.10
Cook Islands	COK	1 April to 31 March	New Zealand dollar (\$NZ)	1.22
Democratic People's Republic of Korea	PRK	..	won (W)	97.79
Fiji	FJI	1 January to 31 December	Fiji dollar (F\$)	1.90
French Polynesia	PYF	..	French Pacific Community franc (FCFP)	87.11
Georgia	GEO	1 January to 31 December	lari (L)	1.74
Guam	GUM	1 October to 30 September	United States dollar (\$)	1.00
Hong Kong, China	HKG	1 April to 31 March	Hong Kong dollar (HK\$)	7.75
India	IND	1 April to 31 March	Indian rupee (Rs)	61.90
Indonesia	IDN	1 April to 31 March	Indonesian rupiah (Rp)	12 189.00
Iran (Islamic Republic of)	IRN	21 March to 20 March	Iranian rial (RIs)	24 774.00
Japan	JPN	1 April to 31 March	yen (¥)	105.30
Kazakhstan	KAZ	1 January to 31 December	tenge (T)	154.06
Kiribati	KIR	1 January to 31 December	Australian dollar (\$A)	1.13
Kyrgyzstan	KGZ	1 January to 31 December	som (som)	49.25
Lao People's Democratic Republic	LAO	1 October to 30 September	new kip (NK)	8 013.92
Macao, China	MAC	1 July to 30 June	pataca (P)	7.99
Malaysia	MYS	1 January to 31 December	ringgit (M\$)	3.28
Maldives	MDV	1 January to 31 December	rufiyaa (Rf)	15.41
Marshall Islands	MHL	1 October to 30 September	United States dollar (\$)	1.00
Micronesia (Federated States of)	FSM	1 October to 30 September	United States dollar (\$)	1.00
Mongolia	MNG	1 January to 31 December	tugrik (Tug)	1 659.34
Myanmar	MMR	1 April to 31 March	kyat (K)	987.00
Nauru	NRU	1 July to 30 June	Australian dollar (\$A)	1.12
Nepal	NPL	16 July to 15 July	Nepalese rupee (NRs)	98.97
New Caledonia	NCL	..	French Pacific Community franc (FCFP)	87.11
New Zealand	NZL	1 April to 31 March	New Zealand dollar (\$NZ)	1.22
Niue	NIU	1 April to 31 March	New Zealand dollar (\$NZ)	1.22
Northern Mariana Islands	MNP	1 October to 30 September	United States dollar (\$)	1.00
Pakistan	PAK	1 July to 30 June	Pakistan rupee (PRs)	105.68
Palau	PLW	1 October to 30 September	United States dollar (\$)	1.00
Papua New Guinea	PNG	1 January to 31 December	kina (K)	2.42

<i>Country or area in the ESCAP region</i>	<i>ISO Alpha-3 code</i>	<i>Fiscal year</i>	<i>Currency and abbreviation</i>	<i>Rate of exchange for \$1 as of December 2013</i>
Philippines	PHL	1 January to 31 December	Philippine peso (P)	44.41
Republic of Korea	KOR	1 January to 31 December	won (W)	1 055.60
Russian Federation	RUS	1 January to 31 December	ruble (R)	32.73
Samoa	WSM	1 July to 30 June	tala (WS\$)	2.34
Singapore	SGP	1 April to 31 March	Singapore dollar (S\$)	1.27
Solomon Islands	SLB	1 January to 31 December	Solomon Islands dollar (SI\$)	7.29
Sri Lanka	LKA	1 January to 31 December	Sri Lanka rupee (SL Rs)	130.75
Tajikistan	TJK	1 January to 31 December	somoni	4.77
Thailand	THA	1 October to 30 September	baht (B)	32.81
Timor-Leste	TLS	1 July to 30 June	United States dollar (\$)	1.00
Tonga	TON	1 July to 30 June	pa'anga (T\$)	1.86
Turkey	TUR	1 January to 31 December	Turkish lira (LT)	2.14
Turkmenistan	TKM	1 January to 31 December	Turkmen manat (M)	2.85
Tuvalu	TUV	1 January to 31 December	Australian dollar (\$A)	1.12
Uzbekistan	UZB	1 January to 31 December	Uzbek som (som)	2 202.00
Vanuatu	VUT	1 January to 31 December	vatu (VT)	97.86
Viet Nam	VNM	1 January to 31 December	dong (D)	21 036.00

Sources: United Nations, *Monthly Bulletin of Statistics*. Available from <http://unstats.un.org/unsd/mbs/app/DataSearchTable.aspx> (accessed 15 June 2014); and national sources.

ABBREVIATIONS

ABF	Asian Bond Fund
ABMI	Asian Bond Markets Initiative
ACSS	ASEAN Community Statistical System
ADB	Asian Development Bank
ADBI	Asian Development Bank Institute
AEC	ASEAN Economic Community
AEH	Asian energy highway
AHSOM	ASEAN Heads of Statistical Offices Meeting
AIF	ASEAN Infrastructure Fund
AIIB	Asian Infrastructure Investment Bank
APAIE	Asia-Pacific Association for International Education
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
ASEAN+3	ASEAN plus China, Japan and the Republic of Korea
ASW	ASEAN Single Window Initiative
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
BRICS	Brazil, Russian Federation, India, China and South Africa
CAREC	Central Asia Regional Economic Cooperation
CDB	China Development Bank
CIS	Commonwealth of Independent States
CLMV	Cambodia, Lao People's Democratic Republic, Myanmar and Viet Nam
CMIM	Chiang Mai Initiative Multilateralization
CO ₂	carbon dioxide
DTAA	double taxation avoidance agreement
ECB	European Central Bank
ECO	Economic Cooperation Organisation
EMEAP	Executives' Meeting of East Asia and Pacific Central Banks Group
ESCAP	Economic and Social Commission for Asia and the Pacific
EU	European Union
EURASEC	Eurasian Economic Community
FATS	Framework for Action on Transport Services
FDI	foreign direct investment
FTA	free trade agreement

ABBREVIATIONS *(continued)*

G20	Group of Twenty
GDP	gross domestic product
GER	gross enrolment ratio
GHI	general health insurance
GLS	generalized least squares
GMS	Greater Mekong Subregion
GNP	gross national product
GPS	Global Positioning System
GST	general sales tax
GW	gigawatt
HVDC	high-voltage direct current
ICD	inland container depot
ICP	integrated check posts
ICT	information and communications technology
IEA	International Energy Agency
IFC	International Finance Corporation
ILO	International Labour Organization
IMF	International Monetary Fund
IP	Internet protocol
IRU	International Road Transport Union
IT	information technology
ITU	International Telecommunication Union
LDCs	least developed countries
LLDCs	landlocked developing countries
LNG	liquefied natural gas
M&A	mergers and acquisitions
MDGs	Millennium Development Goals
MFN	most favoured nation
NEAL-NET	Northeast Asia Logistics Information Service Network
NTMs	non-tariff measures
OECD	Organisation for Economic Co-operation and Development
PAA	Pan Asian E-commerce Alliance
PIF	Pacific Islands Forum

ABBREVIATIONS *(continued)*

PPP	purchasing power parity
PPPs	public-private partnerships
RCEP	Regional Comprehensive Economic Partnership
RFID	radio-frequency identification
Rio+20	United Nations Conference on Sustainable Development
RSE	recognized seasonal employer
SAARC	South Asian Association for Regional Cooperation
SAFTA	South Asian Free Trade Agreement
SASEC	South Asia Subregional Economic Cooperation
SCADA	supervisory control and data acquisition
SCO	Shanghai Cooperation Organisation
SEZ	special economic zones
SIDS	small island developing States
SMEs	small and medium-sized enterprises
SOE	State-owned enterprise
SPC	Secretariat of the Pacific Community
TAR	Trans-Asian Railway
TASIM	Trans-Eurasian Information Superhighway
TIN	taxpayer identification number
TPP	Trans-Pacific Partnership Agreement
UHNWIs	ultra-high net worth individuals
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNNExT	United Nations Network of Experts
UNWTO	United Nations World Tourism Organization
US\$	United States dollar
VAT	value added tax
WCF	World Chamber Federation
WHO	World Health Organization
WTO	World Trade Organization

PART I

GROWTH PROSPECTS AND CHALLENGES

248.23

중국, SHANGHAI B
China

1,978.84

한국, KOSPI
Korea

486.50

한국, KOSDAQ
Korea

22,800.23

홍콩, HANG SENG
HongKong

15,817.99

일본, NIKKEI 225
Japan

3,078.58

싱가폴, STI
Singapore

5,255.60

호주, ALL ORDS
Australia

MAINTAINING GROWTH MOMENTUM AMID UNCERTAINTIES AND INTERNAL CHALLENGES

1

In 2014, the average growth rate of the developing economies of Asia and the Pacific is forecast to rise to 5.8%. This represents a modest increase of 0.2 percentage points over that of 2013. Although the developing Asia-Pacific economies continue to anchor the global economic recovery, both external and internal factors are holding back their faster growth. Besides slow recovery in advanced economies, capital outflows due to the reversal of monetary policy in the United States of America pose difficulties for a number of economies. Growth in some large developing economies in the region is also challenged by infrastructure shortages, large budget deficits, inflationary pressure and rising inequality.

Growth and macroeconomic stability in the region continue to be affected by growth prospects and policies of the developed world. While growth strengthened in major developed economies in 2013, it still remains weak and continues to have an impact on exports from the region. Concerns about the reduction in quantitative easing by the United States Federal Reserve (or the bond-buying programme) referred to as “tapering” caused significant volatility in currency and asset markets first in September 2013 and then again in January 2014.

The constrained domestic growth prospects of the region have underlined the importance of productive countercyclical government spending

Domestic challenges also had an impact on some of the region’s major economies in 2013. Infrastructure shortages have led to significant gaps in productive capacity. These gaps have contributed to inflationary pressures and rising balance-of-payments deficits. Asset prices have been driven up in emerging economies in recent years by surges in capital inflows following quantitative easing in the developed world. On the other hand, some of those economies experienced rapid outflows of large amounts of capital at the first sign of a possible reversal of United States monetary policy. These events point to the vulnerability of these emerging economies’ domestic financial sectors. Rising inequality has contributed sharply to growing household debt in a number of economies. This has increased the vulnerability of their populations to economic shocks, as well as contributed to current account imbalances.

The constrained domestic growth prospects of the region have underlined the importance of productive countercyclical government spending to support inclusive growth and sustainable development. Indeed, achieving inclusive and sustainable development will be the centre-piece of concerns of the entire international community as the development agenda is mapped out. A critical challenge within the region and globally will be locating the funding

for the necessary development programmes. A number of countries in the region, especially in South and South-West Asia, do not currently have enough fiscal space for such additional spending. Policies to increase domestic resource mobilization, in particular fiscal space, as discussed in chapter 3, will therefore be critical.

There is also a need to deepen regional economic cooperation and integration and utilize new and innovative mechanisms to finance development. A significant step in this regard has been recent renewed interest among the member States in the creation of a regional financing agency for infrastructure. In October 2013, the President of China, Mr. Xi Jinping, proposed an Asian infrastructure investment bank to promote connectivity and economic integration.¹ ESCAP has been proposing such a bank for a number of years to effectively deploy the region’s large foreign exchange reserves to meet its huge investment needs. This issue, among others, was considered at the Ministerial Conference on Regional Economic Cooperation and Integration in Asia and the Pacific, convened by ESCAP in December 2013. It was proposed that working groups of experts would be formed to design and present proposals to Governments in the region on a new financial architecture and other key development challenges.

The following sections consider the challenges facing the region in greater detail and then offer a number of policy recommendations. The first of these begins with a discussion of growth prospects in developed countries and the potential for spillover of developed countries’ policies to affect growth and capital flows in the region. Growth and inflation prospects in the region, including in some major regional economies, are then discussed. That section is followed by the outlook for regional trade developments – both external and intraregional. Prospects for foreign capital flows, including foreign direct investment (FDI), remittances and tourism are discussed next. Then the discussion is shifted to major socio-economic challenges in the region, which include the problem of job creation and its quality and

the persistent problem of inequality. Subsequently, the first set of policy recommendations outlines the potential for productive government spending to directly support growth in the short term while helping to reduce the domestic challenges affecting growth in the long term. The second set of policy recommendations addresses youth unemployment, a particularly important part of the jobs challenge. The last set of policy recommendations outlines policies to manage the risks from volatility in capital flows to the region.

remains a concern for the region. The United States saw annual growth dip to 1.9% in 2013 from 2.8% in the previous year (see figure 1.1). The eurozone experienced less annual growth contraction in 2013 of 0.4% as compared with 0.6% in the previous year. Significantly, the eurozone emerged from recession in the second quarter of 2013, although growth remained weak. Japan's annual growth increased in 2013 to 1.5% from 1.4% in the previous year. Japan's economy recorded strong growth in the first part of 2013 following the early rounds of stimulus by the new administration. However, growth was less rapid in later months.

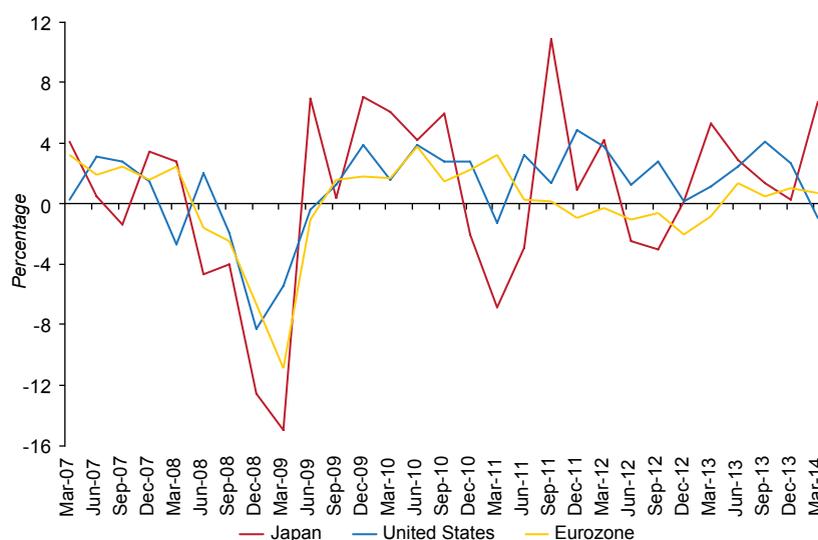
GROWTH RECOVERY UNDER PRESSURE

Slow growth and policies of developed economies having an impact on the region

Growth in the region was affected by low growth in the developed economies in 2013. Given the importance of these economies in terms of trade and investment linkages, their continued slow recovery

Consensus projections for global growth indicate a moderate increase in growth for the developed economies in 2014. In this regard, the G20 economic officials in February 2014 announced the intention of the grouping to raise its collective GDP by 2% above the current trajectory over five years. They proposed to do so by enacting coordinated policies in a number of key areas: investment, employment, trade and macroeconomic fundamentals.²

Figure 1.1. Real GDP growth of major developed economies, quarter-on-quarter, 2007-2014



Sources: ESCAP, based on seasonally adjusted data from the United States Department of Commerce, *National Income and Product Accounts Gross Domestic Product, First Quarter 2014 (second estimate)* (Washington, D.C., Bureau of Economic Analysis, 2014); Japan, Cabinet Office, *Gross Domestic Product: First Quarter 2014 (First Preliminary)* (Tokyo, Economic and Social Research Institute, 2014); and European Commission, "Spring 2014 forecast: Growth becoming broader-based" (Brussels, 2014). Available from http://europa.eu/rapid/press-release_IP-14-513_en.htm.

Note: GDP growth rates are based on annualized data.

It will be challenging to significantly increase growth in the major developed economies in the near term. For the United States, a strong self-sustaining recovery has historically depended on consumer spending. However, with joblessness remaining high, a surge in consumer demand is unlikely to occur. The situation is exacerbated by a rise in inequality, with the well-off having benefited disproportionately from recent growth.³ As the well-off are unlikely to consume as great a proportion of their increased income as those on lower incomes, the increase in effective demand is likely to be less than would have been the case had there been no increase in inequality.

It will be challenging to significantly increase growth in the major developed economies in the near term

The eurozone is also subject to challenges in 2014. The unemployment rate is still high in many eurozone countries and is contributing to the lack of self-sustaining consumption-led growth. While eurozone financial markets were reasonably calm in 2013, there remains the risk of macroeconomic instability resulting from any renewed loss of confidence by investors in the progress of debt resolution. Furthermore, with inflation in the eurozone running at a worryingly low 0.5% as of May 2014, there is uncertainty regarding the possible risk of deflation. The prospect of deflation will increase if the referral of the Federal Constitutional Court of Germany to the Court of Justice of the European Union in February 2014 concerning the constitutionality of the European Central Bank's outright monetary transactions scheme results in the Bank being unable to pursue expansionary monetary policy.

Within the Asian and Pacific region, the growth outlook for Japan will depend on the impact of the ongoing reform programme. The economy recorded an upturn in its growth with a set of economic stimulus policies which came into effect in 2013. The first so-called "arrow" of the policies was monetary stimulus through a programme of bond-buying by

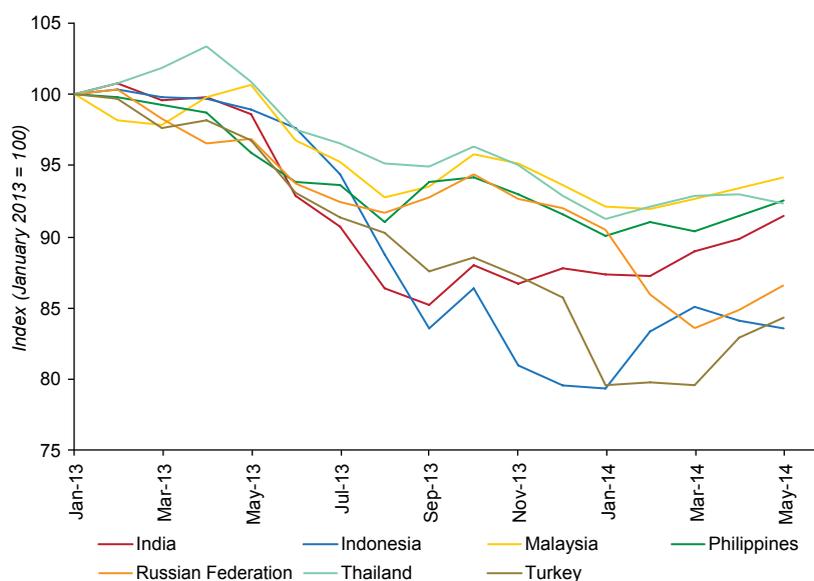
the Bank of Japan, with the objective of achieving an inflation rate of 2%. As a proportion of GDP, this has been the world's largest-ever quantitative easing programme. The injection of money into the domestic financial system led to a boost in asset prices, and thus household wealth and consumer expenditure. Monetary expansion also caused an exchange rate depreciation that significantly boosted exports. The second "arrow" of policies was a large fiscal stimulus package of 10.3 trillion yen (\$116 billion) for infrastructure projects and stimulating private investment. The third "arrow", to be presented to the legislature for approval in mid-2014, is a growth strategy comprising a range of policies to change the country's economic structure. An accompanying reform during this phase was an increase in consumption tax from 5% to 8% effective from 1 April 2014. In 1997, when Japan last increased the consumption tax, that measure slowed consumption demand considerably and aborted the country's nascent recovery. It is possible that there will be a dip in growth for the second quarter of 2014 (April-June) following the tax rise, a dip similar to the one that occurred in 1997. However, more important will be the extent of an expected rebound in the third quarter of 2014; it is too early to judge whether other government policies will continue to cushion or offset the impact of the consumption tax hike.

Apart from slow growth in developed economies, policies in the developed world also had significant impacts on the region through spillovers from the tapering of quantitative easing by the United States. In January 2014 there was a bout of capital outflows from the asset markets of the region. The greatest falls in equity markets were in Turkey (7.7%) and in India (4.4%). This followed a more widespread exit of funds in the third quarter of 2013 in expectation that tapering would start in September 2013. In the equity markets, the greatest decline was seen in Turkey (25%) during the period June-August 2013, followed by Indonesia and Thailand (nearly 20%). In August 2013 alone, stock market capitalization in seven economies in the region declined by \$323 billion as compared with the previous month.

Capital outflows from the region are partly a pre-emptive move by investors in preparation for the normalization of monetary policy by the United States. Tapering represents the first step in normalization. During tapering, monetary policy is still accommodative although less so every month, as the amount of extra liquidity provided by the Federal Reserve is reduced from \$85 billion by \$10 billion monthly. The next stage in normalization will be an increase in interest rates from zero, which will represent the actual tightening of United States monetary policy. There is uncertainty regarding when the interest rate rise will come, though it is believed according to the forward guidance of the Federal Reserve to be most likely sometime in 2015. As interest rates rise in the United States, capital is expected to flow back to that economy from the region. The repatriation of capital to the United States would lead to falls in asset prices in the region. Investors seek to pre-empt the falls in the value of their assets in the region by exiting the markets as early as possible when there are changes in expectations regarding the timing of monetary policy normalization.

Monetary authorities in the region have managed the impact on exchange rates of capital outflows through a combination of approaches – allowing for depreciation, using foreign exchange reserves and raising interest rates. Turkey allowed its currency to fall, vis-à-vis the United States dollar, by 7% in January 2014. In the period June-August 2013, the largest depreciations occurred in Indonesia (10%), followed by India, Malaysia, Turkey, the Philippines and Thailand (see figure 1.2). To prevent excessive depreciation, countries managed the extent of currency falls by spending some of their foreign exchange reserves. Indonesia, Malaysia and India recorded the largest declines in their foreign exchange reserves (see figure 1.3), having used between \$10.9 billion and \$6.9 billion over the period June-August 2013. Another measure used by some countries to manage depreciation was to raise interest rates and thus increase the attractiveness of their currencies. Interest rates were also raised to manage the inflationary impact of depreciation on domestic prices. In January 2014, Turkey sharply raised its overnight lending rate from 7.75% to 12% while India increased its repo rate by 25 basis points to

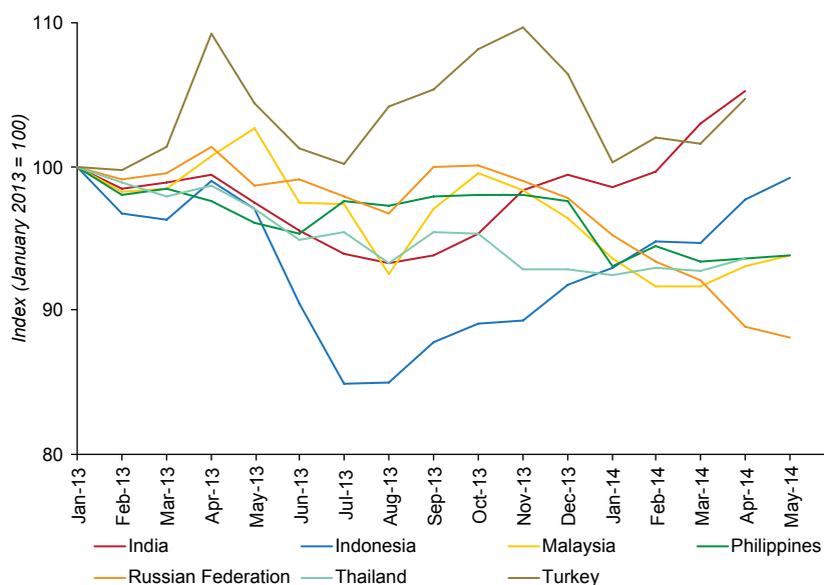
Figure 1.2. Exchange rate indices in selected developing Asia-Pacific economies, 2013-2014



Source: ESCAP, based on data from CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014).

Notes: These indices are calculated vis-à-vis the United States dollar. Lower value signifies depreciation against the United States dollar.

Figure 1.3. Foreign reserve indices in selected developing Asia-Pacific economies, 2013-2014



Source: ESCAP, based on data from CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014).

8%. During the earlier period of capital outflows, Indonesia increased its reference rate between May and November 2013 from 5.8% to 7.5%.

The degree to which capital has exited economies has been related to perceived weaknesses in their macroeconomic fundamentals, as well as to the size of their financial markets. Investors most penalized those economies, such as India and Indonesia, which were perceived as having relatively weak or deteriorating macroeconomic fundamentals. One key weakness for these economies was excessive dependence on foreign short-term portfolio capital to fund balance of payments deficits. Another key weakness of these economies was high inflation which required tight monetary policy. This in turn dampened growth prospects. Apart from the influence of particular weaknesses of economies on the decisions of investors, the degree of capital outflow has been observed to be related to the size and liquidity of their capital markets.⁴ Generally, countries with large and open financial markets experience greater outflows, as compared with less developed economies having relatively closed financial markets. This is because investors are able to rebalance their portfolios more easily and conveniently in the case

of more liquid and open financial markets. This is not to say that economies should be wary of more open financial markets but that they should ensure sufficient policy space to engage in countercyclical measures to thwart the negative impacts of capital outflows and put in place macroprudential measures for managing capital flows.

Further possible financial market turbulence triggered by the normalization of monetary policy in the United States may lead to significant, though differentiated, impacts on countries in the region. ESCAP analysis suggests that, under a worst-case scenario, the effects of such financial market turbulence could cut annual GDP growth by up to 0.7-0.9 percentage points in the most-affected economies — India, Malaysia, the Russian Federation, Thailand and Turkey (see box 1.1). Among the components of growth, fixed investment is most affected due to rising borrowing costs. The adverse impact on GDP growth would be larger than these first-round estimates for economies where monetary policy tightening was deemed necessary to stem capital flight. For example, annual growth in the Russian Federation could slow by as much as 1.3 percentage points in such a case, and in Thailand by 1.1 percentage points.

Box 1.1. How would financial market turbulence due to monetary policy normalization in the United States affect growth performance in Asia and the Pacific?

An attempt is made here to assess the impact of possible financial market turbulence, triggered by the normalization of monetary policy in the United States, on economic growth in selected developing Asia-Pacific economies. The first stage of normalization is the tapering of quantitative easing; this process started in January 2014. In the next stage, interest rates will be increased from zero. There is uncertainty regarding when the interest rate rise will occur, though it is believed most likely to be sometime in 2015. A mismatch between market expectations on the timing, pace and magnitude of the normalization and actual policy announcement, or even speculation about the timing of the announcement, could lead to financial market turbulence, as was evident in many economies in the region in mid-2013. Using a macroeconomic simulation exercise, two possible scenarios of market turbulence are analysed below.

Under the “high-case scenario”, the magnitude of financial sector shocks, in terms of lower share prices and currency depreciation, is assumed to mimic what was observed during the months from May to August 2013, the period when the markets believed that the tapering would commence in September. It is further assumed that, as global financial liquidity tightens, bank lending falls and confidence weakens. There is also a generalized increase in risk aversion against emerging economies. Such a combination of shocks is set for a time period of one quarter after the policy announcement or speculation about the announcement. This scenario is also feasible when the normalization is as expected but policy responses by affected economies are viewed as too slow or ineffective.

Under the “low-case scenario”, communication on a change in policy direction is largely clear so the market is assumed mostly to have factored in the normalization decision. Market reactions and perceived risks are thus assumed to be more modest than in the high-case scenario. This scenario also accounts for a situation where the pace and/or the magnitude of the normalization are milder than market expectations.

It is assumed that turbulence resulting from the normalization decision will constrain output growth in emerging Asia-Pacific economies through at least two channels. First, corporate borrowing rates would rise amid tighter financial liquidity and heightened systemic risk premiums.^a The second channel would be the effect of deteriorating market confidence and increased economic uncertainty on consumer spending and fixed investment.

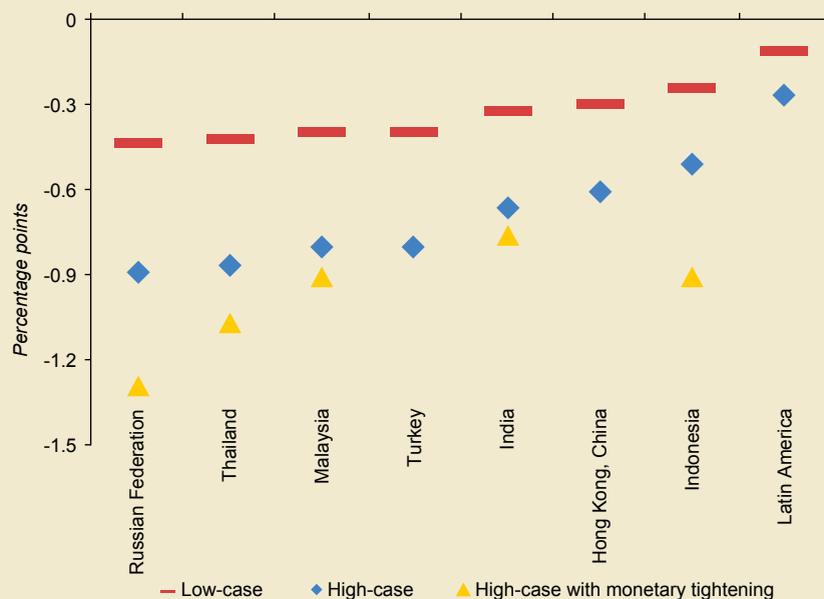
The figure below depicts the differences between estimated GDP growth rates under the two scenarios and baseline growth rates, as projected by the Global Economic Model of Oxford Economics.^b Under the high-case scenario, financial sector disruptions relating to the normalization decision could cut annual GDP growth by up to 0.7-0.9 percentage points in India, Malaysia, the Russian Federation, Thailand and Turkey. The impact would be sizeable, especially for economies where near-term economic growth is projected to be below potential, such as in the Russian Federation and Thailand, due to political factors. The simulation also suggests that the estimated output growth effect on emerging Asia-Pacific economies would be larger than for a group of major economies in Latin America, which ranges for the latter between 0.1 and 0.3 percentage points across the two scenarios.

The negative impact on output growth in economies occurs under these scenarios despite an increase in exports due to weaker currencies. This is because the export effect is outweighed by the negative impact on domestic demand components of GDP. Among the components of domestic demand, the greatest impact is on fixed investment due to higher borrowing costs. Indonesia, Malaysia, the Russian Federation and Thailand are likely to experience the greatest declines in fixed investment growth. Under the high-case scenario, annual fixed investment growth in these economies would be close to 3 percentage points lower than the baseline. Industrial output growth would decelerate and job losses would be higher than in the other economies considered

Box 1.1. (continued)

here. Together with rising joblessness and borrowing costs, higher inflation amid currency depreciation also would put pressure on household spending. Annual private consumption growth in all economies here is estimated to be 0.7-2 percentage points lower under the high-case scenario relative to the baseline.

Figure A. Differences between estimated GDP growth rates under simulation scenarios and baseline GDP growth rates



Source: ESCAP, based on the Global Economic Model of Oxford Economics.

Notes: "Latin America" refers to the GDP-weighted average of the estimated impact in Brazil, Chile and Mexico. These three economies alone account for more than 60% of total output in Latin America.

If monetary policy also needs some tightening in response to capital flight, the growth deceleration for economies would be even more notable. Sharp tightening was necessary, for example, by Turkey in January 2014 when the overnight lending rate had to be raised by 425 basis points. To restore financial market stability, an economy may have to raise its short-term interest rate level to match that in other emerging economies perceived as being at risk of capital outflow. The figure above shows, for example, that if the Russian Federation were to increase its interest rate to the level of Turkey, a country with a comparable sovereign credit rating and considered recently at risk of capital outflow, monetary policy tightening would cut annual GDP growth by another 0.4 percentage points, increasing the total impact to 1.3 percentage points. This additional impact would also be large in Indonesia but less so in India as its current interest rate is already relatively high.^c Overall, financial market turbulence that requires monetary tightening could cut annual output growth in selected Asia-Pacific economies by 0.8-1.3 percentage points.

^a Long-term government bond yields in the region jumped in mid-2013 and stayed high towards the end of the year. During this period, there was widespread speculation about normalization although no change in United States monetary policy direction was announced. The yields between April and December 2013 increased by up to 480 basis points in Turkey, 300 basis points in Indonesia and about 100 basis points for most other emerging economies in the region.

^b The 10 economies included in this analysis are those that: (a) have attracted sizeable short-term capital inflows in the recent years; (b) faced falling equity prices and/or currency depreciation to a sizeable extent over May-August 2013 relative to January-April 2013; and (c) recorded sharp rebounds in September 2013 when the tapering did not materialize as had been feared. China is not included here as it did not meet these criteria. However, the liberalization of China's exchange rate and capital account that is not accompanied by appropriate macroprudential measures would also raise the country's exposure to global financial volatility.

^c In the cases of Malaysia and Thailand, their sovereign credit ratings are more favourable than that of Turkey, so the interest rate hike is assumed to match that of South Africa, which has a more comparable credit rating.

Apart from the short-term impact of volatile portfolio capital outflows, the long-term impact of normalization of monetary policy by the United States will be higher external borrowing rates for the region. Long-term interest rates for the United States dollar are expected to rise, which would lead to higher external borrowing costs for economies in the region. Foreign lending to the region has been spurred in recent years by the high liquidity flowing from the developed world (see box 1.2). Foreign lending has been in the form of direct lending by foreign banks to domestic banks and through the purchase by foreigners of domestic corporate and government bonds. The result has been the ability of economies in the region with open financial markets to borrow at historically low interest rates.

Higher external borrowing rates will have a direct impact on sovereign and corporate borrowing of regional economies from abroad. Rising rates will also have an impact on foreign borrowing by local banks for on-lending domestically, which may then in turn have to increase their domestic interest rates. Higher domestic interest rates are likely to have an impact on local business growth generally and especially for small and medium-sized enterprises (SMEs) as they are more dependent on bank lending. These multiple impacts may have a significant impact on overall GDP growth and employment generation in affected economies. If interest rates also need to be raised to prevent excessive capital outflow, there would be further negative impacts on growth and jobs.

Box 1.2. Potential and challenges for Asia-Pacific bond markets^a

With the low interest rates prevailing in advanced economies, the search for yield has led to significant liquidity flows from the developed world to the Asian region. This has had a notable impact on bond markets, particularly on corporate bonds. Thus, while the dominant source of financing remains bank-intermediated credit for companies, corporate bond issuance has accelerated. In 2013, in China it reached \$97.4 billion compared with \$23.6 billion in 2010. During the same timespan, corporate bond issuance increased almost five-fold in India, reaching \$16.8 billion, and it increased to \$15.8 billion in Singapore from \$3.9 billion in 2010. In fact, between 2008 and 2012, annual issuance of corporate bonds in 10 economies in the region increased from \$100 billion to \$512 billion, before declining somewhat to \$480 billion in 2013.^b

Despite these increases, corporate bond markets remain relatively small and underdeveloped in the region compared with those of advanced countries. In 2013, corporate bond market capitalization was less than 20% of GDP in China, Indonesia, the Philippines, Thailand and Viet Nam. In India, it was less than 12% of GDP in 2012. Corporate bond market capitalization exceeded 50% of GDP only in Hong Kong, China; Malaysia; the Republic of Korea; and Singapore.

One consequence of underdeveloped bond markets is that the risks of supplying long-term capital are overly concentrated in the banking sector in the region. This is particularly so as tighter capital requirements under the Third Basel Accord (Basel III), such as higher capital reserve ratios, are likely to reduce the availability of bank financing. Countries need to enhance their capability to supply long-term capital for financing economic development and to ensure financial stability to safely intermediate external flows. Local currency bond markets and regional bond markets must therefore be developed further as they are important instruments for longer-term finance for corporations and for long-term investors, including pension funds and insurance companies.

Local currency bond markets lessen the risk of currency mismatch and maturity mismatch, thereby mitigating against risks associated with the sudden stop of capital inflows. In this regard, it seems that economies in the region have learned from the currency and maturity mismatches that triggered the Asian financial crisis in 1997, as local currency bonds accounted for more than 80% of corporate bonds during 2009 and 2013, compared with less than 30% in Latin America. Yet, in some economies, bonds denominated in foreign currencies continue to carry an important weight, notably in Indonesia, where during this period

Box 1.2. (continued)

more than 80% of corporate bonds were denominated in foreign currencies. Moreover, since 2010 the importance of issuance of foreign-currency denominated bonds has been on the rise. This may be an indication that firms are taking advantage of lower dollar interest rates in recent years. However, greater foreign investor participation in domestic bond markets and more reliance on foreign currency issuance exposes economies to an additional source of capital outflow pressures. It does so by making local markets more sensitive to bond market developments in developed economies, and thereby vulnerable to external shocks.

Notwithstanding the increase in primary issuance of bonds, corporate bond market development is being impeded by low demand and low trading volumes in secondary markets. In part, this may be due to the fact that bond markets are not sufficiently integrated in the region or into the global economy. This hinders an efficient allocation of resources and robs markets of enforcement discipline and insurance mechanisms that exist in more closely integrated markets. Different and heterogeneous legal and regulatory frameworks impede the development of cross-border bond markets that would allow for greater circulation of the region's high savings.

The development and integration of government bond markets is a further critical element of corporate bond market development, particularly as government bonds provide important benchmark yield curves. Several initiatives to create regional government bond markets have taken place in the past, including the Asian Bond Markets Initiative and the Asian Bond Fund 1 and Asian Bond Fund 2.^c Yet, further progress currently remains limited.

Developing bond markets can provide an important source of financing for the region to address its development challenges. Despite having the highest savings rate in the world, most of the region's surplus savings are invested abroad. The region would benefit from greater efforts to develop, strengthen and integrate regional bond markets. This would enable a shift from bank-centric systems towards deep, liquid, efficient and robust financial and capital markets at the national and regional levels that could better mobilize resources from within and outside the region.

^a This box draws upon Levinger and Li (2014) and Turner (2014).

^b These economies comprise China; Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; Taiwan Province of China; Thailand; and Viet Nam.

^c For instance, to strengthen the Association of Southeast Asian Nations (ASEAN), China, Japan and the Republic of Korea (collectively known as ASEAN+3) launched the ASEAN+3 Asian Bond Market Initiative (ABMI) in 2002. In that same year, the Executives' Meeting of East Asia-Pacific (EMEAP) central banks group launched the \$1 billion Asian Bond Fund 1 (ABF 1); ABF 2, which invested in local currency bonds issued by sovereign and quasi-sovereign issuers in the same member economies as those in ABF 1, was launched in 2005.

Region's growth and inflation prospects

The economic growth rate in the region in 2013 increased slightly to 5.6% from 5.3% in 2012. The developing Asia-Pacific economies, having recovered strongly in 2010 with an average growth rate of more than 8%, have seen their annual growth rate dip below 6% starting in 2012. Apart from external pressure on growth in the region because of the slow recovery of the developed economies, growth in Asia and the Pacific in 2013 also suffered due to low growth in some major regional economies

as a result of domestic challenges. For a number of reasons, China, India and Indonesia, which have large domestic markets, experienced relatively low growth in 2013 compared with their strong performance earlier in the decade (see table 1.1). Growth in China remained unchanged at 7.7% in 2013 as compared with the previous year, but was significantly down from the levels recorded in 2011 and earlier. India saw some increase in growth to 4.7% in 2013 from 4.5% in 2012, but it was substantially down from the level in 2011 and even more so compared with 2010. Indonesia

Table 1.1. Selected economies of the ESCAP region: rates of economic growth and inflation, 2010-2014

(Percentage)											
	Real GDP growth						Inflation ^a				
	Average pre-crisis growth 2005-2007	2010	2011	2012	2013	2014 ^b	2010	2011	2012	2013	2014 ^b
East and North-East Asia^c	6.7	7.2	4.0	4.0	4.2	4.1	1.3	2.5	1.4	1.5	2.9
East and North-East Asia (excluding Japan)^c	10.9	9.5	8.0	6.4	6.6	6.6	3.2	5.1	2.6	2.4	3.0
China	12.7	10.4	9.3	7.7	7.7	7.5	3.3	5.4	2.6	2.6	3.1
Democratic People's Republic of Korea	..	..	..	..	..	..	..	..	..	..	..
Hong Kong, China	6.8	7.0	4.8	1.5	2.9	3.5	2.4	5.3	4.1	4.3	4.6
Japan	2.1	4.7	-0.5	1.4	1.5	1.4	-0.7	-0.3	0.0	0.4	2.8
Macao, China	16.5	26.4	21.3	9.1	11.9	11.3	2.8	5.8	6.1	5.5	6.0
Mongolia	8.7	6.5	17.4	12.4	11.7	10.0	10.1	9.2	14.3	10.5	12.0
Republic of Korea	4.8	6.3	3.7	2.3	3.0	4.0	2.9	4.0	2.2	1.3	2.1
North and Central Asia^c	8.2	4.4	4.7	3.8	2.1	1.3	7.0	8.6	5.1	6.7	5.5
North and Central Asia (excluding Russian Federation)^c	13.0	6.7	6.7	5.5	6.5	6.1	7.4	9.4	5.3	6.0	8.2
Armenia	13.6	2.2	4.7	7.2	3.5	4.5	8.2	7.8	2.6	5.8	5.0
Azerbaijan	28.6	5.0	0.1	2.2	5.8	5.0	5.7	8.1	1.1	2.4	4.0
Georgia	10.4	6.3	7.2	6.2	3.2	5.0	7.1	8.5	-0.9	-0.5	4.0
Kazakhstan	9.8	7.0	7.5	5.0	6.0	5.4	7.1	8.3	5.1	5.8	9.3
Kyrgyzstan	3.8	-0.5	6.0	-0.9	10.5	6.5	8.0	16.9	2.8	6.6	7.2
Russian Federation	7.4	4.0	4.3	3.5	1.3	0.5	6.9	8.4	5.1	6.8	5.0
Tajikistan	7.2	6.5	7.4	7.5	7.5	6.0	6.5	12.5	5.8	5.1	7.2
Turkmenistan	12.0	9.2	14.7	11.1	10.1	10.4	10.0	12.0	8.5	9.0	11.0
Uzbekistan	7.9	8.5	8.3	8.2	8.0	8.1	9.4	12.8	13.2	12.1	11.0
Pacific^{c, d}	3.4	2.5	2.4	3.5	2.4	2.9	2.8	3.4	1.7	2.3	2.7
Pacific island developing economies^c	3.2	5.2	7.6	5.3	4.0	4.9	4.6	6.4	2.6	3.7	4.9
Cook Islands	1.2	-3.0	1.0	4.4	3.2	2.2	-0.3	2.2	3.0	1.9	2.5
Fiji	-0.1	3.0	2.7	1.7	3.6	3.8	3.7	7.3	3.4	2.9	3.0
Kiribati	2.1	-0.5	3.3	2.5	2.0	3.0	-3.9	1.5	-3.0	2.0	2.5
Marshall Islands	2.0	5.8	0.6	3.2	0.8	3.0	1.8	5.4	4.3	1.6	1.5
Micronesia (Federated States of)	0.2	2.5	2.1	0.4	0.6	0.5	3.9	4.6	5.8	2.2	2.0
Nauru	-11.8	0.0	3.8	4.9	4.5	10.0	-0.6	-3.5	-0.5	1.4	5.0
Palau	3.4	-1.1	6.9	4.8	-1.0	3.0	1.1	2.6	5.4	3.0	2.5
Papua New Guinea	4.5	7.1	11.1	8.0	5.1	6.2	6.0	6.9	1.6	4.7	6.5
Samoa	3.7	0.5	1.4	2.7	-0.5	2.0	0.0	3.1	6.2	-0.2	2.0
Solomon Islands	6.4	7.9	10.6	4.8	3.2	3.7	1.0	7.4	5.9	5.6	5.5
Tonga	-1.3	3.3	2.9	0.8	1.6	2.0	5.1	3.8	2.5	0.8	2.0
Tuvalu	2.7	-1.4	-0.6	0.2	1.1	2.0	-1.9	0.5	1.4	2.0	2.5
Vanuatu	6.3	1.6	1.2	1.8	3.2	3.5	2.8	0.9	1.4	1.4	2.5
Developed countries (Australia and New Zealand)^c	3.4	2.5	2.3	3.5	2.4	2.9	2.7	3.4	1.7	2.2	2.7
Australia	3.4	2.6	2.5	3.6	2.4	2.8	2.8	3.3	1.8	2.4	2.8
New Zealand	2.8	1.8	1.2	2.9	2.4	3.3	2.3	4.0	1.1	1.1	2.0
South and South-West Asia^{c, d}	8.1	7.8	6.6	2.9	3.9	4.7	9.9	9.5	11.9	11.3	9.3
Afghanistan	10.2	8.4	6.5	14.0	3.6	3.2	2.2	11.8	6.4	7.4	6.1
Bangladesh	6.3	6.1	6.7	6.2	6.0	6.1	7.3	8.8	10.6	7.7	7.0
Bhutan	10.6	11.7	8.6	4.6	6.9	7.1	6.1	8.3	13.5	8.7	7.6
India	9.5	8.4	6.7	4.5	4.7	5.5	10.4	8.4	10.2	9.5	8.0
Iran (Islamic Republic of)	6.1	5.9	3.0	-5.8	-1.7	1.5	12.4	21.5	30.5	35.2	23.0
Maldives	7.2	7.1	6.5	1.3	3.7	4.5	6.1	11.3	10.9	4.0	5.0
Nepal	3.2	4.0	3.8	4.5	3.6	4.5	9.6	9.6	8.3	9.9	9.8
Pakistan	7.2	2.6	3.6	3.8	3.7	4.1	10.1	13.7	11.0	7.4	8.0
Sri Lanka	6.9	8.0	8.2	6.3	7.3	7.6	6.2	6.7	7.5	6.9	6.0
Turkey	6.7	9.0	8.6	2.2	4.0	4.0	8.6	6.5	8.9	7.5	7.6
South-East Asia^c	6.1	8.1	4.6	5.5	4.9	4.6	4.0	5.5	3.9	3.9	4.0
Brunei Darussalam	1.7	2.6	2.2	0.9	-1.8	1.2	0.4	2.0	0.5	0.4	0.5
Cambodia	11.4	6.0	7.1	7.3	7.6	7.2	4.0	5.5	2.9	2.9	3.4
Indonesia	5.8	6.2	6.5	6.2	5.8	5.4	5.1	5.4	4.3	6.4	5.5
Lao People's Democratic Republic	7.7	7.9	8.3	8.3	8.2	7.5	6.0	7.6	4.3	6.4	6.0
Malaysia	5.9	7.4	5.1	5.6	4.7	5.0	1.7	3.2	1.7	2.1	3.0
Myanmar	12.9	5.3	5.9	7.3	7.5	7.8	8.2	2.8	2.9	5.8	6.6
Philippines	5.8	7.6	3.6	6.8	7.2	6.7	3.9	4.6	3.2	2.9	4.3
Singapore	7.8	14.8	5.2	1.9	3.9	3.5	2.8	5.2	4.6	2.4	2.5
Thailand	4.9	7.8	0.1	6.5	2.9	2.2	3.3	3.8	3.0	2.2	2.4
Timor-Leste	5.0	9.5	12.0	8.3	8.1	8.0	6.9	13.5	10.9	10.6	9.5
Viet Nam	8.4	6.4	6.2	5.2	5.4	5.7	9.2	18.7	9.1	6.6	6.2
Memorandum items:											
Developing ESCAP economies	9.5	8.8	7.2	5.3	5.6	5.8	5.1	6.3	5.3	5.0	4.8
Least developed countries^e	6.0	5.5	6.0	5.6	5.5	5.6	6.5	7.8	8.6	6.8	6.3
Landlocked developing countries	11.7	6.2	6.4	5.3	6.2	5.8	7.2	8.9	5.7	6.3	8.1
Small island developing States	3.7	5.7	7.7	5.1	4.2	5.0	4.8	7.3	3.9	4.1	5.1
Developed ESCAP economies	2.3	4.3	0.0	1.7	1.6	1.6	-0.1	0.3	0.3	0.7	2.8
Total ESCAP	6.8	6.9	4.4	3.9	3.9	4.0	3.3	4.3	3.4	3.6	4.1

Sources: ESCAP based on national sources; United Nations, Department of Economic and Social Affairs (2014). *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; IMF, International Financial Statistics database. Available from <http://elibrary-data.imf.org>; ADB, *Asian Development Outlook 2014* (Manila, 2014); CEIC Data. Available from www.ceicdata.com; and website of the Interstate Statistical Committee of the Commonwealth of Independent States. Available from www.cisstat.com, June 2014.

^a Changes in the consumer price index.

^b Forecasts (as of 15 June 2014).

^c GDP figures at market prices in United States dollars in 2010 (at 2005 prices) are used as weights to calculate the regional and subregional aggregates.

^d The estimates and forecasts for countries relate to fiscal years defined as follows: 2013 refers to fiscal year spanning 1 April 2013 to 31 March 2014 in India; from 21 March 2013 to 20 March 2014 in Afghanistan and the Islamic Republic of Iran; from 1 July 2012 to 30 June 2013 in Bangladesh, Bhutan and Pakistan; and from 16 July 2012 to 15 July 2013 in Nepal.

^e Samoa is excluded from the calculation for 2014 due to its graduation from the least developed country category.

experienced a decline in growth to 5.8% in 2013 from 6.2% in 2012.

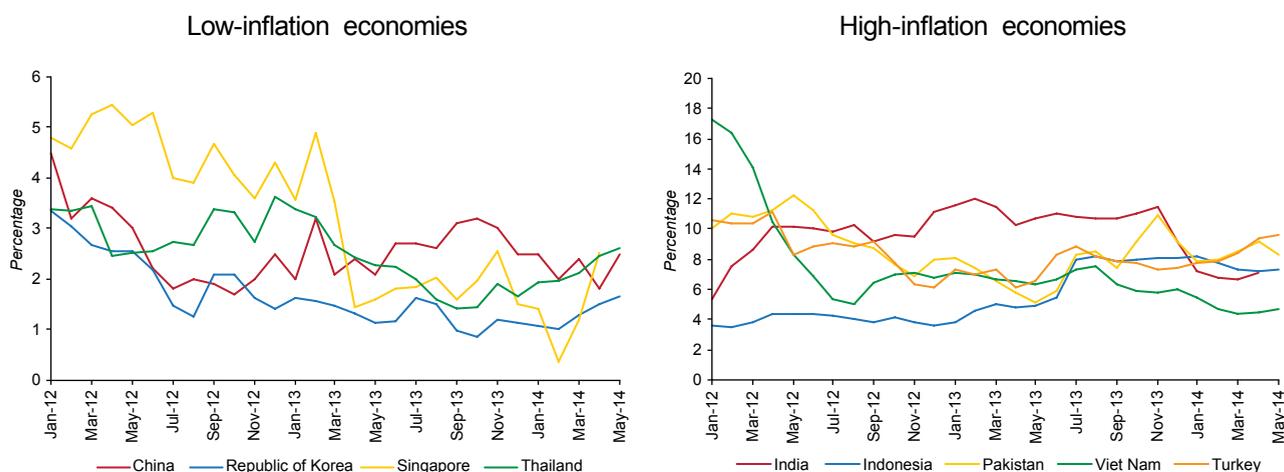
As expected for a large region, subregional growth experiences in 2013 differ. For example, subdued global commodity demand contributed to reduced growth of 2.1% in North and Central Asia and of 4% in Pacific island developing economies. Growth also slowed to 4.9% in South-East Asia, affected by weaker domestic demand in larger economies. East and North-East Asia recorded a rebound to 4.2% with the export of goods reviving recently. Growth in South and South-West Asia also picked up to 3.9% on robust private consumption. In 2014, Pacific island developing countries and South and South-West Asia are forecast to post stronger growth, while other subregions are forecast to have relatively stable or lower growth as compared with the previous year.

Inflation differed substantially across the region in 2013. Inflation in exporting economies, such as those in South-East Asia and East and North-East Asia, declined or remained stable in 2013 due to constrained global demand (see figure 1.4). Despite relatively robust domestic demand in many of these economies, overall slack owing to low export growth kept prices in check. Low inflation allowed for an accommodative monetary policy in most of these countries, with policy interest rates lower or more

stable in 2013 than in the previous year (see figure 1.5). On the other hand, for a number of economies where the export sector does not play as large a role, such as India, Indonesia and Pakistan, inflation remained high in 2013. Consequently, monetary policy was tightened for most of these economies during 2013. The inflation outlook in 2014 is generally moderate and headline inflation in the region is projected to be 4.8% in 2014, down from 5% in 2013 (see table 1.1). However, some major economies, such as India and Indonesia, will continue to face significant price pressures.

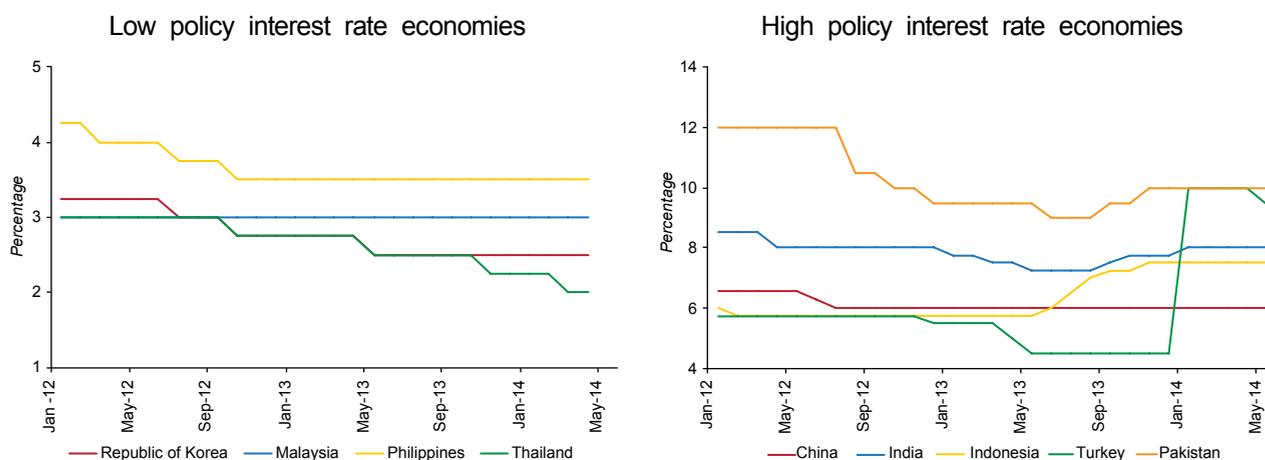
One positive factor for inflation in the region is that most commodity prices are likely to remain flat or decline over the next 12 months due to slow global recovery and the winding back of quantitative easing by the United States Federal Reserve. However, this prospect may change due to geopolitical factors and supply shocks in major producing countries. Moreover, major measures to curb financial speculation in commodity markets that had been agreed at the G20 Summit on Financial Markets and the World Economy, which was held in Cannes, France, in November 2011, still remain unimplemented. Besides the demand-supply fundamentals, high global liquidity has played an important role in supporting the persistently high prices of oil and globally traded food commodities

Figure 1.4. Consumer price inflation in selected developing Asia-Pacific economies, 2012-2014



Source: ESCAP, based on data from CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014).

Figure 1.5. Policy interest rates in selected developing Asia-Pacific economies, 2012-2014



Source: ESCAP, based on data from CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014).

Notes: The policy rates for each country include the nominal short-term one-year lending rate for China; Reserve Bank of India repo rate for India; Bank of Indonesia month end reference rate for Indonesia; Bank of Korea base rate for the Republic of Korea; overnight policy rate for Malaysia; reverse repo rate for Pakistan; reverse repurchase rate for the Philippines; the one-day bilateral repurchase rate for Thailand; and the one-week repo rate for Turkey.

and their volatility. This affected the region badly, especially during the high food and fuel price episodes during the period 2008-2010.

Prospects in the region's major developing economies

While detailed discussions of subregions and countries are presented in chapter 2, this subsection highlights developments and prospects in major developing economies of the region. The economy of China is projected to grow by 7.5% in 2014, lower than the rates recorded in 2012-2013. A substantial portion of the growth moderation in China has resulted from the Government's active attempts to alter the structure of growth away from investment and exports towards domestic consumption. The comprehensive and far-reaching reform programme is also taking measures to address growing inequality, property market overheating and shadow banking. These efforts have slowed growth in the short term, but it is hoped that growth would be more sustained and inclusive in the long run (see box 1.3). Although growth is projected to decline, inflation is forecast to increase from 2.6% in 2013 to 3.1% in 2014, mainly due to liberalization of administrative prices.

The key areas of reform in China include:

- Further adjusting the role of the Government to be a market facilitator and regulator through significant reduction in direct market interventions and substantive strengthening of regulatory capacities;
- Deepening fiscal reforms to improve fiscal accountability and sustainability, and rebalancing fiscal revenues and expenditures between the central and the local governments;
- Completing market infrastructure and the rule of law to promote fair competition and improve the business environment;
- Instituting orderly liberalization of interest rates and opening of the finance sector and other key service sectors to private and foreign investment;
- Improving governance and accountability of State-owned enterprises;
- Strengthening social security networks and promoting equal access to public services;
- Assigning greater land property rights to farmers;
- Exploring innovative social administration mechanisms, including collaborative interaction between government and civil society organizations;

Box 1.3. Understanding China's economic transformation programme

The new master plan announced in late 2013 to “comprehensively deepen reforms” is a response to a number of socio-economic challenges in China – the unsustainable investment-driven growth model, increasing economic inequality and the pressing problem of environmental deterioration.

China has recognized that a holistic and well-coordinated reform plan is required to deal with interlinked and mutually reinforcing challenges. The investment-centric growth model, for instance, leads to income distribution favouring capital over labour. The increasing concentration of wealth in the richest group decreases overall propensity to consume, thus putting downward pressure on effective demand and reinforcing the reliance on investment and exports. Many cross-cutting issues contribute to these challenges. In particular, the broad GDP-oriented government interventions in the past not only fuelled excessive investment but also sometimes suppressed income equality and environment-related concerns. Policymakers have realized that reforms in isolated areas were not sufficient to deal with the interconnected challenges.

The successful shifting to a more balanced and healthier development trajectory is being based on four critical transformations. The first is the transformation in economic structure from industry, especially from capital, resource, energy and pollution-intensive heavy industry, to the modern service sectors. This transformation is planned to enhance job creation, decrease reliance on heavy industrial investments and provide multiple environmental benefits. The pledged reforms to remove market-entry barriers, cut red tape and lower the tax burden on service sectors will contribute to this transformation. Financial reform will play a key role in fostering an advanced and dynamic financial sector as the backbone of modern services. These far-reaching reforms will first be experimented in individual cities or SEZs, including the China (Shanghai) Pilot Free Trade Zone.

The second transformation is urbanization and the corresponding reforms in the social welfare regime. China's urbanization rate is growing by 1 percentage point annually. The unprecedented rural-to-urban migration has the potential to create the largest middle class in the world and significantly boost domestic consumption demand, especially demand for services. To realize these benefits, the Government plans to provide more equal access to economic opportunities, as well as to public services.

Third, there is to be a transformation of government planning at all levels, from GDP-centric thinking to a balanced development philosophy embracing all three economic, social and environmental pillars. The innovative reforms in the incentive structure for government officials based on the broad development outcomes will be of particular importance. In addition to sophisticated score cards, for which design bias and rigidity persist, the proactive and collaborative interaction between the Government and civil society will greatly help in achieving the objectives and improve government accountability.

Last but not least, China's integration into the global economy is to be further deepened. The rebalancing of the global trade regime and enhanced domestic economic strength require China to further diversify its ties with other economies through structural upgrading of trade composition and proactive outward investments. Further opening of the domestic market on the other hand will bring in critical know-how, especially for the development of modern service sectors.

In looking specifically at the financial reform package, which has generated significant international interest, three key components may be observed. The first is the increasing use over time of indirect tools and instruments to steer money supply and demand. The second is the liberalization of interest rates, with lending rates already liberalized and deposit rates to follow. The third component is the strengthening of financial regulatory oversight. These reforms are likely to have numerous positive impacts which will strengthen the overall efficiency and stability of the financial system. These include diversifying sources of financing

Box 1.3. (continued)

away from banks, which had mainly benefited State-owned enterprises and the corporate sector; creating improved efficiency of the financial market and capital allocation, which will improve access to credit for SMEs and those excluded from the formal financial system; generating a win-win situation for both households and corporations, with the former having better opportunities to diversify their savings and the latter access to alternate sources of financing; reducing and regulating the shadow banking system and therefore decreasing risks for the financial system and investors; and levelling the playing field in the regulatory and supervisory system and therefore reducing the opportunities for regulatory arbitrage.

One of the key approaches to mitigate the risks associated with the wide-ranging reform programme will be the proper pace and sequencing of reforms. It will be important, for example, to ensure that macroeconomic fundamentals are strong as the country moves towards full interest rate liberalization and capital account convertibility and that this is sequenced with strengthening of the financial system. A gradual approach has always been China's approach to transition. As the experience of China and other countries shows, the gradual approach has a better chance of success – a point reiterated in ESCAP *Surveys* since the 1990s.

China's transformative process over coming years will have profound implications for itself and for the Asia-Pacific region. Overall, more sustainable and balanced growth in China will be vital for the economic stability of the region. However, countries in Asia and the Pacific will have to adjust themselves to explore the opportunities opened and to be prepared for potential challenges. The opportunities include expanded consumption demand from China, growing FDI by China and the outward reallocation of low-tech industrial sectors from China. The challenges for economies in the region include slower demand growth by China for oil and industrial resources.

- Deepening integration into the global economy through accelerated FTA negotiations and policy experimentations in the newly established special economic zones (SEZs).

The economic growth rate of India in 2014 is forecast to recover to 5.5%, after being below 5% in 2012-2013. The inflation outlook is also slightly better for 2014, declining from 9.5% in 2013 to 8%. Faster growth is constrained by tight monetary and fiscal policies to reduce inflation and government debt. Supply-side factors, such as infrastructure bottlenecks and surges in food prices, were mainly responsible for higher inflation. Deregulation of administered prices and currency depreciation were also contributory factors. Monetary tightening was applied to prevent formation of inflationary expectations. The impact of higher interest rates on growth is the dilemma that policymakers face in dealing with supply-side inflation. This is especially so when a country is open to capital flows and does not have enough fiscal space to take countervailing measures to support growth.

Indonesia's growth is forecast to decline in 2014 to 5.4% – the lowest rate in recent years. As in India, the growth slowdown is partly the result of monetary tightening to halt capital flight and currency depreciation, as well as to combat inflation – estimated at 6.4% in 2013, compared with 4.3% in 2012. Inflation was driven mainly by fuel subsidy cuts, currency depreciation and food price rises. The Government of Indonesia, with a budget deficit estimated at 2.3% of GDP in 2013, is in a better position than India in terms of fiscal resources to support the economy amid the current slowdown.

Malaysia and Thailand are expected to record growth rates of 5% and 2.2% respectively in 2014 with moderate recovery in their external sectors. Growth for Thailand is projected to rebound in the second half of 2014 due to the easing of political uncertainty in recent months. Growth potential in both Malaysia and Thailand is being held back by growing domestic debt. Government debt in Malaysia at 53% of GDP is the highest in South-East Asia

and higher than in many emerging economies in Asia and the Pacific. Household debt (87% of GDP in 2013) is also one of the highest in the region. As in Malaysia, household debt in Thailand is one of the highest in the region at 82% of GDP in 2013. The Government of Malaysia reduced public spending in 2013 in an attempt to cut public debt, while measures taken to control household spending on assets such as property also reduced private consumption. The slowdown in consumption in Thailand can also be attributed partly to consumers paying off some of their debt. Growth in Thailand was further hampered by the effects of political uncertainty, for example the inability to implement a proposed multibillion dollar infrastructure development plan.

The Philippines, in contrast to other major economies experiencing moderate growth, is forecast to experience a high growth rate of 6.7% in 2014. This is, however, lower than the strong growth performance of 7.2% in 2013 despite the destruction wrought by Typhoon Haiyan in November that year. The Philippines provides an example of growth driven by a conducive policy climate. The Government has engaged in significant productive public spending in infrastructure and social areas, while private investment has also increased. Inflation has remained low, offering the opportunity to support growth through accommodative monetary policy. A relatively small budget deficit (1.4% of GDP in 2013) also allowed for substantial government development spending on infrastructure and other basic services during 2013.

Gradual trade recovery

Exports for the region are expected to pick up modestly in 2014 after a difficult time in the previous year in line with increases in global trade as the developed economies experience somewhat higher growth in 2014. Merchandise export growth for Asia and the Pacific is likely to be slightly higher than the 2.3% posted in 2013, although commodity exports may experience slower growth. Among other factors, limited progress in multilateral trade negotiations is preventing an even more favourable outlook for trade. The multilateral trading system

has remained fragmented, as could be observed at the Ninth Ministerial Conference of the World Trade Organization (WTO), which was held in Bali, Indonesia, in December 2013. Global uncertainties also threaten trade recovery.

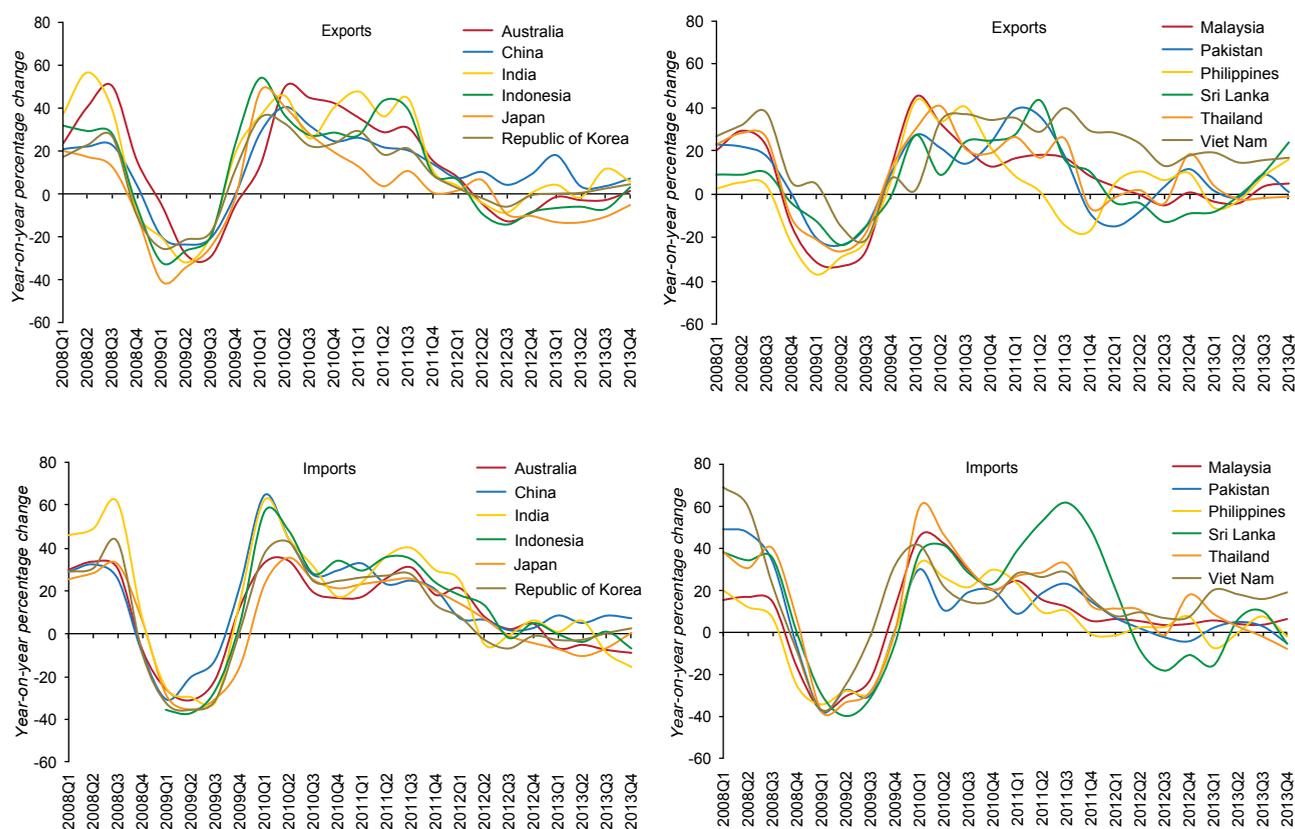
Exports for the region are expected to pick up modestly in 2014

During 2012 and 2013, weak global demand adversely affected Asia-Pacific trade. Most of the major economies in the region had low and volatile export growth in 2013 as compared with their previous peak in 2011 (see figure 1.6). Import trends are similar. In China, soft industrial output and fixed investment performance resulted in a lacklustre import demand for commodities and intermediate goods. For countries highly involved in global value chains, such as Malaysia, the Republic of Korea and Thailand, imports of electronic parts and components slowed significantly due to weak final demand in global markets.

The low share of least developed countries in Asia-Pacific trade continues to be a concern. These countries account for only 0.7% of total regional exports, valued at \$50 billion in 2012. It is, therefore, particularly important to integrate least developed countries more fully into regional supply chains by providing preferential market access and improving their productive capacity. At the same time, better connectivity is needed through improved hard and soft infrastructure for deeper trade integration across countries and subregions.

ESCAP analysis indicates that export growth has been hampered by trade-reducing measures globally and regionally.⁵ It further shows that trade policy measures of major developed economies outside the Asia-Pacific region could result in an estimated reduced opportunity of merchandise exports of some \$255 billion in the region, which could translate into a cumulative decline of more than 1.6 percentage points of regional output, during the period 2009-2013 (see box 1.4). This would be an underestimate

Figure 1.6. Quarterly changes in merchandise trade of selected Asia-Pacific economies, 2008-2013



Source: ESCAP, based on data from CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014).

Box 1.4. Opportunity loss due to trade-reducing measures for developing Asia-Pacific economies

Since the onset of the 2008/09 financial crisis, trade related measures have remained high and a sizeable number of countries have raised tariffs and introduced new non-tariff measures. These measures have often been used in the form of trade defence mechanisms, which are contingency type instruments, including antidumping and countervailing duties, and safeguard measures. These types of policies are complex in their application. At the same time, many countries have introduced direct subsidies (including agricultural export subsidies) and support (often non-trade related support) for domestic industries over the past five years. However, the smaller and poorer Asia-Pacific countries (least developed countries, landlocked developing countries and small island developing States) that cannot apply similar support measures have suffered adverse impacts, if not directly then indirectly.

As demonstrated below, trade-reducing measures globally in the aftermath of the crisis have had negative impacts on the export prospects of Asia-Pacific developing economies and subsequently constrained the growth momentum of many economies.

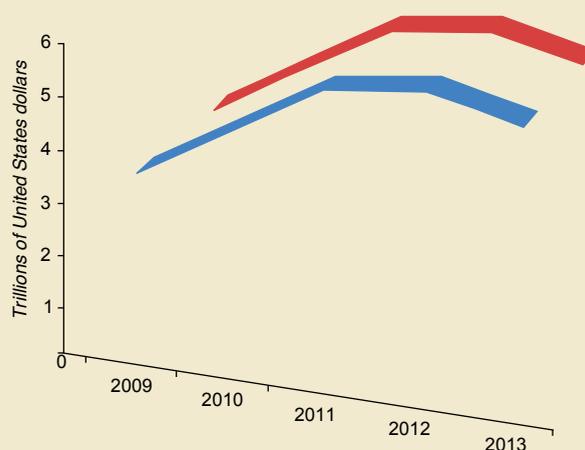
Using data from 43 Asia-Pacific economies, covering more than 99% of total exports from the region, ESCAP analysis estimated the impact of trade-reducing measures imposed by economies outside the region on their exports.^a The estimation of the trade-reducing impact on exports and GDP depends on the depth of exposure of the economies to the markets of the eurozone, United States and other key developed markets via direct exposure (final goods exports) and indirect exposure (intermediate

Box 1.4. (continued)

goods, or value chains), which are computed on the basis of their shares of exports to these economies' total imports. The analysis shows that the impact on exports due to the economies' exposure through participation in the value chains are often substantial, and should be explored adequately for any impact assessment of restrictive trade policy measures. The estimation of the impact on the Asia-Pacific economies has made use of the database and various reports of the measures imposed by G20 economies during the period 2009-2013.^b

Assuming that the overall fall in economic growth has contributed to a decline in import demand from extraregional sources, the imposition of trade-reducing policy measures has further reduced the export potential of the economies in the Asia-Pacific region. Given this, ESCAP estimates show that the trade-reducing policy measures of the developed economies reduced opportunity of merchandise exports worth some \$255 billion from the Asia-Pacific region during the period 2009-2013. The cumulative reduction in exports could translate into more than a 1.6 percentage point decline in regional output during the period 2009-2013 (see figure A).

Figure A. Costs of trade-reducing measures: actual versus estimated loss in exports for Asia-Pacific region, 2009-2013



Source: ESCAP, based on data from United Nations COMTRADE database (accessed 1 April 2014).

Notes: Blue line: actual merchandise exports; red line: potential merchandise exports without the introduction of trade-reducing measures.

At the subregional level, the trade-reducing measures were found to reduce export opportunity by \$138 billion in East and North-East Asia, followed by \$52 billion in South-East Asia, \$39 billion in North and Central Asia, and \$26 billion in South and South-West Asia during the period 2009-2013. Over the same period, the Pacific island developing States experienced a reduction in export opportunity of some \$500 million. The impacts were also significant in countries with special needs, negatively affecting merchandise export prospects worth \$2 billion in the least developed countries, about \$9 billion in landlocked developing countries and more than \$500 million in small island developing States in the region (see figure B).

ESCAP analysis at the country level further shows that China was the economy that suffered the greatest impact, with reduced opportunity for merchandise exports worth more than \$57 billion affected in the period 2009-2013, followed by the Russian Federation (exceeding \$18 billion), the Republic of Korea (more than \$14 billion), Singapore (more than \$10 billion) and India (about \$8 billion). Among other economies greatly affected were Indonesia, Malaysia, Thailand and Turkey. In general, it is clear

Box 1.4. (continued)

that trade-reducing policy measures affect most those countries with higher direct and indirect exposure through regional value chains and that many countries could experience substantially reduced export prospects (see figure C).

Figure B. Costs of trade-reducing measures in subregions and countries with special needs, 2009-2013

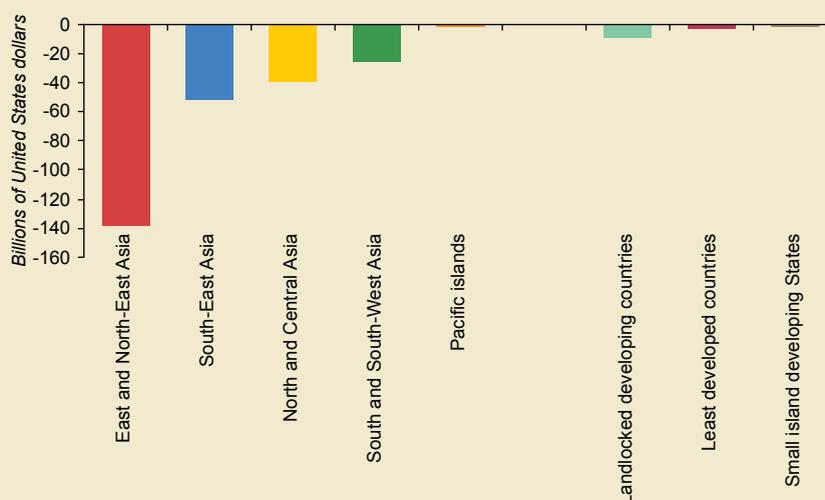
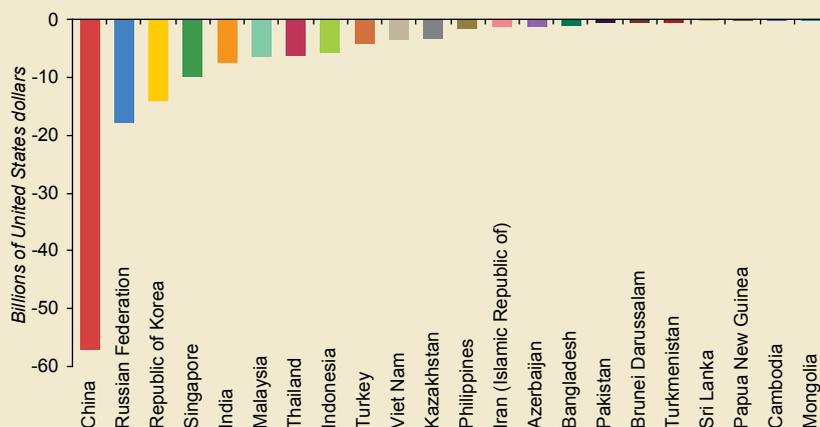


Figure C. Costs of trade-reducing measures in selected developing Asia-Pacific economies, 2009-2013



Sources: ESCAP, based on Sudip Ranjan Basu and others, “Euro zone debt crisis: scenario analysis and implications for developing Asia-Pacific”, *Journal of the Asia Pacific Economy*, vol. 18, No. 1 (2013), pp. 1-25. The trade restrictive policy measures were taken from the WTO-OECD-UNCTAD Report on G20 Trade and Investment Measures (all reports), Trade Monitoring Database of WTO, and the UNCTADStat and ESCAP Statistics for trade and GDP data.

Notes: The figure shows the estimated impacts of trade-reducing policy measures by the developed economies including the United States and the European Union in terms of export opportunity losses from 2009 to 2013. The regional estimates are based on 40 developing countries and three developed countries in the Asia-Pacific region.

^a Basu et al. (2013).

^b The trade restrictive policy measures were taken from the WTO-OECD-UNCTAD Report on G20 Trade and Investment Measures (all reports are available from [http://unctad.org/en/pages/publications/G-20-Trade-and-Investment-Measures-\(Series\).aspx](http://unctad.org/en/pages/publications/G-20-Trade-and-Investment-Measures-(Series).aspx)), Trade Monitoring Database of WTO, and also the UNCTADStat and ESCAP Statistics for trade and GDP data.

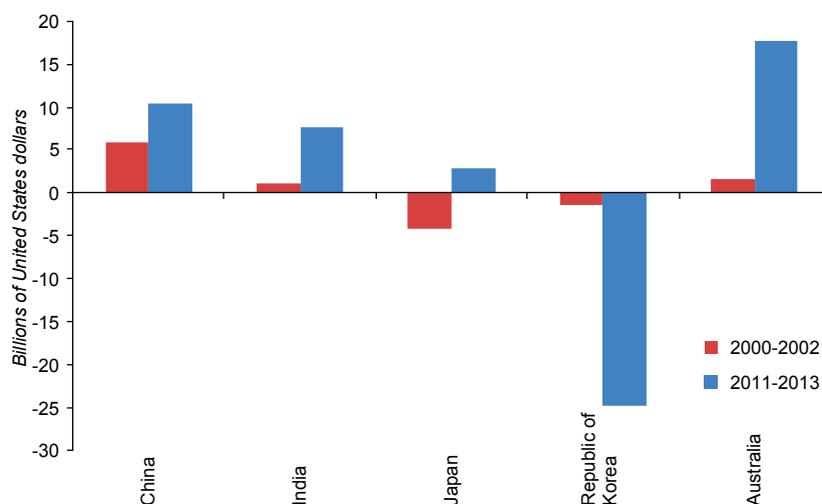
as the analysis did not take into account the trade measures from within the region, as described in a recent ESCAP publication.⁶ The negative impact of the extraregional measures varies across subregions and countries depending on the degree of export dependence on the economies outside of the region, and on their exposure through regional value chains. For example, the estimated negative merchandise export impact was largest in East and North-East Asia given that subregion's close trade ties with the eurozone, United States and other developed economies.

Intraregional trade has expanded in recent years between countries in the Association of Southeast Asian Nations (ASEAN) and other countries in the region. Between 2000 and 2012, the total share of intraregional exports in Asia and the Pacific jumped from 40% to 51%. Regional trade integration between ASEAN and other countries in Asia and the Pacific has increased in recent years due to reductions in bilateral trade costs, as well as through a deepening of and larger number of trade agreements. Analysis of five key ASEAN trading partners from the region, namely Australia, China, India, Japan and the Republic of Korea, illustrates the direction and pattern of trade. In recent years, ASEAN had a

trade surplus with Australia, China, India and Japan while it had a trade deficit with the Republic of Korea (see figure 1.7). The expanded trade with those countries also resulted in an acceleration of intra-ASEAN trade in parts and components for manufacturing sectors, such as electronics products, automobiles, and textiles and clothing. For example, Japan and the Republic of Korea have exported more products requiring medium and high skills to the ASEAN economies, while countries such as China and India are linked more through products that are labour-intensive and requiring low-skilled labour. Furthermore, merchandise exports to China from ASEAN countries are mostly intermediate parts and components, which benefit from economies of scale and the availability of low-cost inputs.

Linkages with China remain particularly important for intraregional trade, with the relationship evolving as the country alters its economic structure. China accounts for more than 30% of the exports from Asia-Pacific developing economies, of which, after processing in China, a substantial portion are destined for re-export. China's bilateral trade surplus in goods increased with several countries in 2012, including India (\$29 billion), Viet Nam (\$18 billion) and Singapore (\$12 billion). On the other hand, China recorded

Figure 1.7. Trade balance of ASEAN with selected Asia-Pacific economies, 2000-2002 and 2011-2013 or latest available data



Source: ESCAP, based on data from United Nations COMTRADE database (accessed 16 April 2014).

Notes: Trade balance is the difference between exports and imports of ASEAN economies with five trading partners. Positive trade balance implies more exports than imports in value terms. The data for Japan and the Republic of Korea are based on the average for the period 2011-2013, and for Australia, China and India are based on the average for the period 2010-2012.

bilateral trade deficits in 2012 with the Republic of Korea (\$81 billion), Australia (\$47 billion), Japan (\$26 billion) and Malaysia (\$22 billion). China's reform policies, as described previously (see box 1.3), to improve the quality of growth by boosting domestic consumption will be a critical factor for the region's trade relationships. ESCAP analysis, reported in the 2013 *Survey*, indicates that rebalancing in China is likely to generate significant benefits for economies in the region exporting consumer goods. It further indicates a likely positive overall macroeconomic impact on the Asia-Pacific region, as any fall in imports of capital goods into China as a result of reduced investment should be offset by the boost in demand for imported consumer goods.⁷

There has been an acceleration of negotiations on free trade agreements (FTA) since the stalling of the WTO Doha Development Agenda, and the global financial crisis. Both of these events have shaped the nature and scope of trade agreements across countries in the region and beyond. There are now a growing number of FTA initiatives at the transregional, regional and subregional levels. As of 20 June 2014, globally 379 notifications of FTAs had been received by GATT/WTO amounting to 249 "physical" agreements in force.⁸ According to ESCAP statistics, there are currently 151 FTAs in force and more than 70 under negotiation (some in prolonged early stage of negotiations) associated with Asia-Pacific countries, where each country is concluding a trade agreement with others under varying degrees of trade liberalization intent. These are creating a "noodle bowl syndrome", often causing a stumbling block to ensuring gains from freer and fair trade for liberalizing countries.

There are now also several "mega-regional FTA" initiatives involving the countries in the Asia-Pacific region, which can have significant implications for Asia-Pacific economic cooperation and integration. For instance, the 10 ASEAN member States and their 6 Dialogue partners – Australia, China, India, Japan, New Zealand and the Republic of Korea – launched the negotiation of the Regional Comprehensive Economic Partnership on 20 November 2012. The

Partnership is aimed at forming a high-quality and mutually beneficial economic partnership for an open trade and investment environment. Also, the United States-led process of negotiating the Trans-Pacific Partnership (TPP) of 12 members began more than four years ago; it includes 7 countries (Australia, Brunei Darussalam, Japan, Malaysia, New Zealand, Singapore and Viet Nam) from the ESCAP region.

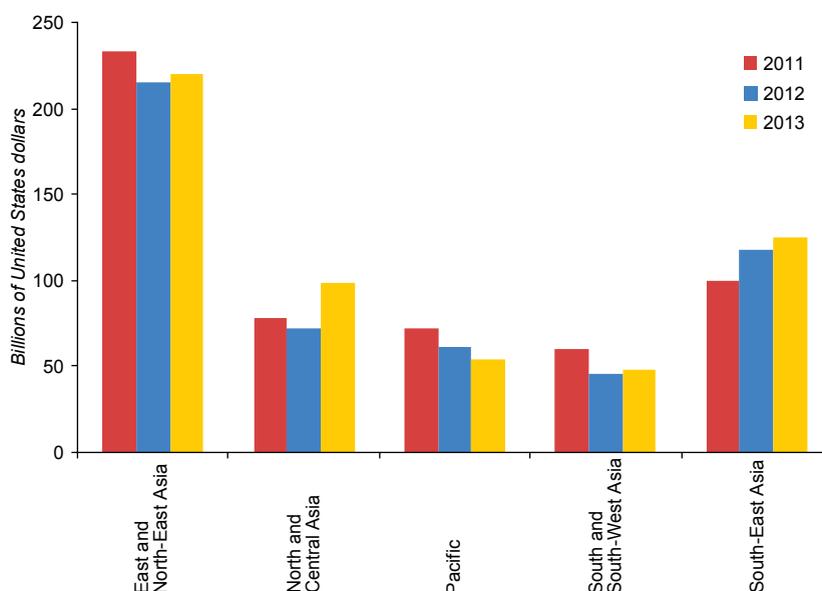
Implementation of specific trade facilitation measures is generally lacking in the region

Promotion of economic development through the adoption of mutually beneficial trade liberalization measures must remain the cornerstone of trade reform policies in the region as this will best contribute to intraregional trade expansion and economic cooperation. Despite significant overall progress in trade integration within the region, implementation of specific trade facilitation measures in the region's developing economies is generally lacking. It is more costly to trade between Asia-Pacific subregions than between subregions and countries or regions outside the Asia-Pacific region. Trade costs for small island developing States and landlocked developing countries often are twice as high as those of other developing countries in the region. ESCAP member States should undertake deep trade reforms and engage in reciprocating with other countries, especially the least developed countries, to offer effective market access for them within the framework of multilateralism under WTO.

Positive outlook for foreign direct investment

FDI within the region has remained large and robust, with variations in FDI inflows across developing subregions in 2013. FDI inflows increased from \$357 billion in 2009 to \$545 billion in 2013 (see figure 1.8).⁹ With the increasing importance of such destinations as ASEAN and China, developing Asia-Pacific countries remained the largest recipient region of global FDI flows, accounting for nearly one quarter

Figure 1.8. Foreign direct investment inflows to developing Asia-Pacific subregions, 2011-2013



Source: ESCAP, based on UNCTAD, *World Investment Report 2014* (Geneva, 2014). Available at <http://unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=937>.

of global FDI. Among the developing Asia-Pacific subregions, East and North-East Asia continues to attract the largest amount of FDI inflows, although the share of South-East Asia is also increasing. Developing economies in the Pacific attracted about 0.55% of the region's FDI inflows in 2013.

Intraregional FDI flows within Asia and the Pacific are on the rise. ASEAN and China are especially attractive destinations for Asian investors. FDI inflows to ASEAN from other Asia-Pacific countries remained stable at \$56 billion in 2013. This grouping had combined FDI inflows of \$326 billion in 2013, accounting for more than 20% of global FDI inflows in recent years. Prospects for intraregional FDI among these economies are promising, as more FDI in the region may come from China, Japan and the Republic of Korea in a wide range of sectors, including infrastructure, finance and manufacturing.

However, a point of concern is falling greenfield FDI. Recent studies have shown that greenfield FDI can have more direct benefits as it creates new investment through the establishment of production

facilities. On the other hand, the benefits from FDI through mergers and acquisitions (M&A) are less clear-cut as this involves purchasing existing assets. The value of global cross-border M&A increased by 5% to reach \$337 billion in 2013 and was driven mainly by deals in East and South-East Asia, particularly in China, Singapore and Thailand. At the same time, the value of global greenfield FDI has fallen significantly since the recent financial crisis, from a peak of \$1.6 trillion per year in 2008 to \$612 billion in 2012, and declined further, by 1.7%, in 2013. Greenfield FDI to developing countries fell by two thirds. Nevertheless, there have been some announcements of increases in greenfield activity in such countries as Myanmar and Viet Nam.

Another concern is related to FDI in agriculture. There have been instances where such FDI displaced smallholders and damaged the environment. The World Bank has highlighted the danger of land acquisition which neglects local people's rights and the susceptibility of smallholders to manipulation by speculators or unscrupulous investors.¹⁰ Questions have been raised about the extent to which large-

scale land acquisition provides local people with long-term benefits and contributes to poverty reduction and sustainable development. Therefore, appropriate policies should be put into place to safeguard against speculative land investment or acquisition, as well as to prevent environmental degradation. Governments need to be vigilant to ensure that FDI projects boost growth, create employment and increase the technological capacity of local industry.

In addition to FDI, there is growing scope for foreign exchange earnings for countries through remittances and tourism. Asia and the Pacific remains the highest remittance-receiving region in the world, both in absolute and relative terms. By 2013 remittances to developing countries in Asia and the Pacific had increased from \$49 billion in 2000 to \$265 billion. International tourism receipts increased from \$169 billion in 2004 to \$320 billion in 2013. For many countries in the region, such as some in the Pacific, the level of dependence on the tourism sector and related services is very significant at around 20% of GDP. Both remittances and tourism have the potential to play a significant role in development in the region. However, policymakers must be cognizant of drawbacks which require government actions. For example, the export of personnel may exacerbate brain drain and worsen inequality. Similarly, uncontrolled expansion of tourism can have adverse ecological and social consequences. Aspects of remittances and tourism are discussed in greater detail in Part II of the *Survey*.

SOCIO-ECONOMIC CHALLENGES

Jobs growth and quality still show mixed progress

Considering the main socio-economic issues facing the region, a principal concern is low job creation despite rapid growth in many economies. Over the past decade, both before and after the crisis, growth in GDP in the region was not accompanied by a commensurate expansion in formal sector employment. The developing Asia-Pacific region

witnessed such “jobless growth” during the period 2009-2013 as average GDP grew by 6.4% while employment grew by only 1.3%. During the pre-crisis period of 2000-2007, employment only grew by 1.7%. This phenomenon was due partly to technological change and labour substitution, but also to the nature and pattern of economic growth that was not rooted in broad-based economy-wide development.

A principal socio-economic concern is low job creation despite rapid growth in many economies

In 2013, labour market outcomes in terms of job creation were decidedly mixed. The rate of job growth in the formal sector was highest in Malaysia (8.8%), Sri Lanka (6.9%) and Singapore (4%). In terms of total job increases, the largest increases were 1.2 million in Indonesia and 1.1 million in Malaysia. Growth in jobs was also positive in Viet Nam (912,000) and the Philippines (620,000). In Thailand, however, job growth turned negative, by 1.2% (466,000), with the largest declines being in agriculture and the hotel and restaurant industry. In the developed economies of the region, job expansion was less than 1% in Australia, Japan and New Zealand. Job creation in the Pacific economies was also mixed.

To boost employment generation, some countries have undertaken active labour market programmes. For example, China initiated labour market policies to improve access to and the quality of training systems, especially to benefit migrants from rural areas to urban industrial jobs. The Republic of Korea has employment programmes to enhance education and training for a specialized workforce. For several low-income and middle-income countries, one of the key areas of focus should be to generate more productive and remunerative rural (off-farm) employment.

There are also concerns about job quality. The majority of workers in the region are informally employed own-account or contributing family workers – with limited opportunities for finding work that is

more productive, secure and salaried. Such informal jobs are more likely to be done by women and other vulnerable groups, such as youth and older persons. In Pakistan, for instance, the share of employment as own-account and contributing family workers was 23.4 percentage points higher for women than for men. Moreover, women are more likely than men to be unemployed: in Indonesia the unemployment rate for men was 5.5% but for women it was 6.3%.

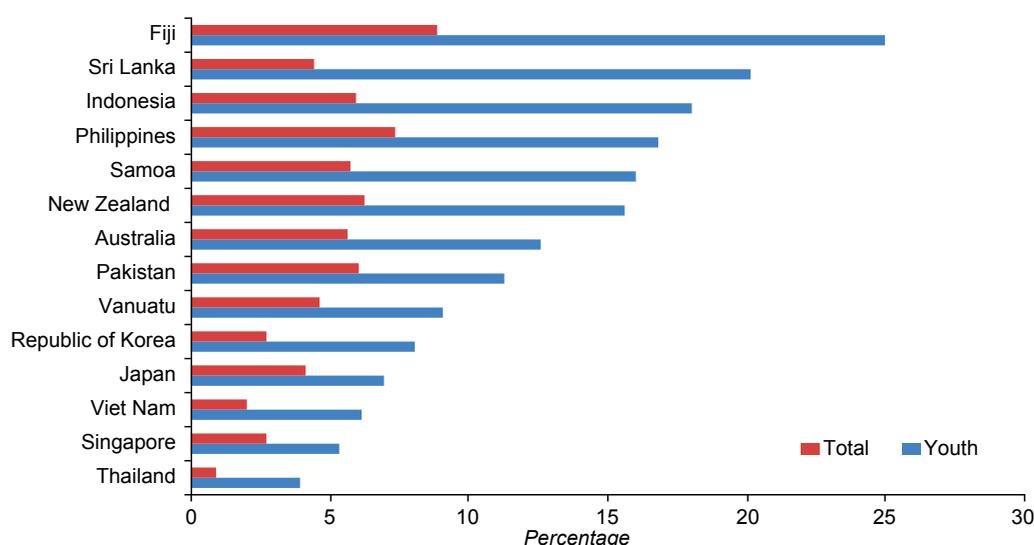
In 2013, an estimated 63.1% of women and 56% of men were engaged in various types of vulnerable employment. There is also an elevated percentage of people in the region working in very low-paying jobs. The number of “working poor”, those who earn less than \$2 a day, was highest in South and South-West Asia. The prevalence of working poverty and vulnerable employment are clear manifestations of the lack of economic and social opportunities.

Young people in particular struggle to find decent and productive employment. The youth unemployment rate in the region is almost three times higher than the adult unemployment rate. Between 2012 and 2013, unemployment among young people rose

from 9.7% to 10.1%. Youth unemployment among developing economies in the region in 2013 was highest in Fiji (25%), followed by Sri Lanka (20.1%), Indonesia (18%), the Philippines (16.8%), Samoa (16%) and Pakistan (11.2%) (see figure 1.9). Among developed economies, New Zealand and Australia have recently had high youth unemployment rates, 15.6% and 12.6%, respectively. At the subregional level, in 2013 employment among young people in East Asia decreased by 6.1 million jobs, or 5.2%. Moreover, this pace of contraction is likely to continue for the next five years, highlighting the mounting challenges facing young graduates entering the labour market.¹¹

There are numerous causes of the high youth unemployment rate in the region. In addition to the lack of adequate decent and productive jobs, this is also an outcome of: the mismatch between education and employers’ requirements; low secondary schooling completion rates; gender discrimination; and high youth aspirations. Many countries now have a potential demographic dividend. Yet, to make the dividend a reality they will need to secure productive employment for the growing pool of young people, especially young women.

Figure 1.9. Total and youth unemployment rates in selected Asia-Pacific economies, 2013 or latest available data



Sources: ESCAP, based on data from ILO and estimates from national labour force surveys. Information on Pacific economies obtained from the Secretariat of the Pacific Community. Available from www.spc.int/nmdi/MdiSummary2.aspx?minorGroup=8.

Note: Total includes ages 15+; youth includes ages 15-24 except for Pakistan (ages 15-19) and Singapore (residents aged 15-29); non-seasonally adjusted.

Inequality hampering sustainability of growth

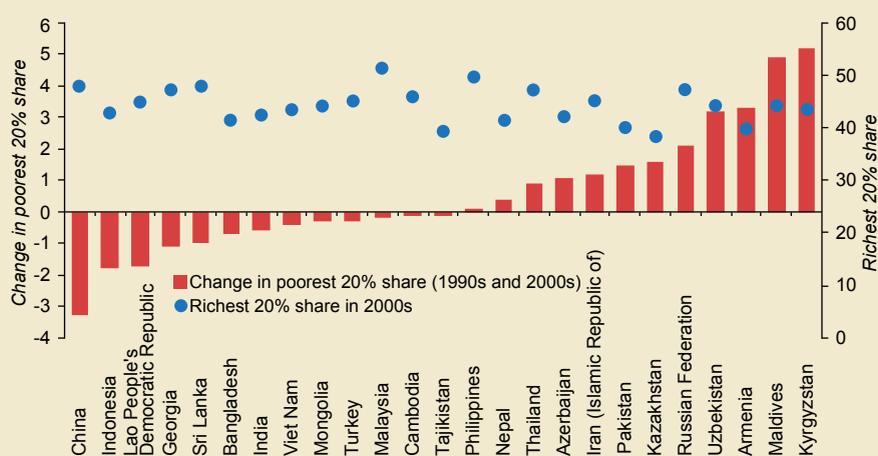
Inequality is another key socio-economic challenge for the region. There is a growing divide between the poor and the rich (see box 1.5). At the national level, there has been an increase in income inequality (Gini coefficient) in many major economies in recent decades. For example, between the early 1990s and the late 2000s, the Gini coefficient increased from 32.4 to 42.1 in China; from 30.8 to 33.9 in India; and from 29.2 to 38.1 in Indonesia (see

figure 1.10). Nevertheless, in some countries – for instance, Cambodia, Kyrgyzstan, Malaysia, Nepal, the Philippines, Thailand and Uzbekistan – it decreased. It is noteworthy, however, that the Gini coefficients for Malaysia (46.2) and the Philippines (43.0) remained among the highest in the region. Widening income gaps across societies and within communities are the consequence of a series of factors, including weaker labour market institutions, inadequate social protection systems, poor-quality education, inadequate access to credit and land and excessive asset concentration.

Box 1.5. Growing divide between the poor and the rich in Asia and the Pacific

The gap between rich and poor is widespread in the region and continuing to grow in many countries. From available data for about 40 countries in the region, it can be seen that the poorest 20% of the population accounts for less than 10% of national income in the latest available year. Among 25 countries with comparable data in two periods (1990s and 2000s), some major developing countries, such as Bangladesh, China, India, Indonesia, Malaysia and Turkey, recorded a falling share of national income for the poorest 20% of the population over the period. However, the share of national income of the poorest 20% increased for some other countries, such as Armenia, the Islamic Republic of Iran, Kazakhstan, Nepal, Pakistan, the Philippines, the Russian Federation and Thailand (see figure A). The share of national income of the richest 20% of the population in the 2000s ranged from a high of 51.5% in Malaysia to a low of 38.4% in Kazakhstan, with average share being 44.2% for the latest available years.

Figure A. Share of the richest 20% and change in share of the poorest 20% in national income in selected developing Asia-Pacific economies, 1990s and 2000s or latest available data



Source: ESCAP, based on Statistics Division online database. Available from www.unescap.org/stat/data/ (accessed 1 April 2014).

Furthermore, an analysis of the ultra-high net worth individuals (UHNWIs) in the region shows that persons with a net worth of \$30 million or more accounted for 30% of the region's income in 2012-2013. This implies that wealth concentration is a major characteristic of income inequality. The region had around 49,000 persons (0.001% of Asia-Pacific population in 2013) classed as

Box 1.5. (continued)

UHNWIs, with about \$7.5 trillion of net wealth in 2012-2013. In some countries UHNWIs' net wealth is half that of the GDP.^a Interestingly, the net wealth of the Asia-Pacific region's UHNWIs is 17 times more than the combined GDP of the Asia-Pacific least developed countries (\$0.44 trillion in current prices in 2012).

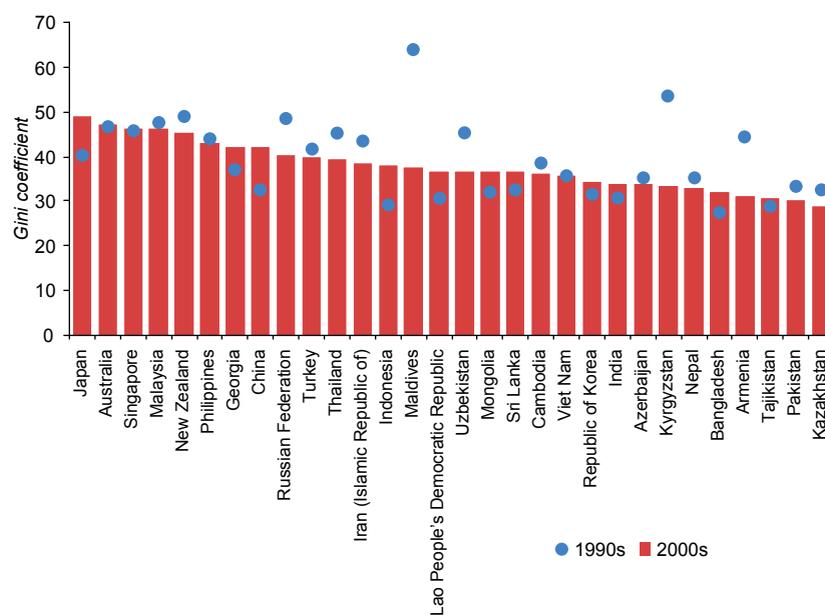
The wide gap in national income held by the ultrarich and the poor is striking. It has been observed that the wealth-income ratio is rising due to the growing share of capital in national income, which is further exacerbating the inequality gap between the top 1% of the population and the poorest 20%.^b A high and increasing ratio of wealth to GDP also illustrates growing concerns regarding concentration of political/business power linked to asset ownership in these countries, as well as financial systems that have lax regulatory and tax structures.

In this context ESCAP *Surveys* since 1950 have contained recommendations on asset redistribution, in particular redistributive land reform, as a key factor for equitable growth. *Surveys* also contained recommendations on progressive taxation, widening of the tax base and public provisioning of basic services, such as education and health care, for this purpose. In reviewing the progress in these areas, it was noted in ESCAP *Surveys* in the 1970s that powerful vested interests largely thwarted land and other distributive reforms in many countries of the region. This has contributed to the phenomenon of growth in many economies over recent decades not being sufficiently translated into equitable development.

^a Wealth-X and UBS (2014).

^b Piketty (2014).

Figure 1.10. Income inequality in selected developing Asia-Pacific economies, 1990s and 2000s



Sources: ESCAP, based on data from World Bank, Financing for Development, Post-2015. October 2013. Available from <http://post2015.org/2013/10/22/world-bank-report-financing-for-development-post-2015/>; PovcalNet data, United Nations Statistical Division, Statistical Databases. Available from <https://unstats.un.org/unsd/databases.htm>; and OECD, 2012 DAC Report on Multilateral Aid. Available from [www.oecd.org/dac/aid-architecture/DCD_DAC\(2012\)33_FINAL.pdf](http://www.oecd.org/dac/aid-architecture/DCD_DAC(2012)33_FINAL.pdf).

In addition to vertical inequality among individuals, there have also been widening horizontal disparities, especially between rural and urban areas, as well as between coastal regions and the interior. This is particularly worrying for large multiracial countries with significant regional variations, since it can trigger social and political instability.

High levels of income inequality seriously undermine the economic and social achievements of the region. For example, GDP per capita (constant 2005 PPP dollars) for the year 2012 in Singapore declined from \$53,266 to \$28,071 when adjusted for income inequality. In the case of China, the decline was from \$7,958 to \$4,472. The ESCAP social development index,¹² which combines education and life expectancy, shows that inequality in several emerging and low-income economies is having a serious impact on social development.

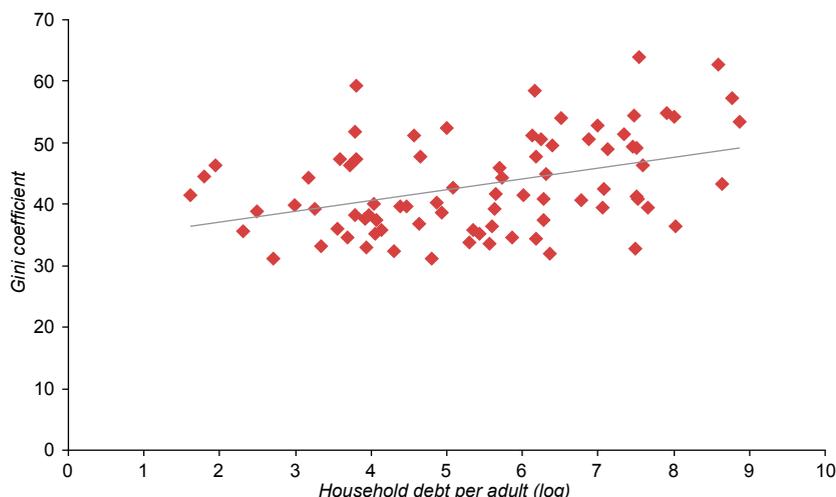
A specific area of concern is gender inequality. Intrinsicly linked to gender inequality is the prevalence of gender-based violence in the region.¹³ These challenges continue to inhibit the full participation of women in public life – affecting not only the well-being of women themselves, but also that of their families and their communities and

can weaken social and economic stability. Policies and legislation that enable women to participate in economic activities specifically, and underpin gender equality more broadly, can improve the quality of lives of all women, men, girls and boys. Allowing women and men to work equally in economic activities with equal pay, and realize their full potential, is integral to a nation's economic resilience and productivity.

Persistent inequality and social disparities are related to the prevalence of undernourishment. In 2013, undernourishment affected 533 million people in Asia and the Pacific, accounting for about 15% of the population.¹⁴ The region accounts for about 63% of the world's hungry people. Undernourishment is high in a number of countries, including Bangladesh, China, India, Pakistan, the Philippines, Solomon Islands and Sri Lanka. Poverty and hunger are intertwined in a vicious cycle since undernourished people are less productive, and are therefore likely to fall into poverty, thus promoting social inequality.

ESCAP analysis of country-level data on household debt and inequality during the post-crisis period shows a positive association between inequality and indebtedness (see figure 1.11). The data were drawn from 81 developing countries globally, including 26

Figure 1.11. Debt per adult and inequality in selected global and Asia-Pacific economies



Sources: ESCAP, based on data from World Bank, *Financing for Development, Post-2015*. October 2013. Available from <http://post2015.org/2013/10/22/world-bank-report-financing-for-development-post-2015>; PovcalNet data, United Nations Statistical Division, *Statistical Databases*. Available from <https://unstats.un.org/unsd/databases.htm>; and Credit Suisse, *Global Wealth Databook 2013*. Available from www.international-adviser.com/ia/media/Media/Credit-Suisse-Global-Wealth-Databook-2013.pdf.

economies from the region. This finding conforms with recent research at the IMF¹⁵ which shows how inequality can lead to household indebtedness. With income growth lagging, the poorer sections of society increase debt-financed consumption. This is made possible by the availability of cheap credit, as higher income groups deposit their increasing wealth in the banking system. Such a transmission process could lead to ever-rising household debt in countries with growing inequality, making them vulnerable to shocks. As households spend more than they earn, countries face growing current account deficits, exacerbated by luxury imports by the well-off.

POLICY OPTIONS TO DEAL WITH LONGER-TERM CHALLENGES AND NEAR-TERM RISKS AND VULNERABILITIES

Productive government spending to support sustainable growth

The obstacles to higher growth in the Asia-Pacific region are partly related to slow economic recovery in the developed world, but also to long-term structural impediments to growth. This highlights the need for productive and countercyclical government macroeconomic support. Such policies can shore up growth in the short term while helping remove structural impediments in the long term. Furthermore, the ongoing reallocation of international capital away from the region as monetary policy in the United States is normalized will increase the need for accommodating policies for domestic investment. This section highlights some possible supportive measures.

- *Social protection spending* – Increasing spending on social protection would help to support growth as well as reduce inequality. Recognizing the importance and necessity of adequate social protection systems, the United Nations System Chief Executives Board for Coordination adopted the Social Protection Floor Initiative, which was endorsed by Member States at the United Nations

Conference on Sustainable Development (Rio+20). Social protection is now a development priority in the development agenda beyond 2015.¹⁶ Public social security expenditure remains low in the region at less than 2% of GDP in half of the countries where data are available. More than 60% of the population of the Asia-Pacific region remain without any social protection coverage.

There is a need for productive and countercyclical government macroeconomic support to address the region's structural impediments

Particularly important areas for action include increased public provision of health and unemployment insurance, as well as pensions. Increased coverage of these needs reduces the need for precautionary savings by citizens and thus increases available income for consumption to support effective demand. As the poorer sections of society spend a greater proportion of their income than the better-off section, there can be positive impacts on growth. There is also a significant positive correlation between the extent of coverage of social protection measures and reductions in inequality. Based on World Bank data,¹⁷ ESCAP finds that, within a universal system, targeted social protection and labour market programmes are likely to reduce inequality. ESCAP has designed a social protection “toolbox” to facilitate the endeavours of policymakers in building stronger and more robust social protection systems.¹⁸ It enables policymakers to identify gaps at the national level, while providing useful examples on how to move forward.

Several countries in the region have recently initiated policies and programmes to enhance social welfare (see box 1.6). These include programmes addressing health in Indonesia, Thailand and Turkey; education in Sri Lanka; food security in India; and employment in the Republic of Korea. Nevertheless, public social protection expenditure still remain very low in a large number of countries in the region. Moreover, coverage of social protection and labour

Box 1.6. Strengthening social services in health and education: Turkey and Sri Lanka

Some countries in Asia and the Pacific have made substantial progress in strengthening health and education services – as exemplified by health insurance in Turkey and universal education in Sri Lanka.

General Health Insurance in Turkey

In 2008, the Government of Turkey launched the General Health Insurance scheme (GHI). This comprises two complementary schemes designed to extend health coverage to the entire population. Turkey's health-care system dates back to the 1990s when lawmakers first began extending coverage to the informal sector as part of its 10-year Health Transformation Programme. Health-care coverage has increased rapidly – from 70% of the population in 2002 to 83% in 2010. Today, GHI provides contributory insurance for those able to pay, while providing a number of different groups with free coverage: persons below the age of 18; pregnant women; people employed by the Social Security Institution; stateless persons; refugees; those with income below one third of the minimum national threshold; and those in receipt of social assistance payments. GHI is implemented by the Ministry of Health through a network of 843 hospitals and 6,463 health centres. The scheme provides access to a comprehensive package and entitlements with reimbursement for a range of preventative, diagnostic and curative services. Co-payment is required for physical examinations, orthodontics and prostheses, healing materials, medicines and fertility treatments.

Universal Education System in Sri Lanka

Sri Lanka's high literacy rates among youth, currently at 98% for boys and 99% for girls, can be linked to policies for free and compulsory education dating back to the 1940s. More recently, in 1997 the Government passed an ordinance on compulsory education, further strengthening the national framework for universal primary education, providing free education at primary, secondary and university levels and compulsory education for all children between 5 and 13 years of age. As part of the education system, children are provided with free textbooks, two sets of uniforms and a mid-day meal (in designated areas). The Sri Lankan education system encourages skills development for suitable employment upon entering grade 9, offering students the option to continue with academic studies, enrol in an apprenticeship to enhance technical capability, or join agricultural production.

programmes varies considerably between countries and between income groups. For example, in the Lao People's Democratic Republic the programmes directly benefit 1.65% of the total population while for the poorest quintile the proportion is only 0.43%. On the other hand, in Thailand the corresponding figures are 99.19% and 99.56%. Encouragingly, in Indonesia, Kyrgyzstan, the Russian Federation, Sri Lanka and Viet Nam the coverage of social protection and labour programmes has flowed more to the poorest quintile of the population.

An important challenge to increase the coverage and depth of social protection measures will be their sustainable financing. Critically, the design of social protection measures will need to address growing budgetary demands due to the changing age structure of populations. The private sector must also

contribute and partner with Governments. Meanwhile, further research needs to be conducted on effective methods for financing national programmes and on the implications for government budgets.

- *Infrastructure spending* – Governments need to address the significant shortage in infrastructure provision across the region. Adequate physical infrastructure in terms of transport, public services provision and telecommunications in both rural and urban areas, is essential for enabling countries to realize their economic potential. Apart from current needs, the demand for infrastructure is projected to increase significantly with growing populations and greater urbanization. A recent study by ESCAP estimated the infrastructure financing gaps in the Asia-Pacific region to be of the order of \$800-900 billion per annum.¹⁹ This total includes the

requirement for national infrastructure in energy, transport, telecommunications, water and sanitation, and cross-country infrastructure projects in transport, energy and telecommunications. The private sector acting alone is not coming close to meeting this requirement, with annual spending on infrastructure over the past 20 years averaging \$13 billion and being concentrated in less risky investments.²⁰

Apart from shortfalls in financing, it is clear that significant improvement is required in legal and regulatory frameworks for infrastructure investment across much of the region. Recent years have seen a lack of clarity in such frameworks and this has been a significant factor in the worsening of investment climates and resulting reduction in new projects in many countries. Without improvements in regulatory frameworks and policy certainty, even in the presence of adequate financing, investors will remain wary of entering into major investments. Political instability also discourages private sector investment in large infrastructure projects.

Existing forms of infrastructure investment in the region could be complemented with a new large-scale lending facility using innovative development financing sources

Existing forms of infrastructure investment in the region could be complemented with a new large-scale lending facility for infrastructure using innovative development financing sources. Such a regional facility could issue securities to enable the region's central banks to be able to park their surplus reserves with it. The infrastructure financing facility could help coordinate other sources of lending, such as that from multilateral and bilateral development agencies and private financial institutions. Its backing for infrastructure projects could also signal opportunities to private investors. As a regional mechanism, the facility could also be in a position to keep track of intraregional spillovers and finance economically significant cross-border projects. Another possible function of the facility could be to provide advisory

services and technical assistance in the financial design of infrastructure projects.

- *Environment-related spending* — Governments will need to undertake spending to address environmental factors which will otherwise hamper growth prospects. Environmental damage is already constraining growth in the region. For example, environmental degradation was estimated in 2012 to have cost India almost 6% of GDP annually.²¹ Air pollution and water pollution are seriously undermining economic prospects in many countries in the region due to serious health impacts. One World Bank study estimates that the health costs of air and water pollution in China amount to about 4.3% of its GDP. By adding the non-health impacts of pollution, which are estimated to be about 1.5% of GDP, the total cost of air and water pollution in China is about 5.8% of GDP.²² Widespread loss of natural ecosystems and biodiversity has also had impacts on economic potential.

Apart from reducing environmental damage, policies are required to improve access to modern energy sources. Using such sources can make growth more sustainable and will contribute to increased growth by making households more productive. To improve access to modern energy, several countries have formulated investment strategies for energy infrastructure – aimed at improving energy efficiency and increasing the use of renewable sources. There are several examples. Bangladesh has initiated a biogas project to provide communities with clean and renewable energy; Nepal has initiated a national programme to integrate alternative energy sources with the socio-economic activities of women and men in rural communities; the Government of Indonesia announced a major reform plan to reduce gasoline subsidies; Thailand has instituted a renewable energy policy; and Viet Nam has adopted a law concerning an environment protection tax.

Another area for action to ensure the sustainability of growth is better addressing climate change through improving climate finance. Sources of climate finance should be mobilized both from

the public and private sectors. Public finance can focus on leveraging private funding to tackle climate challenges. Specifically, climate finance mechanisms should be mainstreamed into the evolving financing framework in the context of the development agenda beyond 2015.

Productive investment in youth

Government policies are required to assist youth to acquire the education and skills required to obtain decent and productive employment. The region is facing the enormous challenge of securing such employment for the largest generation of young people in its history. Nearly 717 million of the region's population are young women and men aged 15 to 24, with the issue being most acute in South and South-West Asia. While some of the problems are caused by a lack of adequate decent and productive jobs, many young people are entering the labour force with skills that are limited or do not match the changing demands of labour markets. Governments therefore need to pay attention to the way in which youth develop from a young age and help prepare them for work with adequate knowledge, skills and experience. In this context, the transition between secondary and tertiary education needs to take into account the capacities and potential of youth. Active labour market programmes will also be important to effectively link education, training and skills development systems with the requirements of employers. The challenge of increasing access to education is especially great for low-income economies, where the probability of obtaining tertiary-level education is low. In these economies, the gross enrolment ratio (GER) in tertiary education is only 10%, while in high-income economies it is 71%. Some of the biggest challenges are in South and South-West Asia where GER is 14%, which is the lowest in the Asia-Pacific region, compared with 56% in North and Central Asia.

Improving education systems will require paying special attention to gender inequalities. Although these have fallen in education in the region over recent years, there are still disparities that translate

into untapped productive potential for both medium and long-term growth. The South and South-West Asian subregion is lagging, with 8 girls for every 10 boys enrolled in secondary education, but an even greater concern is that only 3 women for every 4 men are enrolled in tertiary education. There are many barriers to female education – including the burden of household work, limited appreciation of the benefits of educating girls and women, and negative social and cultural attitudes. Addressing such prejudices will require greater investment in the recruitment of female teachers and targeted support for poor families in order to render educational establishments more female-friendly.

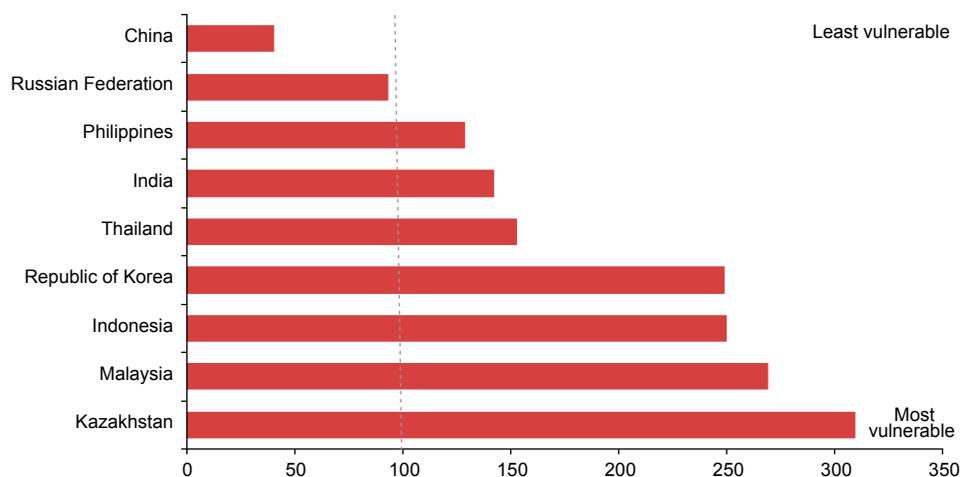
Mitigating risks from volatility of capital flows

Countries should be cognizant of the need to possess sufficient foreign exchange reserves to help defend against excessive depreciation resulting from capital volatility. The build-up of reserves has been one of the main tools of Governments to protect their currencies and prevent the macroeconomic instability resulting from sharp exchange rate depreciation. The ESCAP vulnerability yardstick considers the level of short-term foreign exchange commitments, comprising portfolio investment, short-term debt and quarterly imports, as a percentage of foreign reserves. It indicates that some economies in the region may have insufficient foreign exchange reserves to cover the exit of foreign funds from their financial markets (see figure 1.12); hence they face risks of excessive exchange rate depreciation.

Concerns about the lack of sufficient reserves at the national level to respond to capital volatility have highlighted the need for greater regional support

Concerns about the lack of sufficient reserves at the national level to respond to the risks from capital volatility have highlighted the need for greater regional support. Currency-related difficulties in various countries in 2013 highlighted the lack of use

Figure 1.12. Vulnerability yardstick (short-term foreign exchange commitments as a percentage of foreign reserves) in selected developing Asia-Pacific economies, latest available data



Source: ESCAP, based on data from CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014).

Note: Vulnerability yardstick is the sum of short-term external debt, latest quarterly imports based on four-quarter moving average and estimated international portfolio investment position, expressed as a percentage of foreign reserves.

of current regional schemes, such as the Chiang Mai Initiative Multilateralization. In recent instances when countries have needed currency support, even those within ASEAN+3 have looked to ad hoc regional sources of funds through numerous bilateral swap agreements. Recent experiences have also highlighted the risks facing countries such as India which are not covered by the Initiative. An alternative to current arrangements could be a comprehensive Asia-Pacific financial support mechanism using some of the sizeable foreign reserves available to Governments in the region. A truly regional agreement could offer better protection as it would include many other relatively open economies that are also susceptible to external currency pressure but currently uncovered by agreements. Such a mechanism would be important even for countries that are currently covered by regional agreements, as currency crises in non-protected countries can cause contagion in an interconnected region.

While national or regional pooling of reserves can stabilize currencies after pressure is experienced, they should be complemented by national measures for the management of capital flows. The use of foreign reserves does not deal with the negative impact on

asset markets of any sudden outflow. Therefore, as highlighted by IMF studies,²³ an important additional supportive measure can be capital flows management at the national level to deal with inflow surges in asset markets. Such measures have been gaining in popularity, as recommended by ESCAP over a number of years.²⁴ Some recent capital account management measures have been market-based – as through taxes or levies on particular instruments. Others have been quantitative, such as through caps or prohibitions on the purchase of particular instruments. Furthermore, while most measures have been directed at capital inflows or purchases, some have also been targeted at discouraging capital outflows or sales. A general guideline should be for such regulations to be a component of long-run policies to prevent economic booms and busts.

CONCLUSION

Asia-Pacific economies should undertake policies to revive their robust growth of recent years while also making such growth more inclusive and sustained. The developing Asia-Pacific economies, having recovered strongly in 2010 with an average growth rate of more than 8%, have seen their annual growth

rate dip below 6% since 2012. With constrained growth prospects, productive government spending is critical for reviving growth. The obstacles to higher growth in the Asia-Pacific region are partly related to slow economic recovery in the developed world, but also to long-term structural impediments to growth. This situation highlights the opportunity for productive and countercyclical government macroeconomic support. Such policies can support growth in the short-term while helping remove structural impediments in the long term. These include policies directed towards reducing the high degree of economic insecurity in many economies, large development gaps, significant infrastructure shortages and unsustainable environmental impacts.

In short, policymakers need to ensure that growth-generating activities are inclusive, inequality reducing and environmentally sustainable. This has implications for sources of growth – both sectoral and spatial. Inclusive, equitable and sustainable growth depends on more dynamic industrial and agricultural sector activities which are green or environment-friendly instead of speculative activities concentrated in urban areas. Policymakers also need to identify the sources of growth fluctuations – whether they are due to the business cycle or structural factors – so that they can balance short-term stabilization objectives with long-term sustainable development objectives. Addressing long-term causes would require careful structural reforms. A number of major economies in the region, China and Japan, are already engaged in comprehensive structural reform programmes, and their experiences can provide others with a useful guide. Some of these details are discussed in chapter 2. A critical challenge will be the funding of these policies, which will require raising the resources of Governments. This issue is analysed in chapter 3.

Endnotes

- ¹ Xinhua (2013).
- ² G20 (2014).
- ³ Saez (2013).
- ⁴ Eichengreen et al. (2013).
- ⁵ ESCAP (2013c).
- ⁶ ESCAP (2013a).
- ⁷ ESCAP (2013b).
- ⁸ WTO (2014).
- ⁹ UNCTAD (2014).
- ¹⁰ World Bank (2012b).
- ¹¹ ILO (2014).
- ¹² ESCAP (2012b); ESCAP (2013b).
- ¹³ Fulu et al. (2013).
- ¹⁴ FAO et al. (2013).
- ¹⁵ Kumhof et al. (2011); Cynamon et al. (2013).
- ¹⁶ United Nations (2012).
- ¹⁷ World Bank (2014).
- ¹⁸ Further details of the ESCAP social protection “toolbox” are available at www.socialprotection-toolbox.org/.
- ¹⁹ ESCAP (2014).
- ²⁰ ADBI (2013).
- ²¹ World Bank (2012a).
- ²² World Bank (2007).
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- ²⁴ ESCAP (2010); ESCAP (2013b).



MACROECONOMIC PERFORMANCE AND POLICY CHALLENGES AT THE SUBREGIONAL LEVEL

2

Economic growth momentum and the macroeconomic situation vary widely among the countries in Asia and the Pacific, in line with the diversity across the region. Several of the trade-dependent countries are likely to perform better in 2014, as the global economic recovery gains traction. Their macroeconomic performances thus depend on the implementation of appropriate policy measures to deal with spillovers from developed economies. This requires careful examination of the underlying reasons for changes in the macroeconomic aggregates and the likely impact of policy measures. On the other hand, a number of countries, mostly those with large domestic markets, are poised to experience either a growth slowdown or stagnation in 2014 due to diverse structural challenges. These countries need to accelerate structural reforms to deal with long-term impediments, while at the same time, address short-term macroeconomic issues. The macroeconomic performance of commodity-exporting countries varied widely in 2013. This group of economies faces the prospect of slowing growth in 2014. To counteract this, they should undertake policies to accelerate economic diversification.

This chapter presents a more disaggregated analysis of macroeconomic performance in 2013 and the prospects for 2014 at the subregional level, with some discussion centred on the country level, given their policy challenges. In the *Survey*, the Asia-Pacific region is divided into five geographic subregions: East and North-East Asia; North and Central Asia; the Pacific; South and South-West Asia; and South-East Asia. An overview of macroeconomic and policy developments in these subregions is followed by more detailed discussions on each subregion.

The **East and North-East Asian subregion** comprises: China; Democratic People's Republic of Korea; Hong Kong, China; Japan; Macao, China; Mongolia; and the Republic of Korea. In this highly trade-dependent subregion, growth picked up in most of the economies by mid-2013, as global growth prospects improved. In particular, a recovery in exports to the United States led to increased economic activity. Notable economic-related trends in the subregion were as follows. First, the deceleration of growth in China in recent years has come to a halt, but as mentioned in chapter 1, the prospects for the Chinese economy to return to pre-global crisis growth rates are unlikely unless the economy is rebalanced to be more consumption-led. On the positive side, stimulus announced by China in early April 2014 should help contain a deceleration in growth. Second, China, Japan and the Republic of Korea have formulated a range of structural reforms to tackle long-term impediments. In the case of China, some path-breaking announcements were made to push the economy more towards a market-based system. Japan has been pursuing an aggressive and exceptional monetary policy stance coupled with strong fiscal stimulus to pull the economy out from deflation. This appears to be working as indicated by recent signs of higher growth and inflation. The country also intends to reform its tax system to address its growing public debt. The Republic of Korea launched sizeable stimulus measures that focused on promoting corporate investment through tax reductions and job creation by initiating public projects. Third, on the external side, despite an increase in the second half of 2013, exports for

the year decelerated, which had a negative impact on current account surpluses in some economies. Fourth, although the net impacts of structural reforms are yet to be seen, the strengthening of the global recovery should help maintain the subregion's growth momentum in 2014.

The **North and Central Asian subregion** covers Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan and Uzbekistan. Among these countries, there are net energy exporters and non-energy commodity exporters. Subdued global demand for energy, gold and non-precious metals has impeded growth in the resource-based economies, particularly in the Russian Federation, which accounts for 80% of the subregion's GDP. Thus, the economies of the subregion as a group grew at a slower pace in 2013 than in 2012. Few important trends are worth highlighting. First, the growth performance within the subregion was diverse, ranging from 1.3% in the Russian Federation to 10.5% in Kyrgyzstan. Similarly, the inflation rates also varied from 2.4% in Azerbaijan to 12.1% in Uzbekistan. Second, in net energy-importing and remittance-dependent economies, output growth declined as household spending moderated due to a deceleration in workers' remittances, a direct result of the economic slowdown in the Russian Federation, the largest host of migrant workers in the subregion. Third, upward adjustments in administered prices pushed inflation higher in several of the economies in the subregion and applied further pressure on household spending. In response to inflationary pressures, monetary policy was tightened in some economies, with the Russian Federation hiking the interest rate by 200 basis points. Fourth, a number of the countries in the subregion increased public spending, especially on social programmes, to sustain domestic demand. This led to deteriorations in their fiscal balances. Fifth, on the external side, current account balances generally deteriorated owing to subdued global commodity demand. Despite an expected rebound in the global economy in 2014, output growth in the subregion is not likely to pick up as the economy of the Russian Federation further decelerates on the

back of conflict with Ukraine. In the medium term, diversification of economic growth drivers remains a major challenge for the countries that continue to be highly dependent on commodity exports.

The **Pacific subregion** includes the Cook Islands, Fiji, Kiribati, the Marshall Islands, the Federated States of Micronesia, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu. Australia and New Zealand are also part of this subregion. The Pacific island developing economies face unique challenges, including small populations, a poor resource base (except in a few exceptional cases), remoteness from their more developed trading partners, frequent natural disasters and the adverse impact of global climate change. These economies, as a whole, experienced lower economic growth in 2013, mainly due to an economic slowdown in the resource-rich economies of Papua New Guinea and Solomon Islands. Natural disasters also constrained output growth in Fiji and Samoa. Moderating global food and fuel prices helped limit inflation in several of these economies in 2013, although overall inflation increased modestly on high price rises in Papua New Guinea amid its weakening currency. Budgetary deficits were generally not very large in 2013 despite some increases in the larger economies. Heavy reliance on imported food and fuel together with limited export capacity generally led to sizeable external current account deficits. Some improvement in the growth performance of this subregion is expected in 2014, in line with the more positive outlook for the global economy and an increase in mineral output in Papua New Guinea.

Australia and New Zealand, the two developed economies of the subregion, experienced slower growth in 2013. Inflation remained low, although New Zealand was the first developed country globally to raise interest rates in March 2014 in anticipation of a trend towards higher rates in the United States. Both of these countries are committed to fiscal consolidation in the coming years. In 2014, growth is expected to remain relatively sluggish in Australia on weak mining investments, while New Zealand should record a rebound due to ongoing

reconstruction activities, better prospects for dairy industry and higher net immigration.

The **South and South-West Asian subregion** comprises Afghanistan, Bangladesh, Bhutan, India, the Islamic Republic of Iran, Maldives, Nepal, Pakistan, Sri Lanka and Turkey. Economic growth in the subregion picked up slightly in 2013, as the economies of Bhutan, India, Maldives, Sri Lanka and Turkey expanded at a more rapid rate, aided by increased household spending stemming from steady farm incomes and workers' remittances. Energy shortages have constrained economic activities in several of these economies and political tensions and security issues capped growth in Afghanistan, Bangladesh, Nepal and Pakistan. Large fiscal deficits limit fiscal manoeuvrability within the subregion. Some deceleration in the overall inflation rate occurred, but food inflation remained elevated. Meanwhile, the prospects of quantitative easing tapering in the United States triggered capital market volatility in India and Turkey. This underscored weak macroeconomic fundamentals, such as large current account deficits financed by short-term external borrowings. The large current account deficits are partly a reflection of large fiscal deficits in the subregion. Monetary policy has been tightened to stem capital outflows and combat financial market volatility. Despite this, economic growth in the subregion is projected to further increase in 2014 due to a stronger global economy. Tackling supply-side constraints, especially energy shortages, remains vital for achieving medium-term growth.

The **South-East Asian subregion** covers Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste and Viet Nam. Growth momentum in the subregion slowed somewhat in 2013. The sluggish global economic recovery held back exports, particularly in the first half of the year. Growth in domestic demand also decelerated in the large emerging economies, such as Indonesia, due to monetary tightening in response to higher inflation and capital flight. Domestic demand in Thailand was

adversely affected by rising household debt and political uncertainty. In contrast, the economy of the Philippines grew rapidly, despite the extensive damage caused by Typhoon Haiyan, which struck in late 2013. The least developed countries in the subregion, namely Cambodia, the Lao People's Democratic Republic, Myanmar and Timor-Leste, maintained high growth rates, underpinned in part by steady inflows of foreign investment, especially in the resource sector. Modest inflation enabled the economies of the subregion to ease monetary policy, which supported domestic demand amid weak external demand. Fiscal reforms moved forward in several economies in an attempt to restore fiscal sustainability following large-scale stimulus measures taken during the global economic downturn. As for 2014, growth is generally expected to moderate, especially in economies with large domestic markets. Financial market volatility, which could arise from monetary policy normalization in the United States, is a downside risk.

EAST AND NORTH-EAST ASIA

Recovery under way as the external environment improves

Growth in the subregion increased to 4.2% in 2013 from 4% in 2012 (see table 2.1). In most of the

economies, growth picked up gradually in midyear as the global economy rebounded and domestic demand gained traction. However, subregional growth remained below pre-crisis levels, largely due to the slowing growth rates in China in recent years. The Chinese economy grew by 7.7% in 2012 and 2013 compared to more than 9% during the period 2009-2011.

Slower growth in China is having a negative impact on other economies in the subregion. However, there are far greater long-run potential benefits if the slowdown is resulting from the process to rebalance the economy. By reducing the economy's dependence on exports, efforts will be made to spur more rapid growth in domestic demand. As a result, China will increase its imports of higher value-added final goods. Also, the country's graduation from being a supplier of low-skilled manufacturing jobs may free up nearly 100 million labour-intensive jobs for less developed countries.¹ It is also interesting to note that in 2013, the services sector made up 46.2% of GDP, overtaking the manufacturing sector. With the services sector's contribution to GDP expanding, the Chinese economy would be on its way to growth diversification. In line with the Government's policy direction, going forward, growth in the country is likely to be driven by developments in the services sector. Similar to China, many other economies in the subregion have witnessed an expansion in output

Table 2.1. Rates of economic growth and inflation in selected East and North-East Asian economies, 2012-2014

(Percentage)

	Real GDP growth			Inflation ^a		
	2012	2013	2014 ^b	2012	2013	2014 ^b
East and North-East Asia^c	4.0	4.2	4.1	1.4	1.5	2.9
East and North-East Asia (excluding Japan)^c	6.4	6.6	6.6	2.6	2.4	3.0
China	7.7	7.7	7.5	2.6	2.6	3.1
Democratic People's Republic of Korea	..	..	..	..	..	..
Hong Kong, China	1.5	2.9	3.5	4.1	4.3	4.6
Japan	1.4	1.5	1.4	0.0	0.4	2.8
Macao, China	9.1	11.9	11.3	6.1	5.5	6.0
Mongolia	12.4	11.7	10.0	14.3	10.5	12.0
Republic of Korea	2.3	3.0	4.0	2.2	1.3	2.1

Sources: ESCAP, based on national sources; and CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014).

^a Changes in the consumer price index.

^b Forecasts (as of 15 June 2014).

^c GDP figures at market prices in United States dollars in 2010 (at 2005 prices) are used as weights to calculate the subregional aggregates.

from their services sector. The share of the industrial sector in GDP decreased in Japan, Hong Kong, China and Macao, China, and remained largely stable in China and the Republic of Korea. With the exception of Mongolia, which is promoting agricultural output in an effort to diversify the economy and reduce dependence on the mineral sector, the agriculture sector in all of the export-oriented economies in the subregion continued to shrink in recent years.

In 2013, the deceleration of growth over the past few years came to a halt in China, as the economy expanded by 7.7%, unchanged from the previous year. Growth in 2013 was driven by consumption and investment, while private consumption remained relatively low, at only one-third of GDP, compared to an average of 55% of GDP in other emerging Asia-Pacific economies. In contrast, investment levels remained high as a number of infrastructure projects were initiated around midyear. Investments in the property market were also robust, helped by rapid credit expansion from the shadow banking sector and off-balance sheet commercial banks' transactions. Rising pressures on credit growth resulted in higher interbank lending rates, though it was encouraging that liquidity in non-housing sectors was not affected. Nevertheless, rapid growth in shadow banking and off-balance sheet activities in recent years, as well as the possible property bubble are matters of concerns. The authorities in China are cognizant of this and have taken measures to curb the risks arising from rapid growth of the sector. It should also be mentioned that the nature and content of shadow banking in China differ from western countries. Shadow banking in China, which is mainly composed of trust funds, is typically used to finance riskier borrowers and transactions that banks cannot undertake due to regulations. Thus, shadow banking potentially could support the real economy. Moreover, shadow banking finances only a small part of total credit in China.

Gross national savings in China remained exceptionally high, at 51.4% of GDP, in 2013. Even though private consumption during the past two decades expanded about 8% per annum, it was outstripped

by growth in savings. The high savings, in turn, funded rapid capital formation. Meanwhile, gross investment expanded by more than 12% annually in the past few decades and as a result, its share of GDP increased from about 38% in the early 1990s to 48.9% in 2013 (see figure 2.1). The high savings and investment in China has been a topic of much debate as it is closely linked with transforming the economy to be more consumption-oriented. Many attribute the excessive saving behaviour to rising housing prices and an inadequate social protection system. In this regard, access to affordable financing options and stronger social safety measures would help relieve the need for high savings and boost private consumption.

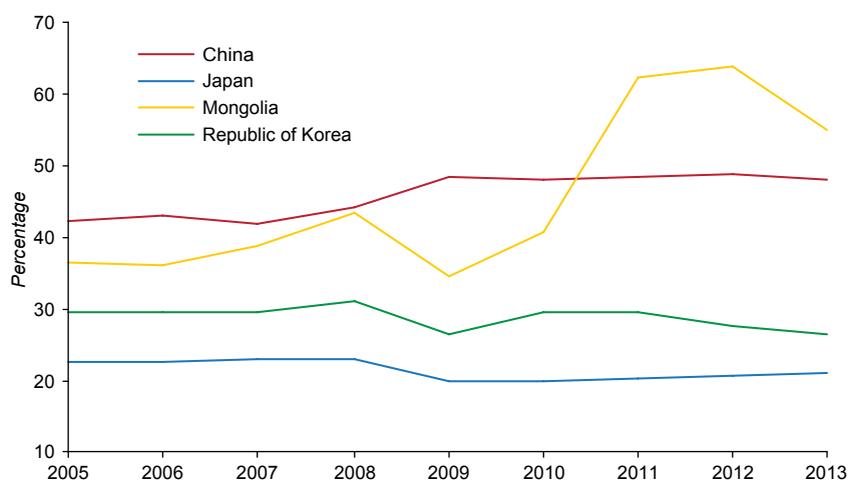
Access to affordable financing options and stronger social safety measures would help relieve the need for high savings and boost private consumption

Hong Kong, China enjoyed a stronger growth performance of 2.9% in 2013, as compared with 1.5% in 2012. Robust private consumption remained a key driver of the expansion, although inbound tourism was also an important factor. Merchandise exports were weak, as shipments to Japan and the United States declined. Wage pressures increased, but inflation remained stable, thus boosting household real incomes. Although the overall labour market appeared strong, the youth unemployment rate remained greater than 8%.

Growth in Macao, China accelerated to 11.9% in 2013. Strong tourism growth spurred economic activities, with both arrivals and spending per visitor rising by about 5%. Private consumption expanded steadily, while fixed investment, mainly in the construction sector, jumped by 15.1% and contributed markedly to the overall growth of the economy.

The Democratic People's Republic of Korea releases limited official economic data. Its economy is highly dependent on the agriculture sector and exports of light industry products and minerals. Favourable

Figure 2.1. Investment-to-GDP ratio in selected East and North-East Asian economies, 2005-2013



Source: ESACP, based on International Monetary Fund, World Economic Outlook Database, April 2014.

weather conditions in 2013 are likely to have supported agricultural activities. A slowdown in China, the country's largest trading partner, could have dampened exports, although much of the bilateral trade is agreed on a barter basis. Special economic zones in the country potentially help support economic growth, but tensions with the Republic of Korea have led to temporary shutdowns in large-scale industrial complexes.

The economic recovery of Japan gained momentum in the early part of 2013 on the back of aggressive monetary easing, which buoyed exports and corporate profits by weakening the yen. The growth momentum, nevertheless, slowed towards the end of the year. In response, the Government announced further stimulus measures amounting to 0.9% of GDP in October 2013. These included additional public sector projects and tax reductions for corporate investment. GDP growth for the year reached 1.5% in 2013, up marginally from 1.4% in 2012. The end of deflation should benefit the economy by lowering the real value of debt, and hence encouraging household consumption and corporate spending. High household savings have enabled the Government to accumulate debt amounting to nearly 230% of GDP at relatively low interest rates. With the fall in overall domestic

savings, the economy's current account balance recorded the smallest surplus in 2013 since the 1980s despite weakened currency. Currently, 95% of government debt is held domestically, with Japanese government bonds making up 20% of total assets of domestic financial institutions. However, as a result of the current trend of dissaving among the ageing population, it will be increasingly difficult to finance government deficits domestically. It is therefore critical that the Government policies succeed in reviving the economy to allow for fiscal consolidation.

Mongolia sustained high growth of 11.7% in 2013. Strong agricultural output, rising government expenditure and the start of copper production at a large mine propelled the overall expansion. Investment in the mining sector rose sharply in recent years. The official unemployment rate in midyear dropped to 7.3% and the solid economic performance in the past years has contributed to poverty reduction, with the poverty rate declining from 38.7% in 2010 to 27.4% in 2012.

The economy of the Republic of Korea expanded by 3% in 2013 compared with 2.3% in 2012. This was attributed to robust domestic demand, as both public and private consumption increased. To support the economy, the Government enacted a 17.3 trillion

won (\$980 million) supplementary budget in 2013, which focused on supporting small and medium-sized enterprises (SMEs), with the ultimate aim to create more employment. The property market remained flat despite repeated attempts by the Government to prop it up. Export growth was weak during the first half of 2013, partly attributable to eroded export competitiveness in line with the weaker Japanese yen. Meanwhile, gross national savings and total investment remained unchanged at about 31% and 27% of GDP, respectively, in 2013, as compared with the previous year. Household savings have trended downward over the past decade due to mounting household debt and the ageing population. Higher household debt levels may be a symptom of rising income inequality and could become a source of financial sector instability and constrain domestic demand growth.

Lower commodity prices kept inflation in check

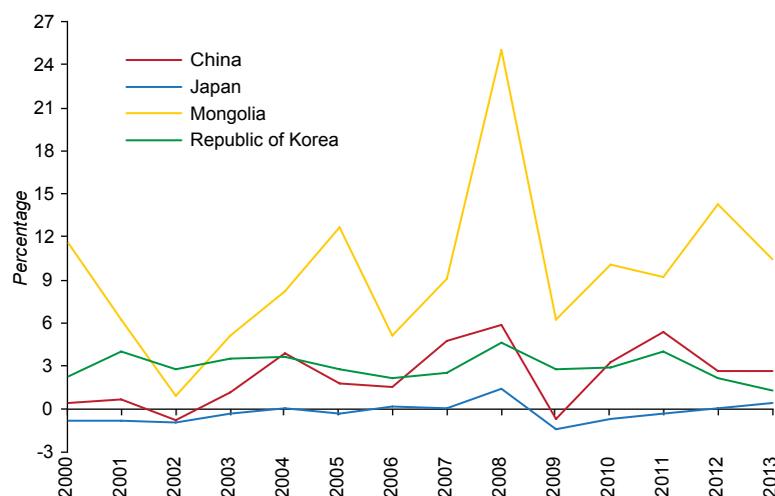
Inflation rates in the subregion were low, with the exception of the rate in Mongolia, which fell but remained in double digits (see figure 2.2). The slow global economic recovery, particularly during the first half of 2013, led to weak external demand

and falling commodity prices, which, in turn, limited inflationary pressures. Government measures in some countries also influenced inflation outcomes.

In China, inflation remained unchanged in 2013, at a low rate of 2.6%, due to moderate wage growth, lower commodity prices and stronger control of credit expansion. In Hong Kong, China, the inflationary pressures from the tight labour market conditions and rising property prices were partly offset by weak external demand and stable energy and food prices. As a result, inflation increased modestly to 4.3% in 2013. Meanwhile, moderating global food and fuel prices trimmed the inflation rate in Macao, China to 5.5%. Softer price increases were also observed in the Republic of Korea, where inflation fell to 1.3% in 2013 from 2.2% in 2012, despite higher public utility prices, including for transportation and heating.

In Japan, inflation turned the corner following efforts to stave off deflationary pressures for many years. The dramatic loosening of monetary policy and a 2% inflation target helped push up inflation to 0.4% in 2013 from zero inflation in 2012 and an average rate of deflation of 0.8% during the period 2009–2011. Another factor that spurred inflation was higher import prices, a direct result of the weaker yen.

Figure 2.2. Inflation in selected East and North-East Asian economies, 2000–2013



Sources: ESCAP, based on national sources; and CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014).

Mongolia, the only economy in the subregion with persistently high inflation, succeeded in softening its inflation rate to 10.5% in 2013 from 14.3% in 2012. In addition to falling food and energy prices globally, the implementation of a price stabilization programme helped reduce the inflation rate. To deal with rising prices, the Government opted to implement a price stabilization programme rather than tighten monetary policy. The programme was aimed at tackling supply-driven inflation by subsidizing suppliers of imported food and fuel. It also helped sustain high economic growth in 2013.

Mixed performance on current account balances

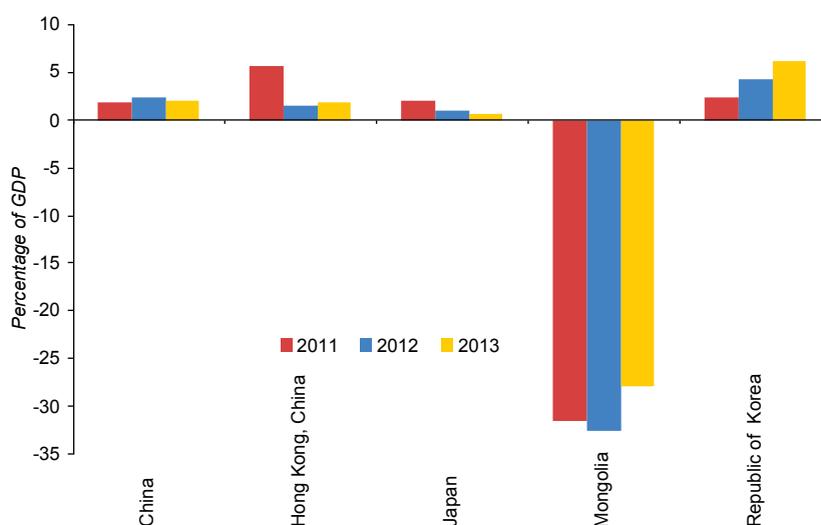
In China, rising export prices and friction with key trading partners, such as Japan, resulted in slower export growth. The current account surplus also narrowed on the back of increasing outbound tourism and a growing service account deficit (see figure 2.3). The current account surplus of Japan also shrank. Although export earnings grew, the value of imports also increased and overseas income declined due to the weaker yen.

In Mongolia, coal exports fell by nearly a half as demand from China weakened. Subdued prices of primary commodities resulted in less favourable terms of trade, which led to a current account deficit equivalent to a quarter of GDP.

Meanwhile, the current account surplus rose slightly in Hong Kong, China on an increase in the service account surplus despite tepid merchandise exports. In the Republic of Korea, the current account surplus reached a record high level in 2013. While exports started to recover in midyear, both import volume and prices continued to decline.

The picture was also mixed on the capital and financial account side. China witnessed a recovery in FDI, reversing the downward trend in 2012. Foreign direct investment in Hong Kong, China also increased. In contrast, investment inflows to Mongolia plunged by more than 40%. This was due, in part, to the completion of the first phase of a large-scale copper and gold mine and also uncertainty associated with a foreign investment law, which required parliamentary approval for large investment plans in strategic sectors, such as

Figure 2.3. External current account balance in selected East and North-East Asian economies, 2011-2013



Sources: ESCAP, based on national sources; and CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014).

minerals and finance. While the Government has since introduced a new investment law that reduces the uncertainty associated with the approval process, the balance between protecting long-term interest in key industries and attracting foreign investment needs to be carefully pursued.

Currencies in the subregion also moved in different directions. The Korean won appreciated against the United States dollar in 2013 as the country's trade surplus increased, but trading in the currency was volatile due to heightened global financial market uncertainty arising from potential changes in the United States monetary policy. Recently, the Chinese yuan has been trending higher, partly due to the liberalization of the exchange rate. The Japanese yen fell to a four-year low as the currency depreciated by 22% against the United States dollar by end of 2013 as a result of extraordinary monetary easing.

Policy responses and structural reforms: promotion of sustained growth

With slower growth relative to the past trend and continued global economic uncertainty, macro-economic policies in the subregion focused on supporting growth through different means.

As discussed in chapter 1, in China, a bold reform package was released in November 2013 with an underlying theme to make the economy more balanced, sustainable, market-oriented and efficient. These reforms include accelerating the pace of interest rate liberalization and convertibility of the Chinese yuan. Also, many of the long-standing issues related to state-owned enterprises are addressed in the reform package, such as allowing private investors to take part in State investment projects and breaking all forms of administrative monopolies, while increasing the State's contribution to public services. Measures to tackle increasing inequality between rural and urban areas are also part of the reforms.

The two-decade battle Japan had with sluggish economic growth and deflation appeared to have turned the corner in 2013 as the Government's

three-pronged approach to revive the economy took effect. As highlighted in chapter 1, massive fiscal stimulus, more aggressive monetary easing and structural reforms resulted in positive inflation and improved growth. The initial positive results of monetary easing and fiscal stimulus packages will be followed up with structural reform measures to increase the growth trajectory. These measures are aimed at, among other things, addressing labour market rigidities and deregulating the public utilities. The Japanese economy still faces many challenges, including mitigating the impact of the consumption tax hike introduced in April 2014.

Japan's battle against sluggish growth and deflation has turned the corner

The Republic of Korea pursued policies aimed at reducing its dependence on exports and raising productivity in the services sector. Under an overall plan to raise the economy's potential growth rate to 4%, increase annual per capita income to \$40,000 and boost the share of employed persons in working-age population to 70% by 2017, the Government adopted three strategies: (a) to strengthen economic fundamentals; (b) to promote creativity and dynamism; and (c) to boost domestic demand. Specific policies include rolling back regulations, particularly those that are applicable to the services sector, shoring up the tax base while giving more tax benefits to startups and providing incentives to hire more women and youth.

Monetary policy remained accommodative in most economies in the subregion. However, in China, growing concerns over shadow banking led to a hike in interest rates during which the 7-day repo rate jumped to a record 12% and the overnight repo reached 25% in mid-2013. Interest rates declined in early 2014 as the central bank injected more than \$42 billion into the economy to meet cash demand.

The Bank of Japan continued its money market operations, which raised the money base by 60

trillion-70 trillion yen (\$430 million-\$500 million) per year. This quantitative easing seeks to achieve a 2% inflation target and boost economic activities in general. Monetary authorities in Mongolia also embarked on monetary easing in 2013 in response to slowing credit growth. Similarly, the Bank of Korea cut its policy interest rate by 25 basis points in May 2013 to 2.5% to stimulate domestic demand.

Fiscal balances deteriorated in several economies in the subregion in 2013 due to rising expenditures and lower-than-expected tax revenues (see figure 2.4). In China, the fiscal deficit increased to 2% of GDP in 2013, from 1.5% of GDP in 2012. Since 2012, the Government has been focusing on reforming the tax system. In a pilot scheme carried out in Shanghai, the Government replaced a business tax with a value-added tax for the transportation, asset leasing and modern services sectors. This shift is designed to promote the services sectors as part of the twelfth five-year national plan.^{2,3}

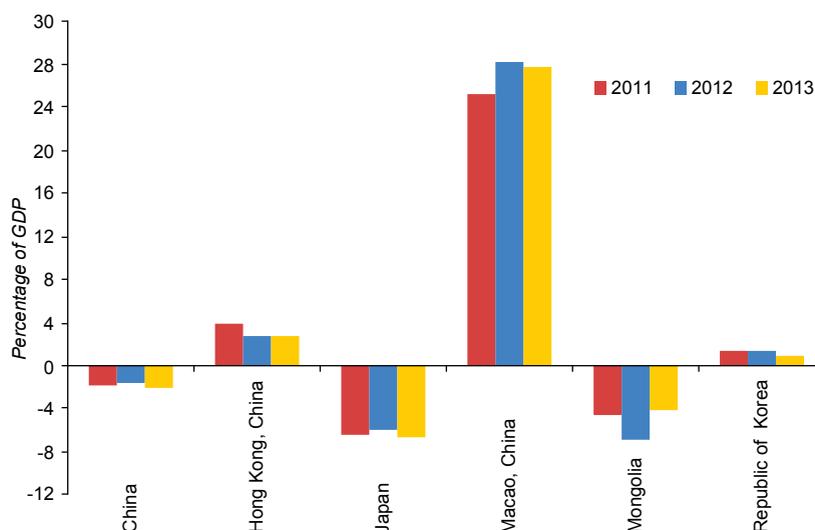
In Japan, the fiscal deficit amounted to 6.7% of GDP in 2013 and gross public debt was equivalent to about 2.3 times that of GDP. The Government of Japan reformed its tax regime in order to tackle the growing public debt burden. Rather than issuing additional bonds, it increased the sales tax rate

from 5% to 8% in April 2014. The Government also introduced measures to relieve the short-term impact of the tax hike. Over the medium term, higher sales tax revenue should help reduce the level of public debt. In Mongolia, an extensive amount of off-budget spending occurred using proceeds from the mining-sector bond sales, despite attempts by the Government to contain the budget deficit and meet the requirements of the Fiscal Stability Law.⁴

Outlook for 2014 and policy challenges

The subregion is expected to experience slightly slower growth in 2014, mainly due to lower economic growth in China and Japan. The economy of Japan is projected to decelerate marginally to 1.4% in 2014 from 1.5% in the previous year, partly due to constrained consumption expenditure as a result of the higher sales tax rate and escalating import prices. Also of note, the shutdown of nuclear power plants will result in higher energy bills. Excluding Japan, growth in the subregion is projected to be stable at 6.6% in 2014. Economic growth in China is forecast to moderate to 7.5% in 2014, as economic rebalancing towards private consumption moves forward. Mini-stimulus measures announced by the Government in April 2014 should help the country achieve its official growth target. Growth

Figure 2.4. Budget balance in selected East and North-East Asian economies, 2011-2013



Sources: ESCAP, based on national sources; and CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014).

projections for China and Japan are discussed in detail in chapter 1.

The Republic of Korea is projected to grow more rapidly, at 4%, in 2014. A rebound in exports to developed markets should cushion the impact of a slowdown in China. Continued weakness in the real estate market and record levels of household debt are immediate challenges. In the medium term, improving productivity and income growth in the services sector and smaller firms is key to enhancing domestic demand. Most new services jobs are in low value-added sectors, such as retail, real estate and transportation. An incentive structure within a proper regulatory framework that supports high value-added services, such as banking and health care, could be promoted.

Economic growth in Mongolia is expected to moderate to 10% in 2014. The economy faces various challenges, including a sizeable deficit in external balances, resulting from declining FDI and lower coal exports to China. The lack of reliable and efficient rail transport has dented the export competitiveness of primary commodities to China. Export product and market diversification can help boost exports.

Employment for the elderly is becoming important given population ageing

Limited number of quality jobs for the elderly population is one of the growing concerns in the subregion. Due to population ageing, employment in the age group of 55-64 years has been steadily increasing. However, more elderly workers have low-paid jobs, are self-employed or are in the informal sector. As a result, poverty among the elderly is high. According to a recent official survey, nearly a quarter of all Chinese aged over 60 years live in poverty.⁵ A report by the OECD also shows that more than 30% of people aged 65 and over in Hong Kong, China earn less than half of the national median income. The elderly poverty rate is higher in the Republic of Korea. It stood at 48.6% in 2011, four percentage points higher than the

rate in 2007. Given the rapid growth of the elderly population, there is an urgent need for the subregion to examine the sustainability and effectiveness of national pension schemes.

The subregion also faces a number of environmental challenges due to, among other things, its rapid industrialization and urbanization in the past decades. In box 2.1, the role of urban planning in achieving more sustainable development is highlighted.

NORTH AND CENTRAL ASIA

Slower economic growth due to subdued commodity prices

Growth in the North and Central Asian subregion as a whole slowed to 2.1% in 2013 from 3.8% in 2012 (see table 2.2). Many of the economies in the subregion were affected by the sluggish global economic recovery due to their high dependence on exports of oil, gas, metals and other commodities. Also, as a result of strong economic linkages, particularly through remittances received from the Russian Federation and to a lesser extent from Kazakhstan, the slowdown in net energy exporters adversely affected consumer spending and GDP growth in the energy-importing and remittance-dependent economies in which the services sector comprised the largest share of the economy.

In Armenia, growth declined to 3.5% in 2013 from a high base of 7.2% in 2012. Softer international metal prices largely underpinned the slowdown. Construction activities continued to shrink, as the sector has yet to recover from the slump resulting from the global financial crisis. On the demand side, the contribution of private consumption to growth slowed in line with higher prices for imported gas and declines in real wages. A survey conducted by the central bank suggests that consumer confidence was at its lowest level since 2009.

Economic growth in Azerbaijan strengthened to 5.8% in 2013 from 2.2% in 2012. Non-oil sectors,

Box 2.1. The role of low-carbon cities to promote sustainable development in East and North-East Asia

China, Japan and the Republic of Korea are among the world's top importers of fossil fuels. Together, they account for about a quarter of global greenhouse gas emissions. Enhancing energy consumption efficiency is thus vital in East and North-East Asia. This box discusses how low-carbon cities help promote sustainable development in the subregion.

Cities are home to about half of humanity or around 3.5 billion people worldwide.^a The share of urban population in East and North-East Asia is estimated to rise to more than 70% by the next decade.^b By 2030, China alone is likely to have an additional 400 million city dwellers. About 220 Chinese cities will have more than one million residents.^c The damaging effects on climate change can be significant since cities emit around 70% of total greenhouse gas emissions, while they occupy only 2% of the global land area.^d

Despite these grim statistics, cities are uniquely positioned to tackle climate change by achieving greater efficiencies through better urban planning and greater citizen participation. Furthermore, many cities in the Asia-Pacific region are at a crossroads in developing and expanding infrastructure in support of economic growth. These choices made in urban infrastructure development will have a major influence on climate change.

Some of the key factors influencing energy use and carbon dioxide emissions are the compactness of urban settlements, nature of transportation systems, income and lifestyle, industrial process, construction technologies and waste disposal methods. In East and North-East Asia, income and lifestyle changes, such as the rapid increase in the number of vehicles, are cited as a major factor.^e There are various ways cities can contribute to climate change mitigation, including by developing urban transport systems that support walking and cycling, constructing more eco-friendly buildings, and managing solid waste in a way that maximizes recycling and reuse. Structured tax incentives and emissions trading programmes can also be used to reduce the carbon intensity of urban industries.

Many cities in China, Japan and the Republic of Korea have set goals and taken steps to reduce greenhouse gas emissions. For example, in Hangzhou, China, the government has announced an ambitious plan to cut emissions by half. At the national level, the twelfth five-year plan targets a reduction in energy and carbon intensity by up to 17%.^f An example of an initiative on low-carbon cities undertaken by Japan is the Bill of Basic Act on Global Warming Countermeasures. In the Republic of Korea, these initiatives are the Low Carbon, Green Growth Basic Act and Urban Planning Guidelines for Low-Carbon Green Growth.

^a World Bank (2013a).

^b United Nations (2005).

^c McKinsey Global Institute (2009).

^d United Nations (2011a).

^e Dhakal (2004).

^f China (2011).

which account for about half of GDP, led the upturn. This was especially seen in service activities; for example, the restaurants subsector was buoyed by improving household demand and the construction industry benefitted from government spending on infrastructure projects. Jobs created in the private sector accounted for up to 40% of the new jobs.

Output growth in Georgia slowed to 3.2% in 2013 from a high base of 6.2% in 2012. Domestic demand, particularly government spending and private investment, weakened as a result of political uncertainty related to the general elections held in October 2013. The slowdown was broad-based, affecting such subsectors as agricultural,

Table 2.2. Rates of economic growth and inflation in North and Central Asian economies, 2012-2014

(Percentage)

	Real GDP growth			Inflation ^a		
	2012	2013	2014 ^b	2012	2013	2014 ^b
North and Central Asia^c	3.8	2.1	1.3	5.1	6.7	5.5
North and Central Asia (excluding Russian Federation)^c	5.5	6.5	6.1	5.3	6.0	8.2
Armenia	7.2	3.5	4.5	2.6	5.8	5.0
Azerbaijan	2.2	5.8	5.0	1.1	2.4	4.0
Georgia	6.2	3.2	5.0	-0.9	-0.5	4.0
Kazakhstan	5.0	6.0	5.4	5.1	5.8	9.3
Kyrgyzstan	-0.9	10.5	6.5	2.8	6.6	7.2
Russian Federation	3.5	1.3	0.5	5.1	6.8	5.0
Tajikistan	7.5	7.5	6.0	5.8	5.1	7.2
Turkmenistan	11.1	10.1	10.4	8.5	9.0	11.0
Uzbekistan	8.2	8.0	8.1	13.2	12.1	11.0

Sources: ESCAP, based on national sources; Interstate Statistical Committee of the Commonwealth of Independent States. Available from www.cisstat.com (accessed 15 June 2014); CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014); and Economist Intelligence Unit, *Country Reports*.

^a Changes in the consumer price index.

^b Forecasts (as of 15 June 2014).

^c GDP figures at market prices in United States dollars in 2010 (at 2005 prices) are used as weights to calculate the subregional aggregates.

manufacturing and trade. Despite a general increase in wage levels, weak employment prospects further hampered domestic demand.

Kazakhstan enjoyed more rapid economic growth of 6% in 2013 compared with 5% in the previous year. Better agricultural performance and solid private consumption, supported by accommodative credit policies for consumers, contributed to higher growth. However, consumer loans by commercial banks increased at the expense of credit extended to small businesses. Export earnings were weak on the back of sluggish world demand for oil. On the supply side, services sectors, such as trade and transport, contributed significantly to output growth. Strong economic growth has led to job creation, but youth unemployment remains relatively high.

The economy of Kyrgyzstan staged a turnaround from a contraction of 0.9% in 2012 to 10.5% growth in 2013. Gold production, which accounted for almost half of industrial production, jumped as the production problems and labour tensions that depressed gold output in 2012 eased. The agriculture sector performed better too. The economy also benefited from higher household consumption, resulting from robust employment and rising remittance inflows,

albeit at a slower pace. This was reflected in the improved performance of the domestic retail trade sector.

In the Russian Federation, GDP growth decelerated further from 3.5% in 2012 to a four-year low of 1.3% in 2013. Hydrocarbon exports were anaemic and related sectors, such as trade, industry and finance, experienced a slowdown on the back of the sluggish global economy. Although capacity utilization was close to its pre-crisis level, fixed investment remained weak as several public investment projects were completed. The economy was supported mainly by household consumption, which benefited from easy access to consumer loans and higher real wages. Growth performances in other countries in the subregion, especially net energy importers, tend to be strongly linked to that of the Russian Federation through trade and workers' remittances.

Tajikistan sustained high growth of 7.5% in 2013. Remittance inflows, which accounted for nearly half of GDP, propelled household consumption. Similar to a number of other economies in the subregion, agricultural production was strong due to large grain harvests, which helped contain food inflation. Industrial activities were weaker, owing to

sluggish aluminium output, which constitutes more than 60% of total exports. The sluggish output was tied to shortages of gas and weak external demand. Meanwhile, the country's aluminium sector is facing productivity challenges as it uses outdated technologies, which are expensive to operate and use an excess amount of energy.

Output growth in Turkmenistan moderated in 2013, but it remained solid at 10.1%. The production of natural gas, which accounts for more than half of total exports, continued to expand. Domestic demand remained strong as private consumption increased in line with higher wage levels. The country also saw greater investments from both the private and public sectors, which were reflected by strong construction activities.

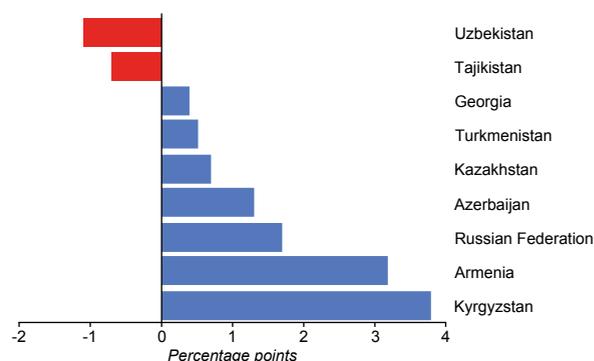
Economic growth in Uzbekistan slowed slightly in 2013 to 8%. Subdued global demand for, and lower prices of, gold adversely affected the country's exports. However, domestic demand remained robust and provided an impetus to growth. Government spending on housing and industrialization programmes increased, while household spending benefited from upward adjustments of minimum wages and social transfers and stable remittance incomes. Industrial activities led the expansion from the supply side, particularly those related to construction and metals.

Inflation edged up on non-food items

Consumer price pressures increased in most of the economies in North and Central Asia, mainly due to higher prices for non-food items (see figure 2.5). Overall, inflation ranged from 2.4% in Azerbaijan to 9% in Turkmenistan and 12.1% in Uzbekistan.

In many of the countries of the subregion, the price increases were partially policy-driven. In Kyrgyzstan, a weaker exchange rate and higher excise taxes on alcoholic beverages and tobacco products contributed to higher inflation. Upward adjustments in administered prices, such as utility tariffs and public transportation fares, were recorded in Armenia, Kazakhstan, Turkmenistan and Uzbekistan. A strong agricultural

Figure 2.5. Inflation in North and Central Asian economies, changes in 2013 relative to 2012



Sources: ESCAP, based on national sources; and CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014).

harvest helped offset part of those policy-induced price pressures in Kazakhstan and Kyrgyzstan.

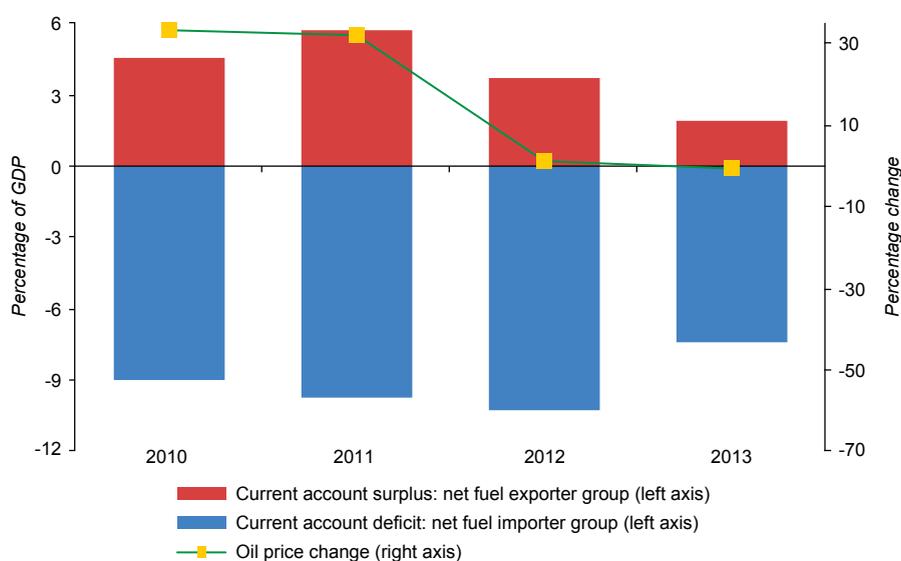
Inflation in Armenia rose to 5.8% in 2013 from 2.6% in 2012 due to higher prices for gas from the Russian Federation, although core inflation remained within the official target range of 2.5-5.5%. In the Russian Federation, inflation rose to 6.8% in 2013 from 5.1% in 2012, partly due to rising wages. In Turkmenistan, the Government's commitment to raise salaries and social spending by 10% annually resulted in upward pressure on prices. Meanwhile, the inflation rates in Tajikistan and Uzbekistan, which are relatively high, decelerated slightly in 2013. Finally, unlike other economies in the subregion, Georgia had experienced deflation since 2012 amid subdued domestic demand.

External current account balances generally deteriorated

Several economies in North and Central Asia experienced a deterioration in their current account balances in 2013. Weak external demand and commodity prices coupled with strong import demand contributed to smaller current account surpluses, especially among net oil exporters (see figure 2.6).

In the Russian Federation, the current account surplus decreased to 1.6% of GDP in 2013. Exports

Figure 2.6. External current account balance in North and Central Asian economies, 2010-2013



Sources: ESCAP, based on national sources; and International Monetary Fund, World Economic Outlook database, April 2014 and Primary Commodity Prices data (accessed 15 June 2014).

Notes: The oil price index (2005 = 100) is a simple average of spot prices of Dated Brent, West Texas Intermediate, and the Dubai Fateh. Net fuel exporters include Azerbaijan, Kazakhstan, Russian Federation, Turkmenistan and Uzbekistan. Net fuel importers include Armenia, Georgia, Kyrgyzstan and Tajikistan.

contracted by 1.3% amid lower export prices of energy, while imports increased on the back of strong household demand, which was fuelled by credit growth. Strong import demand also narrowed the current account surplus in Azerbaijan. In Tajikistan, lower prices for aluminium and cotton, which together accounted for up to 80% of all exports, depressed overall export earnings. The current account deficit stood at 1.9% of GDP in 2013. Meanwhile, an improvement in net current transfers helped trim the current account shortfall of Kyrgyzstan, which, however, remained high at 12.6% of GDP.

In Armenia and Georgia, the current account deficits narrowed on rising workers' remittance inflows, which constituted up to 10% of GDP in these economies. Higher exports of copper in Armenia and lower imports in Georgia as growth in investment and public spending slowed were also factors behind this. Despite the recent narrowing, the current account deficits of those two countries remained high, at 10.5% of GDP in Armenia and 6.1% of GDP in Georgia in 2013.

Although the value of remittance inflows to most of the countries in the subregion has generally risen, the growth rate of these inflows has slowed in recent years. This is in line with the economic slowdown in the Russian Federation, which is the dominant recipient country of migrant workers in the subregion. For example, Armenia, which receives 90% of its remittances from the Russian Federation, has been recording slower growth of inflows since 2010. Migrant workers are particularly affected by an economic slowdown in a recipient economy as many of them are engaged in vulnerable employment.

Some positive developments on the balance of payments were recorded in 2013. In September, Armenia secured \$700 million through its first international bond issuance. This allowed the country to repay a bilateral loan that was extended by the Russian Federation and provide financial liquidity to the business sector. Nevertheless, policymakers should be mindful of risks associated with external commercial borrowings arising from sudden shifts in investor sentiment and global macroeconomic

conditions. Other economies, meanwhile, have gradually expanded their export baskets beyond traditional shipments of oil and mineral products to include, for example, sugar products in Azerbaijan and live animals in Georgia, but the export values of these products are still relatively small.

Sluggish global demand for commodities was a key factor behind narrowing current account surpluses in several of the subregion's economies. Another contributory factor was strong demand for imported capital goods, especially in Turkmenistan and Uzbekistan. These capital goods could boost future foreign exchange earnings if they are used to enhance production competitiveness and diversification.

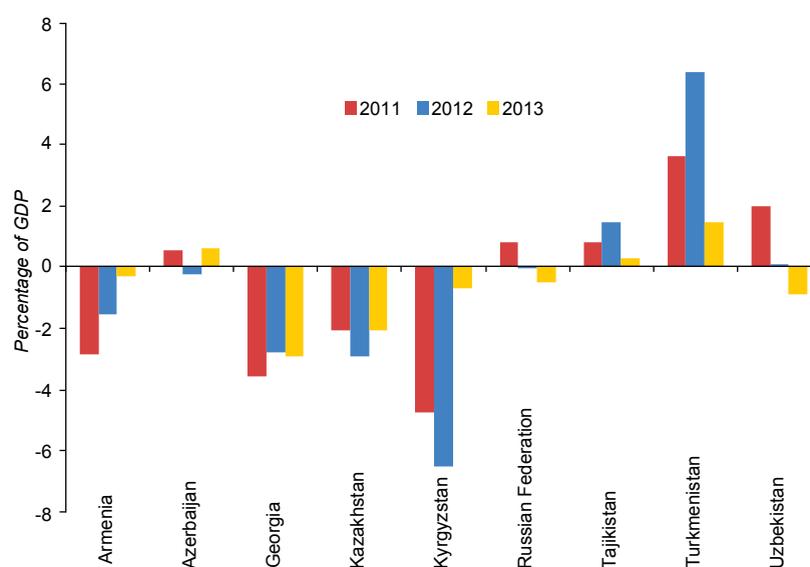
Movements in the external current accounts are reflections of developments in national savings-investment gaps. National savings fell short of domestic investments in several of the economies of the subregion, with the gaps ranging from 0.7% of GDP in Kyrgyzstan to 6.5% of GDP in Armenia during the period 2010-2012. Long-term foreign capital thus played an important role in the subregion, with FDI inflows averaging at a quarter of total investment over the same period.

Policy responses and structural reforms

Several countries in the subregion have implemented supportive policies aimed mainly at increasing the purchasing power of households. These policies had resulted in larger fiscal deficits or smaller surpluses. In other countries in the subregion, particularly those that enjoyed more favourable economic conditions, tax reforms were implemented to restore fiscal sustainability. Monetary policy stances were mixed in the subregion, as they are primarily based on the relevance of inflationary pressures in each country.

In more than the half of the countries in the subregion, fiscal policy in 2013 was expansionary to support growth. Consequently, fiscal balances deteriorated in Georgia, the Russian Federation, Tajikistan, Turkmenistan and Uzbekistan (see figure 2.7). In Georgia, expenditure on social programmes was expanded by about 17% in an effort to introduce universal health care. Similarly, in Tajikistan, Turkmenistan and Uzbekistan, higher social transfers boosted the purchasing power of low-income households. In the Russian Federation, the fiscal deficit widened marginally to 0.5% of GDP due to lower oil revenues.

Figure 2.7. Budget balance in North and Central Asian economies, 2011-2013



Source: ESCAP, based on Economist Intelligence Unit, *Country Reports*.

In several countries of the subregion, fiscal space expanded in line with reforms in revenue collection. In Azerbaijan, for example, stronger economic growth coupled with tax and customs administration reforms boosted government revenues. In Armenia, tax reforms led to greater revenue collection despite an economic slowdown. In particular, the Government launched a fiscal consolidation programme that entailed strengthening the tax and customs administration to increase tax revenues, which are currently among the lowest in the subregion in terms of GDP.

It is important to ensure that declines in public spending and increases in revenue do not adversely affect the poor and vulnerable groups in the population

Some of the countries in the subregion also tried to rebuild sustainable fiscal paths by restraining expenditure. This was particularly the case in Kazakhstan and Kyrgyzstan. In Kazakhstan, public spending on housing and utilities was cut. The country's budget deficit thus narrowed to 2.1% of GDP in 2013; however the impact of this change on the budget allocation on lower-income groups should be closely monitored. In Kyrgyzstan, spending was also rationalized, although education, social security and public health remained priority areas. This led to an improved fiscal performance in Kyrgyzstan, which also benefited from a rebound in the gold mining sector and higher economic growth. Overall, it is important to ensure that declines in public spending and increases in revenue do not adversely affect the poor and vulnerable groups in the population. To this end, coordinating fiscal and monetary policies is critical for stimulating investment and reducing inflationary pressures on households.

Monetary policy stances in the subregion were mixed, with interest rates remaining below the levels recorded during the global financial crisis in several of the economies. In Armenia, the policy rate was increased in August 2013 for the first time in two years as authorities responded to higher inflation resulting in part from rising import prices of gas.

However, the policy rate was lowered in late 2013 and early 2014 as a programme to peg Armenian gas prices to Russian domestic prices for a five-year period began. In Azerbaijan and Tajikistan, the policy stance was further eased to stimulate domestic demand. In Georgia, after a series of policy rate cuts over 2013 to combat deflation, policy rate normalization began in early 2014 in line with a rise in inflation. In Uzbekistan, money supply growth slowed, which helped weaken inflationary pressures triggered by a weaker currency, import restrictions and higher public spending. A tighter policy stance was also noted in Kyrgyzstan on the back of robust economic activities.

In the Russian Federation, despite slowing economic growth, the policy interest rate remained unchanged between September 2012 and February 2014 as inflation stayed above the central bank's official target. To contain inflation, the central bank intervened actively in currency markets to limit the depreciation of the Russian rouble against the United States dollar. However, in early 2014, it hiked the policy interest rate by 200 basis points to 7.5% to curb inflationary pressures emerging from continued currency depreciation as capital outflows accelerated.

Changes also occurred in the implementation of monetary policy in the Russian Federation and Kazakhstan. Direct interventions by the Central Bank of Russia in the currency market in 2013 and the increase in the policy interest rate in early 2014 reflected a shift in monetary policy management from exchange rate targeting to inflation targeting. This shift is also backed by the strengthening of the supervisory role of the central bank through key amendments to the Banking Law and by raising the reserve requirements for commercial banks. Indeed, in anticipation of the forthcoming implementation of Basel III, the solvability ratio of Tier 1 common equity is set at 5%, compared to a ratio of 4.5% of Basel III. Moreover, in reaction to an increase in the household debt-to-income ratio from 15% in 2010 to 24% in 2013, the central bank has introduced higher requirements for uncollateralized loans and increased the risk weights for consumer loans.

Kazakhstan shifted from pegging its currency to the United States dollar to a multicurrency basket peg that comprises the Russian rouble, the euro and the United States dollar. This change was initiated partly in reaction to closer economic ties between Kazakhstan and the Russian Federation.

To promote economic diversification, countries, such as Armenia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, have sought to attract more FDI in non-resource based sectors. The Government of Armenia announced deregulation policies, such as eliminating company registration fees and establishing a single window for public services, to support the country's medium-term growth. The Government of Kazakhstan revised laws related to public-private partnerships (PPPs) to increase the efficiency of public investments. These amendments helped expand the coverage of PPPs and authorized the use of international standards. In addition, the Government launched a programme to diversify exports and boost agricultural output. Under this programme, agricultural subsidies in 2014 will be twice as high as in 2013, which will aid producers who are struggling with higher costs for imported goods.

Outlook for 2014 and policy challenges

In 2014, growth in the subregion as a whole is projected to slow mainly due to expected lower growth in the Russian Federation. The fallout from geopolitical tensions related to Ukraine is expected to further depress already weak economic activity in the Russian Federation, which is projected to grow by only 0.5%. Besides capital outflows, investment in the country is also expected to suffer. Moreover, growth in the medium term is likely to remain well below the pre-crisis pace mainly due to the country's high dependence on oil production, which is likely to remain sluggish. Lower economic growth could eventually dampen the country's currently tight labour market, which would weaken remittance incomes in several neighbouring economies.

The economy of Kazakhstan is projected to grow at a slightly lower rate of 5.4%, as newly imposed

restrictions on consumer credit weigh on household consumption. However, the devaluation of Kazakh tenge in February 2014 should boost net exports. Azerbaijan is projected to grow at a slower rate of 5% in line with lower public expenditures and less expansion in the oil industry. In Kyrgyzstan, growth could soften relative to the high base in 2013, but should still remain robust at an estimated rate of 6.5% in 2014. Export earnings are likely to remain sluggish, partly due to weak gold prices. Remittances are also expected to decelerate. Growth in Tajikistan could ease to 6% as higher inflation is likely to constrain private consumption, while cotton and aluminium prices are expected to rise only modestly.

In Turkmenistan, growth is expected to edge up to 10.4%, driven by public investments and private consumption, resulting from higher salaries and social transfers. Growth in Armenia is projected to increase to 4.5% in 2014, helped by an agreement by the Government of the Russian Federation to reduce the price of gas imported by Armenia. As a result, lower domestic prices of gas and electricity should help improve household spending and cut production costs. Economic growth in Georgia is expected to rebound to 5% due to greater political stability and rising public expenditures directed at SMEs. Finally, lower profit and income taxes should support industrial activities in Uzbekistan and help sustain the country's high overall growth rate of 8.1%.

Foreign investment strategies should align more closely with regional cooperation initiatives

The North and Central Asian economies should align their foreign investment strategies more closely with regional cooperation and integration initiatives in order to attract large-scale foreign investment in non-resource sectors, which thus far had been limited. Most North and Central Asian countries are relatively small in terms of population so a more integrated subregion would be critical in reducing fixed business costs.

Reducing trade costs would help foster intraregional trade. Cross-border and transit transport remains hindered by complex and non-harmonized procedures, as well as by limited cross-border transport infrastructure. In this regard, the implementation of regional initiatives aimed at strengthening regional economic cooperation and integration would be an opportunity for the subregion to achieve greater

diversification. One possibility is regional connectivity of cities in the subregion (see box 2.2).

Furthermore, Governments may consider PPPs with an appropriate risk-sharing and regulatory framework as an option for cost-effective public service delivery. This is especially important with regard to transport networks, as such endeavours would help reduce

Box 2.2. Urbanization challenges in North and Central Asia

Following the collapse of the Soviet Union, five North and Central Asian countries — Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan — were established as independent States with immediate pressures to restructure their economies. Initially, many urban settlements in the subregion experienced a decline in economic activities with limited local budget revenue and urban infrastructure, and faced capacity challenges in managing urban development under newly introduced free-market mechanisms.

The demise of many urban economies had repercussions for national economic prospects. Recognition that cities are the drivers of national and regional economic growth and broader development opportunities has led to greater focus on urban areas in this relatively under-urbanized subregion. The share of urban population in those five North and Central Asian countries is 47% on average.

In order to evaluate urban development trends in North and Central Asia with a view to policy options, ESCAP and the Center for Economic Research partnered to complete an analytical report entitled “Urbanization in Central Asia: challenges, issues and prospects”. The three main outcomes of the study are as follows:

First, North and Central Asia has substantial potential for economic growth. In managing these prospects, urban policy will be a key factor. However, in many cases, urbanization policies aimed at establishing and maintaining productive, sustainable and inclusive cities are lacking. Though cities are recognized as having a critical role as national and subregional growth poles, urban policy is still evolving. In addition, regional connectivity of cities provides great opportunities for the subregion. By developing their growth poles centred on strategic urban centres, complemented by the development of economic corridors, both national and regional economic prospects can be enhanced, including through cross-border trade routes to distant markets.

Second, the majority of urban areas in North and Central Asia suffer from failing public infrastructure, such as electricity, gas heating, water and sewage. Investments to upgrade and develop urban infrastructure are also lacking. Increasing urban populations will only exert greater pressure on existing urban infrastructure both in terms of quantity and quality of services. Future infrastructure systems policies and projects must take into account opportunities provided by changing technologies. The massive investments required to maintain and modernize urban infrastructure will benefit from planning that is based upon low-carbon and sustainable urban development.

Thirdly, the subregion has implemented different approaches for urban development with the aim to improve the capacities of municipal governance systems, such as municipal budgeting and support for social and economic development in urban areas. However, greater opportunities still lie in streamlining policies and creating broader stakeholder engagement, including with communities, in addressing the future challenges of urban transformation in North and Central Asia.

transport costs. According to World Bank data, in recent years, the number of infrastructure projects involving participation of the private sector ranges from a few projects in Tajikistan, Turkmenistan and Uzbekistan to more than 300 projects in the Russian Federation.

The low level of private investment in non-resource based activities is concomitant with other structural challenges faced by the subregion. The development of the private sector has been impeded by structural problems that affect innovation and entrepreneurship. ESCAP analysis shows that the absence of fair competition undermines the development of innovative products, and that better access to funds could foster innovation. Currently in the subregion, more than 80% of fixed assets are purchased using either internal funds, short-term cash flows, such as credit from suppliers or advances from customers, or unconventional sources, including moneylenders, friends or relatives.

PACIFIC

The Pacific subregion is divided into two distinct groups for analytical purposes. One group consists of Pacific island developing economies and the other of Australia and New Zealand.

Pacific island developing economies

Growth slowed amid lower commodity prices

The weak global economy has resulted in lower commodity prices and contributed to an economic slowdown in Australia. It has also been a key factor behind lower output growth in the Pacific island developing economies, which as a whole fell to 4% in 2013 from 5.3% in 2012 (see table 2.3).

The deceleration of growth was more pronounced in Palau and the resource-rich economies, such as

Table 2.3. Rates of economic growth and inflation in selected economies in the Pacific, 2012-2014

(Percentage)

	Real GDP growth			Inflation ^a		
	2012	2013	2014 ^b	2012	2013	2014 ^b
Pacific^c	3.5	2.4	2.9	1.7	2.3	2.7
Pacific island developing economies^c	5.3	4.0	4.9	2.6	3.7	4.9
Cook Islands	4.4	3.2	2.2	3.0	1.9	2.5
Fiji	1.7	3.6	3.8	3.4	2.9	3.0
Kiribati	2.5	2.0	3.0	-3.0	2.0	2.5
Marshall Islands	3.2	0.8	3.0	4.3	1.6	1.5
Micronesia (Federated States of)	0.4	0.6	0.5	5.8	2.2	2.0
Nauru	4.9	4.5	10.0	-0.5	1.4	5.0
Palau	4.8	-1.0	3.0	5.4	3.0	2.5
Papua New Guinea	8.0	5.1	6.2	1.6	4.7	6.5
Samoa	2.7	-0.5	2.0	6.2	-0.2	2.0
Solomon Islands	4.8	3.2	3.7	5.9	5.6	5.5
Tonga	0.8	1.6	2.0	2.5	0.8	2.0
Tuvalu	0.2	1.1	2.0	1.4	2.0	2.5
Vanuatu	1.8	3.2	3.5	1.4	1.4	2.5
Developed countries^c	3.5	2.4	2.9	1.7	2.2	2.7
Australia	3.6	2.4	2.8	1.8	2.4	2.8
New Zealand	2.9	2.4	3.3	1.1	1.1	2.0

Sources: ESCAP, based on national sources; Asian Development Bank, *Asian Development Outlook 2014* (Manila, 2014); and CEIC Data (for Australia and New Zealand). Available from www.ceicdata.com (accessed 15 June 2014).

^a Changes in the consumer price index.

^b Forecasts (as of 15 June 2014).

^c GDP figures at market prices in United States dollars in 2010 (at 2005 prices) are used as weights to calculate the subregional aggregates.

Papua New Guinea and Solomon Islands. Domestic factors also affected the growth performance of individual countries. Investment in Papua New Guinea slowed due to the completion of a large liquefied natural gas project and the economy of Samoa was adversely affected by a tropical cyclone. On the other hand, growth in Fiji in 2013 was stimulated by an expansion of government expenditure to rehabilitate and upgrade the country's road network, as well as by increased domestic investment and consumption.

The structure of Pacific island developing economies underwent some changes over the past decade, as the agricultural and industry sectors' shares of GDP declined and the share of services sector increased. In Fiji, for instance, the share of the agricultural sector declined from 18.8% of GDP in 1995 to 12.1% in 2011, while in Samoa, it fell from 18.4% of GDP in 1995 to 9.8% of GDP in 2012. The agriculture share in Papua New Guinea also fell, partly because the share of industry increased from 33.3% of GDP in 1995 to 44.2% of GDP in 2012, reflecting the domination of the mineral resource boom being experienced by the country. In contrast, the contribution of the services sector to GDP has been on the rise, mainly on the back of the large and growing tourism sector in the subregion. The share of the services sector was more than 50% in most of the Pacific island economies in 2011. Despite the decline in agriculture's share in GDP, the agriculture (including fisheries) continues to be the main provider of employment in many of these economies, indicating low agricultural productivity.

Economic growth rates have been slow in Pacific island economies, leading to joblessness, especially among the youth. High levels of unemployment and underemployment are significant problems across the Pacific. The global economic downturn made the situation worse. For example, 53% of Samoan employers had frozen or cut employment in 2009. The country's largest industrial company, an auto parts manufacturer, which provides 16% of all private formal sector jobs, cut its workforce by 70% in the aftermath of the global financial crisis when the automotive market in Australia weakened. In Kiribati,

about 2,000 persons enter the labour market each year, while the formal economy generates less than 500 jobs a year. In Vanuatu, the mismatch is also sizeable, with 3,500 new entrants for less than 700 jobs a year. Thus, in these countries, only a fraction of the job seekers find paid employment.⁶ Youth and females are particularly disadvantaged. Less than 35% of women aged 20-29 years in the Marshall Islands, Samoa and Solomon Islands are officially employed.

Total investment-to-GDP ratio is much higher than the savings ratio in all Pacific island developing countries, but it is still generally low

While investment needs are large, the levels of national savings in these small economies are very low. In Solomon Islands, gross national savings was only 13.5% of GDP in 2013. It was even lower, at 9.7% of GDP, in Papua New Guinea. Total investment as a share of GDP is much higher than the savings ratio in all of the Pacific island developing countries, but still investment ratios among them generally remain low. However, the investment ratio in Fiji jumped to 28% in 2013 from 17% in 2012, driven by the purchase of airplanes by Fiji Airways. Papua New Guinea attracted large FDI in the mining sector in recent years, which is tapering now with the completion of a major project.

Growth in Fiji strengthened from 1.7% in 2012 to 3.6% in 2013, in line with higher investment. Underpinned by its robust manufacturing and financial sectors, the expansion of the economy was broad-based with positive contributions from all sectors except for the mining and quarrying sector. In addition to increased public investment, tax cuts and higher tax thresholds and inward remittances helped boost domestic demand. Public investment in infrastructure and lower interest rates together with lower corporate tax rates induced private investment, resulting in the highest investment-to-GDP ratio of 28% in more than two decades. The economic rebound was held back somewhat

by major floods, which affected agricultural output and tourism revenue. Some of the policy priorities of the Government are to encourage exports and the diversification of the economy, as consumption and investment-led growth may not be sustainable in the medium term.

Key policy challenges are how to manage the windfall revenue from resource projects and promote growth to benefit the wider community

Economic expansion in Papua New Guinea softened to 5.1% in 2013 from 8% in 2012. The deceleration was largely anticipated due to the slowdown in investment as a \$20 billion liquefied natural gas project nears completion. As a spillover, growth in construction halved to 12% in 2013 from 24% in 2012, and wholesale and retail trade growth decelerated from 20% in 2012 to 5% in 2013. Meanwhile, the ongoing decline in the operations of a number of older mining and oil fields was more than offset by a rise in output from new nickel project operations. The increased output was the main factor behind growth of 15% in the country's mining and quarrying sector in 2013. Agricultural and mining activities will continue to play a key role in driving the economy, although stronger commodity prices are needed to support future economic growth. Key policy challenges for the country are how to manage the windfall revenue from the gas project and the need to promote growth that benefits a broader section of the population.

The economy of Samoa shrank by 0.5% in 2013. The country is highly vulnerable to natural disasters as witnessed by the extensive damages caused by Tropical Cyclone Evan in many parts of the country in late 2012. The country's medium-term development plan identifies 14 key priorities, including macroeconomic stability, promoting tourism and business development and improved access to essential social services, as well as to safe drinking water, sanitation and transport.

Growth in the Solomon Islands slowed to 3.2% in 2013 from 4.8% in 2012 due to lower output of wood logging, the result of declining forest cover. Despite attempts to diversify the economic base, the country remains dependent on exports of wood logs, fish and more recently minerals. Gold mining could replace logging as the main growth driver in the coming years. Developing potential sectors, such as ecotourism, may broaden the economic base. The country also needs to ensure sustainable forestry and fishing.

In Vanuatu, output growth picked up to 3.2% in 2013, mainly due to an improvement in tourist arrivals. Despite the rebound, growth was held back by slow implementation of major public works projects, such as the country's first fibre-optic cable. The development of seabed mining was also slow. The Government's policy priorities include fiscal and land reforms.

The economy of Nauru expanded by 4.5% in 2013, down slightly from the pace seen in the previous year. Fishery output and phosphate exports supported the expansion. Growth was also driven by activities related to the expansion of the Australian Regional Processing Centre of the asylum seekers, which employs more than 600 Nauruans and is the second largest employer after the Government. Care must be taken so that the rights of the refugees are protected according to the Convention relating to the Status of Refugees.

The Cook Islands recorded more modest economic growth of 3.2% in 2013, as public infrastructure spending and tourism receipts decreased. Growth of the Kiribati economy also slowed, to 2%, even though investment in public infrastructure increased. An economic slowdown was similarly observed in the Marshall Islands, which posted modest growth of 0.8% despite ongoing infrastructure investments. The economy of Palau recorded an economic contraction of 1% due to lower tourist arrivals.

Against this downward trend in several economies, economic growth in Tonga accelerated to 1.6% in 2013. In Tuvalu, growth increased to 1.1%, with

ongoing infrastructure upgrades, improved fishery output and remittances supporting the economy. Meanwhile, growth also edged up to 0.6% in the Federated States of Micronesia.

Moderate inflationary pressure

Moderating international food and fuel prices led to lower inflation rates in several Pacific island developing economies in 2013 (see figure 2.8). As a group, however, the average inflation rate increased slightly on the back of steep price rises in Papua New Guinea, the largest economy in the subregion.

In Papua New Guinea, the inflation rate increased to 4.7% in 2013 from 1.6% in 2012. The weaker domestic currency against the United States dollar and the currencies of the country’s key trading partners was a major contributing factor.

In Fiji, inflation eased moderately to 2.9% in 2013, despite a hike in the salaries of workers in the public sector. Food prices stabilized following supply disruptions early in the year in the aftermath of Cyclone Evan and adverse weather conditions. Meanwhile, inflation in Solomon Islands remained relatively high at 5.6% amid additional spending under the country’s supplementary budget in 2012. In

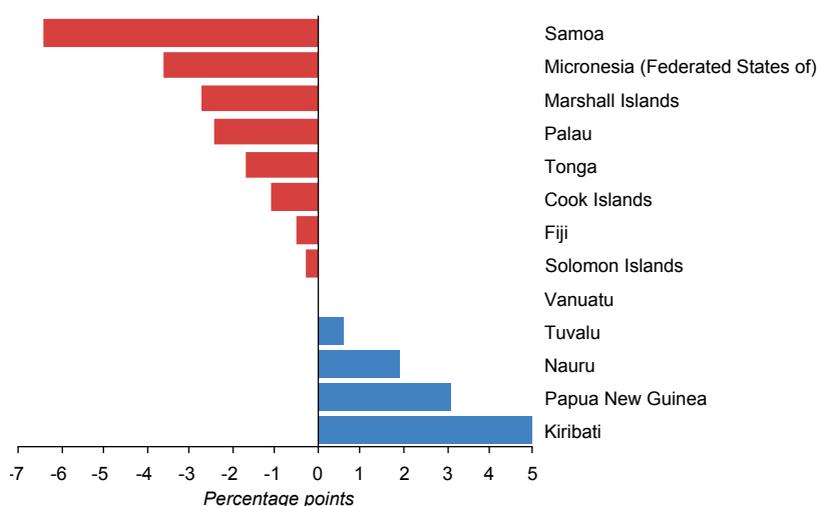
Samoa, a strong rebound in agricultural production following Cyclone Evan helped lower price levels after a steep rise in 2012.

Given the moderate inflationary pressures in the subregion, prompt monetary policy reaction may not be needed. However, the central banks should continue to closely monitor price developments and find non-conventional solutions to manage supply-side inflation. Governments should also consider some fiscal support measures to help the poor if price pressures build up.

External current account deficits remained large

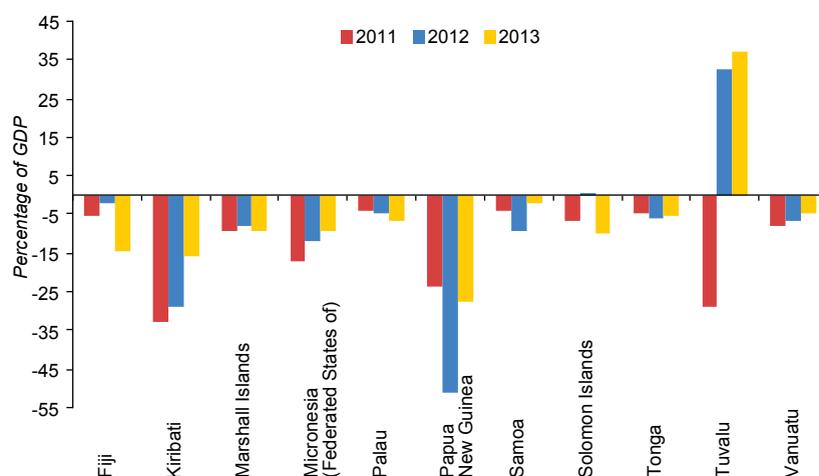
Commensurate with large savings-investment gaps, most Pacific island developing economies continued to register current account deficits. Fiji, Kiribati, Papua New Guinea and Solomon Islands recorded current account deficits of at least 10% of GDP in 2013 (see figure 2.9). Strong import demand and weak export earnings caused by sluggish global prices for their main export items, including agricultural commodities, resulted in trade deficits. Also, workers’ remittances softened in some economies. In Samoa and Tonga, remittances constituted more than a quarter of their GDP.

Figure 2.8. Inflation in selected Pacific island developing economies, changes in 2013 relative to 2012



Sources: ESCAP, based on national sources; Asian Development Bank, *Asian Development Outlook 2014 Update* (Manila, 2014); and International Monetary Fund, 2013 and 2014 Article IV Consultations. Available from www.imf.org/external/ns/cs.aspx?id=51.

Figure 2.9. External current account balance in selected Pacific island developing economies, 2011-2013



Sources: ESCAP, based on national sources; Asian Development Bank, *Asian Development Outlook 2014* (Manila, 2014); Economist Intelligence Unit, *Country Reports*; and International Monetary Fund, World Economic Outlook database, April 2014.

Note: Figures for 2013 are estimates.

Declining global commodity prices depressed the export receipts of Papua New Guinea in 2013. Gold and petroleum exports to Australia fell by 32% during the first quarter of the year. Exports of copper, gold and oil accounted for about two thirds of total export earnings. The country recorded a large trade deficit and a double-digit current account shortfall as a percentage of GDP due to increased demand for imported goods to service a liquefied natural gas project.

In Fiji, as the investment-to-GDP ratio shot up, the current account deficit jumped to 15% of GDP in 2013 from only 1.8% in 2012. This occurred despite a rise in private remittance flows in 2013, which was largely underpinned by the significant deployment of Fijian soldiers to international peacekeeping missions. Exports shrank while imports continued to rise on the back of strong domestic demand. Tourism revenues fell in early 2013 following Cyclone Evan, although an estimate for the whole year suggests that they recovered later in the year.

The current account balance of Solomon Islands turned to a deficit of 10% of GDP in 2013 from a small surplus in 2012. Export receipts contracted by 18% on declining commodity prices while

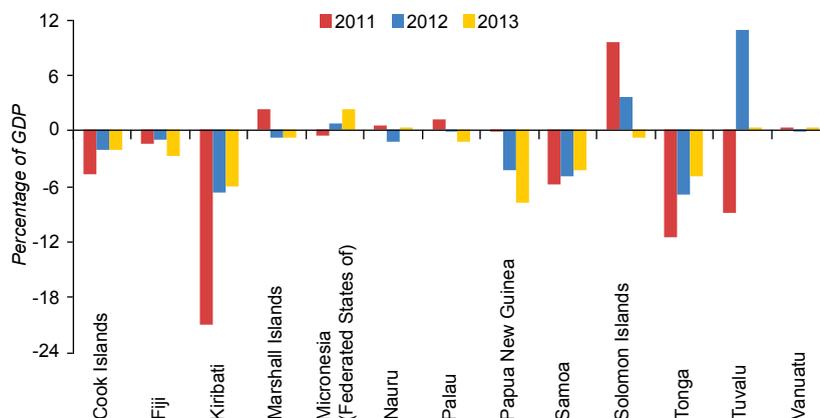
import payments fell more modestly. The balance of payments position, nonetheless, improved in the first half of 2013, owing to steady donor support and foreign investment inflows.

Policy responses and structural reforms: fiscal consolidation and private sector promotion

Recent progress in improving fiscal management in some of the countries in the subregion is a welcome development and should be sustained to build fiscal space for responding to economic shocks. To achieve long-term fiscal sustainability, the Pacific island developing economies need to contain the growth of the public sector, rationalize public sector wage bills and initiate broader based tax reforms, including strengthening tax administrations. However, given their small economic base, most Pacific island developing economies will continue to depend on development partnerships for closing their development gaps.

Budget deficits in the Pacific island developing economies were generally moderate in 2013, with the exception of Kiribati, Papua New Guinea, Samoa and Tonga where the shortfalls reached 4.4-7.8% of GDP (see figure 2.10).

Figure 2.10. Budget balance in selected Pacific island developing economies, 2011-2013



Sources: ESCAP, based on national sources; Asian Development Bank, *Asian Development Outlook 2014* (Manila, 2014); and International Monetary Fund, 2013 and 2014 Article IV Consultations. Available from www.imf.org/external/ns/cs.aspx?id=51.

In Fiji, the budget deficit remained low but it widened to 2.8% of GDP in 2013. To support medium-term economic growth, larger public resources were allocated to public works, especially on road maintenance and upgrading. Higher expenditures were also accompanied by stronger government revenue due to more efficient tax collection.

Papua New Guinea recorded a higher budget deficit of 7.8% of GDP in 2013. Nevertheless, as in Fiji, the increased spending focused on growth-enhancing areas. In particular, spending on infrastructure, education, health and internal security rose by 38%. In the 2013 budget, however, it was highlighted that the country faced challenges related to implementation capacity as public agencies struggled to spend growing budgetary resources.

The fiscal deficit in Samoa narrowed to 4.4% of GDP in 2013. Government revenue rose by about 10% due to higher external grants for post-cyclone rehabilitation and reconstruction. Although the shortfall remains above the official target of 3.5% of GDP, there has been some progress in efforts that began in 2010 aimed at achieving medium-term fiscal consolidation.

Vanuatu recorded a small budget surplus of 0.3% of GDP in 2013. Higher revenue collection of value-

added taxes and import duties boosted government revenue by 10% in the first half of 2013 while current expenditure fell. In Solomon Islands, the fiscal balance turned to a deficit of 0.7% of GDP in 2013. Tonga also posted a budget shortfall, of 4.9% of GDP, due to lower external grants and a supplementary budget to fund airport development.

Turning to monetary policy, the Reserve Bank of Fiji continued its accommodative stance in 2013, with the overnight policy rate remaining unchanged at 0.5% to support investment and economic growth. In Papua New Guinea, the policy interest rate was stable for most of 2013 after cuts of 150 basis points were made in the period from September 2012 to March 2013.

The public sector plays a major role in most of the economies in the subregion. Public monopolies in water and electricity supply, as well as in port and inter-island shipping services are quite common. Services provided by these public and semi-public monopolies are generally below standard and inadequate. To improve their quality and coverage, Governments need to seek support from development partners for new investment. Private sector participation in utilities could contribute to improved efficiency. However, this has to be balanced with equity and access as private sector

involvement may lead to price hikes, especially when the market size is small.

Limited market size may not accommodate enough producers for effective competition and a private monopoly may replace the public monopoly

As part of its reform plans to improve the efficiency of public enterprises, Fiji continued to encourage more private sector participation. A public-private partnership was formed in April 2013 to manage the operations of the country's main ports. This arrangement will improve the efficiency of the port facilities, potentially resulting in higher trade. The Government also plans to divest most of its shares in other key public enterprises in 2014. The deregulation of the energy sector moved forward, which is expected to promote competition and facilitate the provision of efficient and affordable electricity services to the general public. However, the limited market size may not be able to accommodate enough producers for effective competition to occur and a private monopoly may replace the public monopoly. Therefore, this policy would require continuous monitoring. The Government also scrapped the minimum investment value required for foreign investors and reduced the corporate tax rate payable by foreign firms setting up headquarters in the country to 17%. The outcome of this policy also needs to be monitored carefully as experiences elsewhere, especially in the small island economies of the Caribbean, show that lowering taxes does not lead to higher FDI (see chapter 3 for more details). As a result, countries offering lower taxes to foreign investors or corporations end up with a shrunken fiscal space.

Papua New Guinea continued to pursue a national reform agenda that includes supporting greater private sector participation in the economy. Some of the key reform strategies include developing more efficient and competitive markets and streamlining business regulations. These reforms have improved the investment climate in the country. The Government

also remains committed to public sector reforms. As part of the rightsizing public sector reform, the Government plans to amalgamate government agencies with duplicate functions in 2014.

Outlook for 2014 and policy challenges

The expected global economic recovery in 2014, especially in developed economies, should provide a boost for most Pacific island developing economies. This is especially true for resource-rich countries, such as Papua New Guinea and Solomon Islands, and for the smaller economies dependent on remittances and tourism receipts. As a group, Pacific island developing economies are expected to enjoy more rapid economic growth of 4.9% in 2014.

The Papua New Guinea economy is projected to grow by 6.2% in 2014, an improvement over the previous year. While the construction of a large liquefied natural gas project was almost completed in the first half of 2014, the subsequent production of natural gas will help propel economic growth. The economy should also be buoyed by a rebound in mining output, as major mines return to normal production following disruptions in 2013. The economy of Fiji is projected to grow at a slightly faster pace of 3.8%. Despite an expected fall in public investment, sectors, such as construction and sugar, should support the projected expansion of the economy.

An expected rise in tourist arrivals should help Solomon Islands post a slightly better growth, of 3.7%, in 2014. The economy of Samoa is projected to turn from a contraction in 2013 to expand 2% in 2014, due to an expansionary budget, which is aimed at stimulating growth. In Kiribati, higher growth of 3% is forecast based on expected stronger construction activity, of which much of it is tied to roads and airport projects financed mainly by development partners. Strong tourism revenue and a raft of planned infrastructure projects are likely to support growth of 3.5% in Vanuatu. The implementation of major infrastructure projects, however, is subject to receiving large foreign grants and loans.

Many Pacific island developing economies will continue to face the growing challenge of providing basic services to the poor and vulnerable groups of the society. The situation is compounded by falling levels of official development assistance, lower agricultural productivity, growing populations, high youth unemployment, and low and uneven economic growth.

Pacific island countries face the increasing threat from climate change

Pacific island countries also have to deal with the increasing threat from climate change. Climate change, including ocean acidification and sea-level rise, does not only affect the natural environment, such as coastal resources and land loss, but it also has an impact on economic and social development, particularly for vulnerable populations. According to a recent report,⁷ the most significant economic losses related to climate change could be felt in Papua New Guinea where they could amount to 15% of GDP by 2100. The loss is estimated at 4-6% of GDP in Fiji, Samoa, Solomon Islands and Vanuatu. Access to, and timely implementation of, global resources for adaptation and mitigation remain a priority for these small countries.

It is, therefore, vital for Pacific island countries to adopt policies that develop their comparative advantages in sectors such as agriculture, tourism and fisheries in a sustainable fashion, as these sectors enjoy unique biodiversity. These policies also need to promote jobs, particularly for the large pool of unemployed youth. While large informal sectors in the Pacific economies have provided job opportunities, growth of formal sector employment is necessary to raise income levels. Further development of the private sector is also needed, as currently the public sector is a major source of job creation.

To enhance job-rich growth, these economies need more private sector investment, especially in niche markets that can overcome market size and distance disadvantages. They need to create an

enabling environment for private sector investments in labour-intensive sustainable ecotourism. This is crucial given the fragile ecological environment and rich biodiversity of the subregion and threat it faces from climate change. The Pacific island economies also need to develop their financial systems, reform their legal and regulatory approaches and revamp their State enterprises.

The development of rural areas and outer islands through the provision of necessary infrastructure and support for leveraging sustainable resource-based sectors will foster improved livelihoods and mitigate rural-to-urban migration. Given the significant potential for small and microenterprises in Pacific island developing economies, appropriate policies should include lowering barriers and costs of doing business. To undertake evidence-based policymaking, countries need to strengthen efforts to improve data collection and analysis, particularly in social areas (see box 2.3).

Given their small size and limited economies of scale, regional cooperation among Pacific island countries has served this group of economies well in such areas as sustainable fishery management. Regional cooperation in other areas, such as liberalizing the aviation sector, could lead to service improvements and efficiencies and thus would benefit export capacity and tourism potential. These small economies should also continue to explore and strengthen their trade and investment links with neighbouring countries and subregions, including the ASEAN, which is set to offer great trade and investment opportunities with the launch of the ASEAN Economic Community in 2015.

Australia and New Zealand

Growth performance weakened

The Australian economy slowed to 2.4% in 2013 from 3.6% in 2012 (see figure 2.11). Mining sector investment, which propelled growth in the past years, has started to wind down. The booming mining sector generally led to a stronger currency and

Box 2.3. Strengthening the evidence base for disability policymaking in the Pacific

Disability in Pacific island developing countries has typically been an invisible issue. There is relatively little accurate official data on the incidence of disability and few services for people living with physical or mental impairments. Disability is low on the policy agenda and receives minimal proportions of national budgetary resources.^a People with disabilities in these economies are among the poorest and most marginalized members of their communities.^b Evidence suggests that the number of persons with disability is increasing due to high rates of diabetes-related amputations and blindness, increasing traffic and industrial accidents, and ageing populations.

Although Governments in Pacific island developing countries have been slow to address disability, there have been some positive changes in the past decade. There is increasing awareness of disability issues across the subregion, and enhanced political will to ensure that policies and development plans are disability-inclusive. Development partners and intergovernmental organizations have taken a strong lead in providing technical assistance and resources.

The Convention on the Rights of Persons with Disabilities provides a comprehensive framework for Pacific island developing countries to shape disability-inclusive development. Several economies have demonstrated political commitment to strengthening the protection and promotion of the rights of persons with disabilities by ratifying and implementing the Convention. Australia, New Zealand and Vanuatu ratified the Convention in 2008, followed by the Cook Islands in 2009 and Nauru in 2012. In 2013, Kiribati, Palau, Papua New Guinea and Tuvalu became States Parties to the Convention.

Another important milestone has been the Pacific Regional Strategy on Disability 2010-2015, which was developed based on the Convention. This was endorsed at the First Forum Disability Ministers' Meeting, which was held in October 2009. The Strategy is based on the following: human rights principles; reducing vulnerability and risks of disabilities; and improving care, support and partnerships. It provides achievable guidelines to support national efforts to advance disability issues. The Strategy calls upon Governments and civil society to mainstream disability into all local and national policies and practices, including national censuses, labour force surveys, and household income and expenditure surveys.

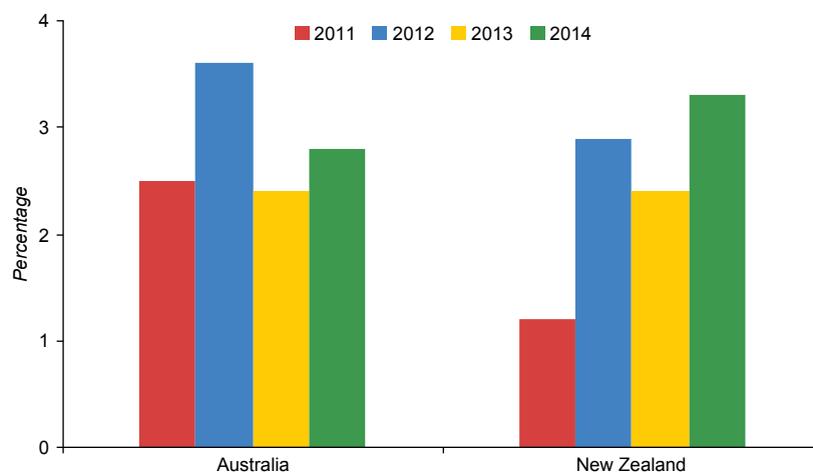
Although there are signs that progress has been made, disability prevalence still remains grossly underestimated in most of the Pacific island developing countries. Except for a few countries that have recorded prevalence of 11-18.5%, such as Australia, Federated States of Micronesia, New Zealand and Vanuatu, prevalence for Pacific island countries is below 5%.^c High reliance on census data with limited space for questions concerning disability and the lack of data collection instruments going beyond severe impairments are the two main reasons for this underestimation. The lack of relevant data collection on persons with disabilities is hampering not only the design, implementation and evaluation of effective policymaking, but more importantly, the quality of the lives of persons with disabilities.

^a Tavola (2012).

^b Pacific Islands Forum Secretariat (2009).

^c ESCAP (2012a).

Figure 2.11. Economic growth of Australia and New Zealand, 2011-2014



Sources: ESCAP, based on national sources; and CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014).

Note: Real GDP growth rates for 2014 are forecasts.

therefore weakened competitiveness in non-resource sectors, a typical manifestation of the Dutch disease.⁸ Slower economic growth held back employment and wage growth. The unemployment rate rose to 6% in January 2014, the highest level in a decade. Meanwhile, the housing market continued to rebound, which helped boost dwelling investments.

Growth momentum in New Zealand also slowed, from 2.9% in 2012 to 2.4% in 2013. Weaker investment and a decline in public spending in the latter part of the year dragged on overall growth. Rising construction activities, which were a reflection of the post-earthquake reconstruction efforts in Christchurch, were the main driver of growth. Strong net immigration, the largest increase since 2003, along with the country’s low unemployment rate also propped up housing demand and domestic consumption. Following the drought that dampened dairy output in the first half of 2013, the industry recovered strongly in the third quarter.

Inflationary pressure remained modest

Inflation in Australia accelerated slightly to 2.4% in 2013. This was partly due to the one-time impact the introduction of the carbon tax in mid-2012 had on prices. Weak labour market conditions helped

contain inflation within the official target range. The depreciation of the Australian dollar, which has been ongoing since mid-2013, has started to have some inflationary pressures on tradable goods. In contrast, the inflation rate in New Zealand remained low, at 1.1%, in 2013. Maintaining a low-inflation environment for an extended period of time may not be desirable as when nominal interest rates are high, a low inflation rate implies high real interest rates, which raise the real burden of debt and potentially dampen household and corporate spending.⁹ Very low inflation also pushes up real wages if nominal wages continue to rise. This may adversely impact employment growth. A very low inflation rate also risks deflation.

Stronger exports narrowed current account deficits

The Australian trade balance turned to a surplus in 2013. Despite subdued export prices, high export volumes of metal ore helped boost export revenues. Imports also rose, but only marginally, driven by mining-related capital goods. The current account deficit thus narrowed to 3.2% of GDP in 2013 from 4.2% of GDP in 2012. The current account deficit of New Zealand moderated to 3.4% of GDP in 2013. Although the strong New Zealand dollar dampened

export earnings somewhat, the country benefited from favourable terms of trade on rising export prices of dairy products. More broadly, stronger currencies in both economies in recent years held back inbound tourism and the number of foreign students, and generally weakened non-commodity exports.

Policy responses: fiscal consolidation

In Australia, the budget deficit increased to 2.9% of GDP in 2013, as resource tax revenues declined on the back of falling commodity prices. The carbon tax and minerals resource rent tax will be cancelled from July 2014 amid some opposition from environmental activists. It is claimed that such a policy shift should reduce price pressures and boost the economy. A large transport infrastructure project is under way, which should help improve output in the medium term, as well as budget positions. A sustainable fiscal surplus is targeted by 2025. Meanwhile, monetary policy has been accommodative. At the end of 2013, the policy interest rate stood at 2.5%, a total of 225 basis points lower than the level in November 2011.

In New Zealand, strong output growth in the early part of 2013 helped lower the fiscal deficit to 1.1% of GDP in the fiscal year 2013. Despite large spending requirements for post-earthquake reconstruction activities, the Government is targeting to balance the budget by 2015. Meanwhile, more robust economic activities and rising inflation expectations prompted the central bank to hike the policy rate three times in early 2014 to 3.25%. Prior to that, it had been left unchanged since March 2011. The effects of restrictions on the loan-to-value ratio for mortgage lending that were announced in October 2013 have started to ease pressure on the housing market, while rising interest rates are poised to have a further moderating effect.

Outlook for 2014 and policy challenges

Economic growth in Australia is likely to remain sluggish, at 2.8%, in 2014. This is due to falling mining investments, fiscal restraint and fragile private consumption. Weak labour market conditions should

help contain inflation. Commodity exports are set to continue to support the economy, but the outlook is constrained by a policy shift in China towards domestic demand-led growth, which will soften demand for the country's commodities. The housing market is likely to strengthen, but the possibility of an asset bubble should be monitored closely. Monetary policy should not react to the orderly depreciation of the Australian dollar in recent months, as this was needed to improve the competitiveness of the non-resource sectors in order to supplement the fall in resources investments.

The Australian economy is likely to remain sluggish due to weak mining investment

The New Zealand economy is projected to grow by 3.3% in 2014. Higher net immigration, better prospects for the dairy industry, and the reconstruction activities will continue to support the economy. However, this is conditional on the strength of private consumption and investment, as fiscal consolidation moves forward and monetary policy is tightened. Regarding possible headwinds, the strong New Zealand dollar could hurt export growth, while surging house prices and monetary tightening in the United States may drive up interest rates further and put strains on investments and consumer spending.

SOUTH AND SOUTH-WEST ASIA

Slight pickup in growth

Overall growth in South and South-West Asia picked up to 3.9% in 2013 from 2.9% in 2012 (see table 2.4), but it remained well below the 6.4% pace that was registered in the years prior to the global financial turmoil.

Economic growth in Afghanistan dipped to 3.6% in the fiscal year 2013 after a bumper agricultural harvest in the previous year that helped push the growth rate to 14%. Agriculture accounted for a

Table 2.4. Rates of economic growth and inflation in South and South-West Asian economies, 2012-2014

(Percentage)

	Real GDP growth			Inflation ^a		
	2012	2013	2014 ^b	2012	2013	2014 ^b
South and South-West Asia^{c,d}	2.9	3.9	4.7	11.9	11.3	9.3
Afghanistan	14.0	3.6	3.2	6.4	7.4	6.1
Bangladesh	6.2	6.0	6.1	10.6	7.7	7.0
Bhutan	4.6	6.9	7.1	13.5	8.7	7.6
India	4.5	4.7	5.5	10.2	9.5	8.0
Iran (Islamic Republic of)	-5.8	-1.7	1.5	30.5	35.2	23.0
Maldives	1.3	3.7	4.5	10.9	4.0	5.0
Nepal	4.5	3.6	4.5	8.3	9.9	9.8
Pakistan	3.8	3.7	4.1	11.0	7.4	8.0
Sri Lanka	6.3	7.3	7.6	7.5	6.9	6.0
Turkey	2.2	4.0	4.0	8.9	7.5	7.6

Source: ESCAP, based on national sources.

^a Changes in the consumer price index.

^b Forecasts (as of 15 June 2014).

^c GDP figures at market prices in United States dollars in 2010 (at 2005 prices) are used as weights to calculate the subregional aggregate.

^d The estimates and forecasts for countries relate to fiscal years, and are defined as follows: 2013 refers to fiscal year spanning 1 April 2013 to 31 March 2014 in India; 21 March 2013 to 20 March 2014 in Afghanistan and the Islamic Republic of Iran; 1 July 2012 to 30 June 2013 in Bangladesh, Bhutan and Pakistan; and 16 July 2012 to 15 July 2013 in Nepal.

quarter of total output and the majority of employment. Continued security issues have dampened consumer confidence, while donor-led investments also decelerated. The country's dependence on donor assistance leaves it highly vulnerable to the planned exit of international security forces in 2014.

Growth in Bangladesh softened slightly to 6% in the fiscal year 2013 from 6.2% in the previous year. The decline was mainly driven by slower growth in agriculture and the services sectors. The economy also suffered from political unrest related to parliamentary elections. Growth of the industrial sector picked up slightly to reach 9%. The economy has seen growth of more than 6% in the past few years due to expanding garment exports and strong household spending fuelled by steady workers' remittances. Annual private investment, however, recently contracted for the first time in at least a decade due to political tension and the increasing adverse effects on the economy arising from the country's inadequate infrastructure and energy shortages.

The economy of Bhutan depends on exports of hydropower to India. These exports helped the

country enjoy high economic growth of 6.9% in the fiscal year 2013. Investment in large-scale hydropower projects propelled construction activities, although tight domestic financial liquidity constrained bank lending. Tourist arrivals continued to support private consumption. The country's macroeconomic conditions are closely linked to India in terms of export earnings, official grants, a pegged exchange rate and inflation.

The Indian economy expanded by 4.7% in the fiscal year 2013, up from 4.5% in the previous year. This rate is, however, far below the 9.5% pace registered in pre-crisis years. A fragile global economy has weighed on growth in recent years, but delays in tackling structural impediments, such as rising inequality, high inflation, infrastructure shortages and public spending effectiveness, have also been important factors. The economy experienced market volatility and heavy losses in the value of the Indian rupee during the period May-August 2013, as a large amount of capital was withdrawn from the country on speculation of a change in the United States monetary policy stance. Tight monetary policy to contain inflationary expectations and capital flight also had an impact on domestic demand.

Consumer confidence deteriorated, with car sales in 2013 declining for the first time in a decade. Fixed investment also slowed, in line with sluggish demand and higher interest rates. Subdued output growth pushed up the measured unemployment rate by one percentage point to 4.7%. Structural challenges have constrained the country's capacity to weather capital market volatility as was seen in mid-2013.

Structural impediments like rising inequality and infrastructure shortages held back economic growth

The economy of the Islamic Republic of Iran contracted for the second year in a row in the fiscal year 2013, though at 1.7%, the rate was much lower than in 2012. International sanctions severely limited oil production and exports, which accounted for nearly three fourths of GDP, as well as goods imports and access to international financial markets. Lower global oil prices and sluggish household spending amid high inflation and jobless rates also contributed to the economic decline. Prices spiked after the Government lowered significantly the official exchange rate in July 2013.

Maldives enjoyed more rapid growth, of 3.7%, in 2013, as compared with 1.3% in 2012. The tourism sector, which accounts for one third of GDP, recovered from a mild contraction recorded in 2012. Tourist arrivals rose by almost 20%, with a notable expansion in visitors from China. The fisheries sector expanded for the first time in seven years, while manufacturing and construction activities were less robust.

In Nepal, economic growth in the fiscal year 2013 fell to 3.6% from 4.5% in the previous year. Political uncertainty resulted in weak budget implementation. Agricultural activities, which account for one third of the economy, also slowed due to a poor monsoon harvest and limited access to fertilizers. Domestic production continued to be constrained by electricity shortages, while tourism and retail trade expanded.

Workers' remittances play a major role in sustaining household spending and growth of the economy. The country's foreign exchange earnings rely on these remittances, while limited production capacity has made the country highly dependent on imported goods.

Economic growth in Pakistan was largely stable at 3.7% in the fiscal year 2013. Growing security concerns and energy shortages continued to hamper the business environment. Agricultural output growth decelerated in 2013 due to poor weather conditions, while industrial production picked up on capacity enhancement and investment in alternate energy, especially by large-scale manufacturing operations. On the demand side, an impetus to growth came from private and public consumption, whereas overall investment remained sluggish. The investment-to-GDP ratio fell to 14.2% of GDP in 2013 from 14.9% of GDP in the previous year.

Growth of the Sri Lankan economy accelerated to 7.3% in 2013. Similar to most of its neighbouring countries, output growth was mainly driven by household consumption and supported by remittance inflows, a supportive monetary policy and steady tourism revenue. The hotels and restaurants sector advanced favourably, while the construction industry benefited from reconstruction activities in areas that suffered extensive damage during the internal conflict that ended in 2009 and urban housing demand. Reducing large fiscal and external current account deficits and improving the business environment are among the Government's policy priorities.

In Turkey, GDP growth rebounded to 4% in 2013 from 2.2% in 2012. This is still well below the 6.7% pace that was registered in the pre-crisis years. The upturn in 2013 was domestic demand-led, especially through private consumption growth. Capital market disruptions were notable in mid-2013 and early 2014, largely triggered by the tapering of quantitative easing in the United States. This was partly a reflection of weak macroeconomic fundamentals, such as a sizeable external current account deficit due to strong imports of oil and

intermediate goods. Weak European economies, major trading partners of Turkey, also adversely affected the growth performance of the country.

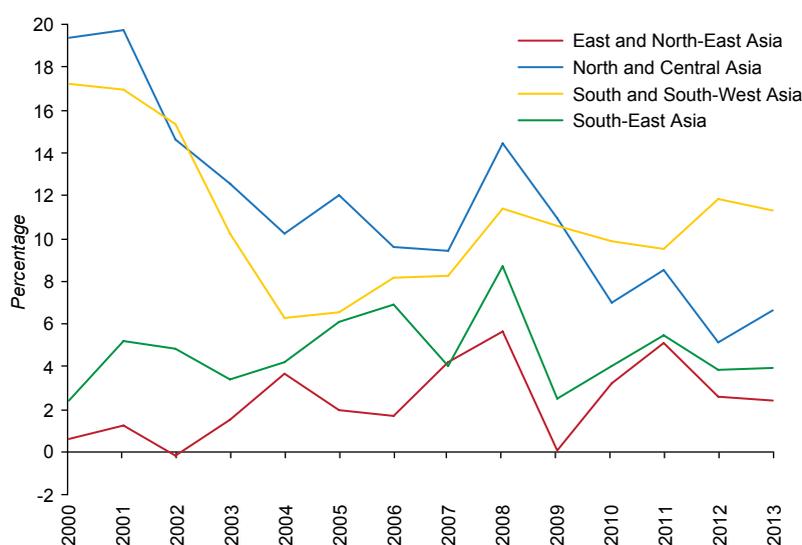
South and South-West Asia has gradually transformed into services-based economies. For the subregion as a whole, the services sectors accounted for 57.9% of total output in 2012, or 3.4 percentage points higher than a decade ago. The rise of the services sectors coincided with a comparable decline in agriculture and stagnant industrial activities. Data for 2012 show that the share of services in GDP varied from two fifths in Bhutan to four fifths in Maldives. The services-oriented structural transformation witnessed by the subregion, however, failed to create enough jobs to enable people to move from agriculture to more productive jobs in services. The employment elasticity of growth in the subregion has come down with the ascent of the services sector. Therefore, agriculture continues to support more than 50% of workers. The subregion needs to focus on developing manufacturing and other industries that have higher employment-creating potential to create more jobs for the subregion's youthful population and to accelerate the process of poverty alleviation.¹⁰

Inflation softened but still elevated

Inflationary pressures in South and South-West Asia remained strong relative to other subregions in recent years (see figure 2.12). For most of the economies in the subregion, persistently high inflation was driven by supply-side constraints, such as energy shortages, that limit domestic production. Rising costs of raw agricultural materials and labour also contributed to high inflation.

In India, the inflation rate was still high at 9.5% in 2013. In addition to supply constraints, the weakening of its currency, which led to higher import prices for energy, coupled with cuts in fuel price subsidies contributed to higher price levels. Price pressures in India kept inflation in Bhutan and Nepal at high levels as the currencies of these two countries are pegged to the Indian rupee and their economies are heavily reliant on imports from India. In contrast, inflation in Pakistan moderated to 7.4% in 2013, although the impact of the depreciating currency was felt in the later months of the year. The domestic currency has appreciated in recent months, which should help contain inflation in the

Figure 2.12. Inflation in selected Asia-Pacific subregions, 2000-2013



Sources: ESCAP, based on national sources; and CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014).

Note: The data for East and North-East Asia excludes Japan.

current fiscal year. Bangladesh, Sri Lanka and Turkey also experienced moderating inflation of 6.9-7.7%. In the Islamic Republic of Iran, inflation surged to 35.2%, as international sanctions limited the supply of goods, while a much weaker official exchange rate resulted in higher import prices.

High food inflation disproportionately hurts the poor

Food inflation has typically outpaced overall inflation in the subregion. Cereal items have traditionally driven food inflation, but the contribution of meat and dairy products, fruits and vegetables has risen in recent years, as household incomes increased. High food inflation hit the poor harder, as they spend proportionally more on food purchases, especially cereals and vegetables. Food items account for nearly 60% of the Bangladesh consumer price index and close to half of the indices of India and Nepal. The dominance of traditional agriculture and reliance on imported cereals in Bangladesh makes domestic food prices highly vulnerable to weather conditions and global price developments. In Sri Lanka, about one third of cereals consumed domestically need to be imported. To contain food inflation, substantial wastage of agricultural produce, particularly perishables, such as fruits and vegetables, need to be minimized by improving the supply chain logistics and setting up cold storage and processing facilities. Moreover, it is essential to enhance productivity in the agriculture sector by ensuring that farmers, particularly small-holder farmers, benefit from modern technologies.

High inflation in the subregion limits room for countercyclical monetary policy. This not only reduces the subregion's ability to weather external shocks, but it also results in high interest rates, which discourage fixed investment, especially by small enterprises. Rather than tightening monetary policy, which would dampen economic growth and employment, cost-push inflation in the subregion could be dealt with through such measures as lower import tariffs, strict price checks, cutting food wastage

and targeted food subsidies. Market competition should also be strengthened. There could also be enhanced public provisioning of basic services to help the poor, however, this would be difficult to carry out due to limited fiscal space.

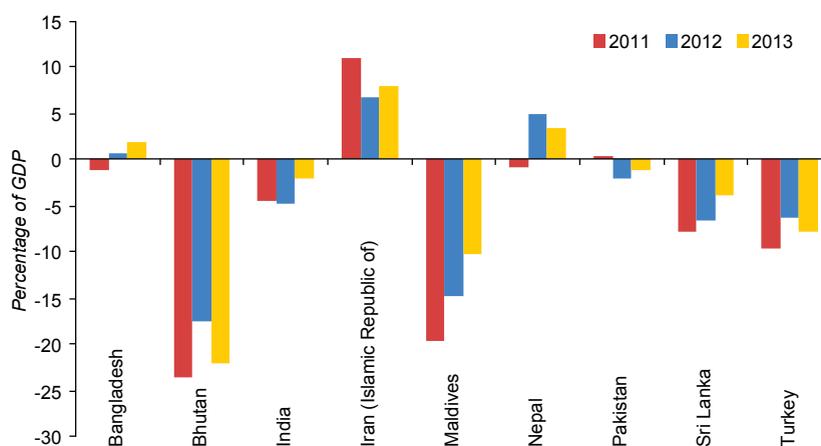
External current accounts improved on export rebound

Merchandise exports generally rebounded in 2013. Shipments from Bangladesh, India, Pakistan and Sri Lanka increased after contracting between 2% and 7% in 2012. The pickup was mainly fuelled by strengthening import demand from developed economies, which accounted for at least half of the total exports from most of the economies in the subregion. The weaker Indian rupee also spurred exports, lowering the current account deficit to 2% of GDP in 2013 (see figure 2.13). In contrast, exports from Nepal and Turkey declined following sluggish economic activity in India and Europe, respectively. International sanctions negatively affected oil exports from the Islamic Republic of Iran.

Trade deficits narrowed due to stronger exports but they remained sizeable. The subregion in general continued to rely on imported food and energy. Export items are typically low value-added and concentrated in textiles and garments in Bangladesh, Nepal, Pakistan and Sri Lanka. Goods exports account for less than one fifth of GDP in most economies, highlighting the need to enhance productive capacity. Meanwhile, governments have recently sought to address trade deficits. Bangladesh raised import tariffs, while India, Pakistan and Sri Lanka introduced measures to curb gold imports.

Current account deficits narrowed in several of the economies in the subregion in 2013 as workers' remittances and tourism revenue increased and exports rebounded. Among countries that receive sizeable remittances, inflows have been growing in Bangladesh, Nepal, Pakistan and Sri Lanka in recent years, in line with a higher number of overseas workers. Although remittances have supported household spending and contributed to

Figure 2.13. External current account balance in selected South and South-West Asian economies, 2011-2013



Sources: ESCAP, based on national sources; and International Monetary Fund, World Economic Outlook Database, April 2014.

Note: Fiscal-year data for Bangladesh, Bhutan, India, the Islamic Republic of Iran, Nepal and Pakistan.

current account surpluses in Bangladesh and Nepal, they also point to inadequate job opportunities at home. Most migrant workers are also employed in low-skilled sectors. Meanwhile, the number of tourists to India, Maldives, Sri Lanka and Turkey rose steadily, although the current account deficit in Maldives remained at about 10% of GDP due to the country's heavy reliance on imported goods.

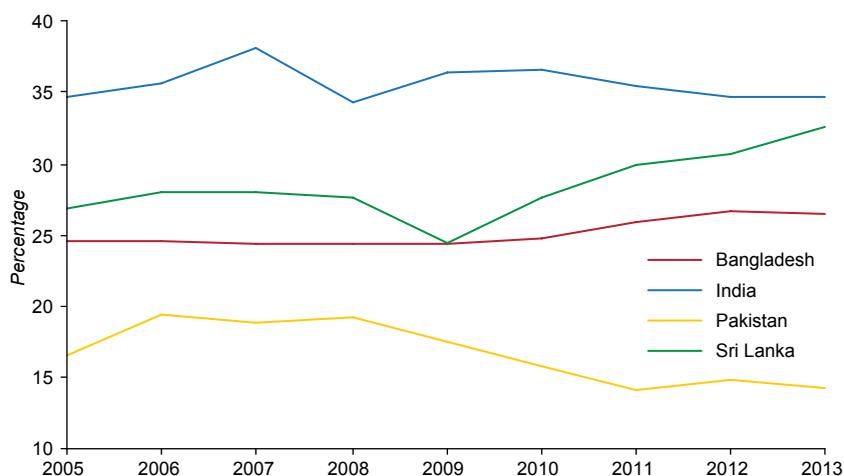
Signals pointing to a possible tapering of monetary stimulus in the United States in mid-2013 led to disruptions in some capital markets and currencies (see chapter 1 for details). Between May and August 2013, the Indian rupee depreciated by almost 15%, while share prices in Sri Lanka and Turkey lost about 10% and 25%, respectively. Capital market volatility also increased in Turkey in early 2014. In response to the volatile conditions, countries introduced capital flow management tools. For instance, India lowered the limit on overseas investment. More heavily affected economies were those with large fiscal and current account deficits financed by external short-term capital flows. This highlights the need for a deeper structural transformation to drive the subregion's dynamic competitive advantage.

External account vulnerability is high for some economies. Foreign exchange reserves held by Pakistan plummeted in 2013. The level at the end of the

year was equivalent to only two months of imports, although this has improved in recent months. Financial support from the IMF was secured after the Government made commitments to tackle the fiscal deficit. However, reducing the fiscal shortfall should not be at the cost of development and social expenditures, but rather through revenue-raising measures, reforms of state-owned enterprises and rationalizing current spending.

Current account deficits in several of the economies partly reflect inadequate domestic savings. Pakistan has a low investment level, at around 14% of GDP, as compared with Bangladesh, India, Nepal and Sri Lanka, which all have the investment-to-GDP ratios of about 25% or higher (see figure 2.14). Domestic savings in the subregion are, however, often too low to finance large investment needs. The savings-investment gaps reached about one fifth of GDP in Bhutan and Maldives and were also notable in Sri Lanka and Turkey. These countries experienced large current account deficits in recent years. Low domestic savings in the subregion are partly underpinned by a lack of public savings, as reflected in persistent fiscal deficits. Enhancing private and public savings would help sustain the subregion's investment level and reduce its external account vulnerability.

Figure 2.14. Investment-to-GDP ratio in selected South and South-West Asian economies, 2005-2013



Source: ESCAP, based on International Monetary Fund, World Economic Outlook Database, April 2014.

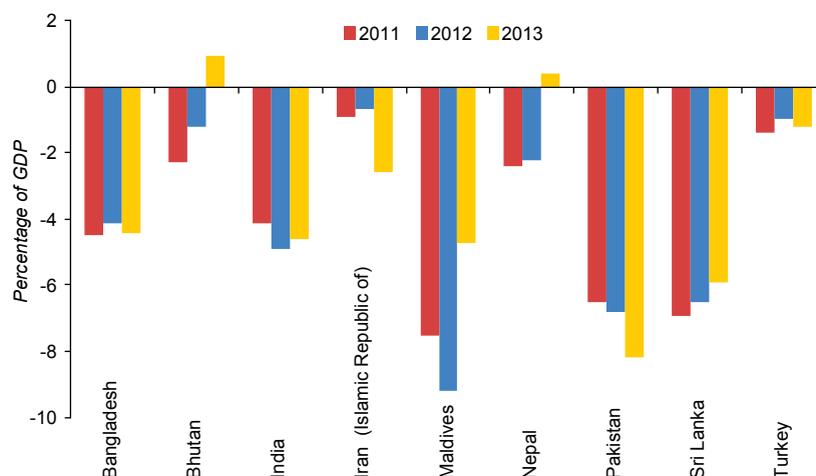
Policy responses and structural reforms: accommodative macroeconomic policies

Macroeconomic policies in 2013 were largely accommodative in South and South-West Asia, as growth levels remained below the pre-crisis pace amid the fragile global economic recovery. Moreover, structural reforms were introduced in some economies.

Fiscal policy remained supportive to economic growth in 2013, but concerns regarding high budget

deficits have risen. Except in Bhutan and Nepal, the economies in the subregion posted fiscal deficits in the fiscal year 2013, ranging from 1.2% of GDP in Turkey to 8.2% of GDP in Pakistan (see figure 2.15). The deficits in Bangladesh and Pakistan have widened over the past years, partly due to contingent liabilities associated with public-private partnership projects, especially in the energy sector. India, Maldives and Sri Lanka experienced lower budget deficits. More broadly, fiscal deficits in South and South-West Asia are higher and more persistent

Figure 2.15. Budget balance in selected South and South-West Asian economies, 2011-2013



Source: ESCAP, based on national sources.

than in other subregions. They are driven primarily by a large informal economy, a small tax base, loss making state-owned enterprises and inefficient tax collection. Attempts to address budget deficits must therefore tackle these root causes instead of by cutting essential development and social expenditures to meet short-term exigencies.

Fiscal policy space is often limited in these countries. Expenditures on maintaining internal security and weakly targeted subsidies are considerable, while those on interest payments are as high as 30% of total spending in some of the economies. The public debt level is close to 80% of GDP in Bangladesh and Sri Lanka and more than 50% in Bhutan, India and Pakistan. Sizeable public external debt in Sri Lanka makes the country subject to greater exchange rate risk. Limited fiscal space has not only reduced available funds for development expenditure, but in economies, such as Pakistan, a large proportion of current expenditure is financed through borrowing. In Afghanistan and Bhutan, fiscal positions are also highly dependent on external funding and grants.

Monetary policy was generally accommodative amid some softening of inflation and fragile external demand. In 2013, policy interest rate cuts totalling 50 and 100 basis points were made in Bangladesh and Sri Lanka, respectively. In India, the policy rate was cut steadily from January 2013 until September when the monetary policy changed course in response to heightened capital market volatility. A similar turnaround was observed in Turkey in early 2014 to stem currency depreciation and capital flight, and in Pakistan, in late 2013, as inflation edged up. The cash reserve ratio was lowered in India, Nepal and Sri Lanka. Broad money supply growth was comparable to the past years. Loose monetary policy enabled strong bank credit growth in Bangladesh, although the country's non-performing loan ratio was high at close to 10%. Meanwhile, monetary policy effectiveness is limited in several of the economies, such as Afghanistan due to an underdeveloped financial system, Bhutan and Nepal as a result of pegged exchange rates with India, and the Islamic Republic of Iran due to a large informal market for foreign exchange.

Turning to the structural reform agenda, in the twelfth national development plan (2012-2017) of India, it is emphasized that the country needs to reverse the recent economic slowdown, while ensuring that growth was more inclusive and sustainable. Tackling macroeconomic imbalances, particularly high fiscal and current account deficits, is also cited as an immediate policy challenge.¹¹ Some of the country's recent reform initiatives include: relaxing caps on foreign investment in such sectors as retail and telecommunications; allowing foreigners to invest in pension funds; setting up an investment committee to speed up the implementation of large infrastructure projects; passing a food security act that provides subsidized food grains to two thirds of the population; and introducing clearer guidelines on the land acquisition process. Regarding financial reforms, there are proposals to create a new category of banks that would focus on lending to small businesses and low-income households, and to introduce a structured monetary policy framework to increase central bank independence. The formation of a new Government after parliamentary elections in April-May 2014 should provide impetus to economic reforms.

India's national development plan aims to ensure more inclusive and sustainable development

In Bangladesh, one key initiative is an amendment in the labour law to strengthen worker rights by allowing more trade unions and requiring a provision for group insurance for work-related accidents. Another key development is the introduction of an online tax registration system, which facilitates tax payments. Meanwhile, more recent initiatives have focused on supporting the garment sector amid political disruptions. They included lower income tax for garment exporters and reduced lending rates on input procurement.

Outlook for 2014 and policy challenges

The outlook for the subregion in 2014 is positive. As discussed in chapter 1 in detail, the Indian economy

is expected to stage a modest recovery and grow by 5.5% in the fiscal year 2014. This recovery is to be supported by an improved performance in the industrial and services sectors. Higher growth in the developed countries will likely enhance external demand, which would be further supported by the recent depreciation of the Indian rupee. However, to secure growth, more emphasis must be placed on removing structural impediments, building business confidence and creating fiscal space to support investment. The removal of infrastructure deficiencies, especially with regards to power and transport, is needed to promote growth. The growth prospects of the country also depend on the pace of a structural reform agenda carried out by the new Government.

Growth in Pakistan is projected to pick up to 4.1% in the fiscal year 2014. In recent months, there have been some notable positive changes in the economy, including improved growth of large-scale manufacturing industries, expansion in private sector credit, accumulation of foreign exchange reserves and appreciation of the Pakistani rupee against the United States dollar. Despite these positive developments, the economy still faces many challenges and structural reforms are needed to address them. The investment-to-GDP ratio is one of the lowest in the subregion. Tackling the problem of severe energy shortages is key to promoting investment and growth on sustainable basis. There is also a need to reduce the country's trade deficit by improving production efficiency and export competitiveness and lowering its reliance on imported oil in meeting domestic energy needs. Also, the budget deficit, which continues to be large, needs to be reduced significantly in the coming years.

The economy of Bangladesh is projected to grow at a steady rate of 6.1% in the fiscal year 2014. The agricultural sector is expected to perform better due to improved weather conditions and last year's low base. However, slower expansion of exports and falling workers' remittances may hold back growth. Massive investments in infrastructure are needed to raise growth to higher levels.

Sri Lanka is projected to maintain high growth momentum, with its economy expected to expand at a higher rate of 7.6% in 2014. The high growth rate is expected to be supported by an increase in investment, particularly in infrastructure by the Government, a favourable macroeconomic environment and the continued recovery in the global economy. Greater involvement of the private sector in economic activities will further enhance the growth prospects of the country. Further fiscal consolidation and improving tax revenues, however, remain major challenges.

Relatively fast economic growth has translated into only a modest poverty reduction

Strong hydropower exports should sustain high output growth of 7.1% in Bhutan. Steady remittance inflows and tourism income would particularly benefit Maldives and Nepal, both of which are expected to grow by 4.5%. On the condition that the withdrawal of international security forces from Afghanistan is smooth, the economy is projected to maintain steady growth of 3.2% in 2014.

The economy of the Islamic Republic of Iran is likely to expand by 1.5% in 2014 after contracting in the past two years. This improved performance is contingent upon eased sanctions on oil exports. In Turkey, growth is expected to be stable at 4% in 2014, as economies in the European Union start to recover. However, further escalation in tensions between the Russian Federation and Ukraine can undermine growth in Europe, as well as in Turkey. Domestic politics and uncertainty can also weigh on growth.

The South and South-West Asia subregion has enjoyed relatively rapid economic growth, but this has translated into only a modest reduction of poverty. The proportion of the population living in poverty (based on \$1.25 a day) decreased steadily from more than a half in the early 1990s to around 29% in 2010. However, the subregion is still home to close to 40% of the world's poor, up from 27% two decades ago.

Income inequality deepened in Bangladesh, India and Sri Lanka. Gender disparities are also a matter of concern in most economies with significant costs to potential GDP growth (see box 2.4).

Limited fiscal space has constrained the ability of Governments in most countries in the subregion to deliver public spending that focuses on more inclusive development. As discussed in chapter 3, increased

Box 2.4. Empowering women, enabling development

Gender inequalities that result in the dichotomization of women into the private domain and men into the public domain, and the consequent lower rates of female participation in economic activities outside of the home, are a documented obstacle to reducing poverty and an impediment to socioeconomic development that is inclusive, equitable and sustainable.

In South and South-West Asia, gender inequality is evident in female and male labour force participation rates. The labour force participation rates for women in the countries of South and South-West Asia are between 18 and 52 percentage points lower than the labour force participation rates of men. For example, in Bangladesh, the labour force participation rates for women and men are 36% and 82%, respectively. In Turkey, 29% of women of working age are in the labour force, compared with 70% of men.^a

Beyond quantitative measures of participation, discrimination and inequality are evident across almost every dimension of women's wage employment and entrepreneurship: gender pay gaps, where the earnings of women are less than those of men; occupational segregation; and the insecurity of vulnerable employment, including work that comes without social protection, takes place in hazardous work environments and involves casual work contracts.^b

Cognizant of the challenges that women encounter to fully and freely participate in economic activities, and of the immense social and financial value that their participation yields, Governments are undertaking initiatives to promote women's economic participation, such as embracing policy reform, education and training, service provision, and measures in support of women's decent work and entrepreneurship.

For example, in Bangladesh Vision 2021,^c the Government of Bangladesh has committed to increasing the labour force participation of women to 40% by the year 2021. Complementing the Bangladesh Vision 2021, the Government also adopted specific measures to increase women's labour force participation, employment and enterprise development in its sixth five-year national development plan, including realizing equal pay for equal work, providing childcare services and promoting women's access to credit facilities.

In India, positive policy actions include the National Microfinance Support Programme and the prominent National Rural Employment Guarantee Scheme. Regarding the latter initiative, in seeking to address poverty among women and men in rural India, in the Scheme the following was mandated: one third of beneficiaries must be women; equal wages for women and men; and the provision of childcare for children under the age of six years who accompany their mothers to work.

For the last two years in Maldives, the Ministry of Economic Development has led the "Employment and Enterprise Development for Women and Youth" initiative. Policy actions, such as those that target awareness raising, leadership training and allocation of resources, can address key determinants of gender inequality and yield concrete benefits for individual women and men, their families, their communities and their countries.

^a International Labour Organization (2013).

^b International Labour Organization (2010).

^c A political manifesto introduced in 2008 that stands as a political vision for the country for the year 2021. For more details see http://www.drrgateway.net/sites/default/files/Bangladesh%20Vision_2021_English.pdf.

domestic tax revenues would be the key to improve fiscal space. Tax revenue on income and profits is low, at less than 20% of total tax revenue, in several countries. Only 1 in 10 working-age persons in 2010 was a wage and salaried worker, who are the main source of income tax revenue. Such a low share is driven mainly by such factors as poor tax administration, various tax exemptions, limited employment opportunities and a very high share of informal and vulnerable employment in which up to 80% of people employed in the subregion are unpaid family workers and own-account workers. Therefore, the countries need to enhance their tax collection efforts by broadening the tax base, improving tax progressivity and strengthening tax administration. This is needed not only to expand their fiscal space to close their development gaps, but also to address rising inequality.

Closing infrastructure gaps is central to energizing industrialization and job-creation. Many countries in the subregion suffer from severe energy shortages. According to a recent World Bank study, almost 70% of firms surveyed in Pakistan cited electricity shortages as the most binding business obstacle. Such firms estimated that sale values would have

been at least 10% higher without power outages. A recent estimate suggests that the subregion needs to invest up to \$2.5 trillion over the next ten years to close its infrastructure gaps.¹² Due to limited fiscal space, PPPs on infrastructure projects have the potential to play an important role. However, this arrangement has thus far failed to fully take off and when it had been set up, ironically further strains were placed on fiscal balances due to contingent liabilities. Infrastructure investment with private participation in the subregion amounted to about \$7.2 billion per year during the period 2000–2011, compared with \$15.8 billion in Latin America and the Caribbean. However, in promoting PPPs, policymakers should consider carefully appropriate risk-sharing and guaranteeing demand or revenue, as well as ensure equity and access for remote areas and disadvantaged groups.

SOUTH-EAST ASIA

Diverse growth performance

Average economic growth of the economies in South-East Asia slowed to 4.9% in 2013 from 5.5% in 2012 (see table 2.5). Exports and domestic

Table 2.5. Rates of economic growth and inflation in South-East Asian economies, 2012–2014

(Percentage)

	Real GDP growth			Inflation ^a		
	2012	2013	2014 ^b	2012	2013	2014 ^b
South-East Asia^c	5.5	4.9	4.6	3.9	3.9	4.0
Brunei Darussalam	0.9	-1.8	1.2	0.5	0.4	0.5
Cambodia	7.3	7.6	7.2	2.9	2.9	3.4
Indonesia	6.2	5.8	5.4	4.3	6.4	5.5
Lao People's Democratic Republic	8.3	8.2	7.5	4.3	6.4	6.0
Malaysia	5.6	4.7	5.0	1.7	2.1	3.0
Myanmar	7.3	7.5	7.8	2.9	5.8	6.6
Philippines	6.8	7.2	6.7	3.2	2.9	4.3
Singapore	1.9	3.9	3.5	4.6	2.4	2.5
Thailand	6.5	2.9	2.2	3.0	2.2	2.4
Timor-Leste	8.3	8.1	8.0	10.9	10.6	9.5
Viet Nam	5.2	5.4	5.7	9.1	6.6	6.2

Sources: ESCAP, based on national sources; and CEIC Data. Data available from www.ceicdata.com (accessed 15 June 2014).

^a Changes in the consumer price index.

^b Forecasts (as of 15 June 2014).

^c GDP figures at market prices in United States dollars in 2010 (at 2005 prices) are used as weights to calculate the subregional aggregate.

Notes: Data for Myanmar is reported on a fiscal year basis, 2013 refers to fiscal year spanning 1 April 2013 to 31 March 2014; and Timor-Leste GDP is reported as non-oil GDP.

demand lost momentum in Indonesia, Malaysia and Thailand. Bucking the trend was economic growth in the Philippines, which grew at a more rapid rate. The economies of Cambodia, the Lao People's Democratic Republic and Myanmar continued to expand at rate that exceeds 7%, despite significant human capital and infrastructure challenges.

In Brunei Darussalam, GDP contracted by 1.8% in 2013 after growing by 0.9% in 2012. Oil output declined markedly in the second half of the year. Public investment and non-energy activities held up more favourably. Expanded petrochemical and refinery capacities are expected to support growth in the coming years, but diversification into sectors, such as banking and tourism, remains a priority.

The economy of Cambodia accelerated slightly to 7.6% in 2013. Garment exports continued to drive growth. The minimum wage in the garment industry, which employs about 600,000 workers, was raised; yet, working conditions still need to be improved. Beyond garments, steady agricultural growth has been supported by public investment in rice milling and storage facilities. Credit growth continued to expand rapidly, and the country's banking sector received the highest FDI among the country's service industries. However, the proportion of credit channelled to long-term investments needs to be increased at the expense of credit for consumption and real estate.

Economic growth in Indonesia slowed amid monetary policy tightening

Output growth in Indonesia slowed to 5.8% in 2013 from 6.2% in 2012, as the monetary policy was tightened to curb inflation and put a cap on the current account deficit. Growth in fixed investment eased on the back of higher interest rates and the depreciation of the Indonesian rupiah, while public investment in infrastructure rose to about 3% of GDP, the highest level since the 1997 Asian financial crisis. Export earnings remained subdued on softer global commodity prices, but a decrease in imports resulted in higher net exports for the year. Private

consumption held up more strongly, supported by tax reductions, cash transfers and higher minimum wages. The impact of slowing output growth was felt in the labour market, as the official unemployment rate edged up to 6.25% in August 2013 from 6.14% in the previous year. Financial markets experienced increased volatility in mid-2013, triggered by fears over the withdrawal of monetary policy support in the United States.

The economy of the Lao People's Democratic Republic sustained high growth of 8.2% in 2013. Hydropower and mining activities continued to drive growth, but garments and other manufacturing activities have emerged as important sources of output and employment growth. The services sector, particularly telecommunications, also expanded rapidly. Accession to the World Trade Organization in 2013 and the planned railway linking the capital city to major cities in southern China could open up new opportunities. Developing human resources and institutional capacity would help the country benefit fully from these developments.

Growth in Malaysia slowed from 5.6% in 2012 to 4.7% in 2013. Demand for the country's exports waned in the first half of the year and investment growth softened albeit from a high base, as public outlays dropped sharply. Growth was primarily driven by private consumption, which rose by 7.6% amid low inflation, robust employment expansion and the introduction of minimum wages in 2013. However, a rapid increase in consumption in recent years has been accompanied by rising household debt levels, which has become a concern. On the supply side, growth in the export-oriented manufacturing sector and in some services sectors, such as finance, was sluggish, but communications, real estate and business services expanded rapidly.

Economic growth in Myanmar accelerated slightly to 7.5% in 2013, driven by natural gas exports and higher investment in the energy sector. Improved business confidence following recent reforms has attracted foreign investment in telecommunications, infrastructure and garments, among others. This was

reflected in increased capital imports, new business registrations and rapid credit growth in the private sector. Nevertheless, significant challenges remain. Medium-term priorities include expanding access to electricity in rural areas and developing the banking sector, as the economy remains largely cash-based. Telecommunication facilities are also limited, with mobile phone penetration estimated at only 11%, the fourth-lowest rate in the world.

The economy of the Philippines expanded by a robust 7.2% in 2013, well above its historical trend. Notably, the country posted a strong economic performance despite being struck by Typhoon Haiyan in November 2013, which caused extensive damage and more than 6,000 confirmed deaths. Private consumption buoyed the economic expansion, supported by steady overseas workers' remittances. Investment also increased notably, particularly in construction, although overall the investment-to-GDP ratio remains relatively low, at about 20% of GDP. Net exports hampered growth as imports rose while exports suffered from weak demand for semiconductors and other electronic components, which account for about 40% of total exports. Despite a booming economy, the country's official unemployment rate was high, at 7.5%, in 2013.

The economy of Singapore rebounded from sluggish growth of 1.9% in 2012 to 3.9% in 2013. External-oriented sectors, such as manufacturing, wholesale trade and transportation, bounced back in the second half of 2013. Other sectors, such as construction and business services, also registered improvements, although the tight labour market weighed on some labour-intensive sectors. In the country's 2014 budget, the need to invest in labour-saving technologies and worker training is emphasized. Additional support for students from low-income families and elderly groups was also introduced to reduce income inequality.

The economy of Thailand slowed notably to 2.9% in 2013 from a high base of 6.5% in 2012. Exports stalled as key items, such as electronics products, auto vehicles and rice, performed poorly. Weak merchandise exports were, however, partially offset

by strong tourist arrivals. Domestic demand also weakened as the effects of fiscal stimulus faded and the post-flood reconstruction was completed. Rising household debts, arrears in government subsidy payments to rice farmers and political uncertainty, which began in November 2013, have put a damper on consumer confidence. Political tensions have also delayed major public investment projects in water management and infrastructure and raised uncertainty over planned public spending. Taken together, the economy expanded by a mere 0.6% in the fourth quarter on a year-on-year basis.

Rising household debt and political uncertainty put a damper on consumer confidence in Thailand

Non-oil economic growth in Timor-Leste softened marginally to 8.1% in 2013. Given moderating oil production during the year, overall GDP growth was rather weak. The economy is driven largely by government spending, backed by the Petroleum Fund, and energy-related sectors, such as construction. Domestic production is confined to subsistence farming and coffee, resulting in high reliance on imported goods. A major challenge for the country is to effectively use oil revenues to foster social development and diversify the economic structure.

Economic growth in Viet Nam picked up slightly, to 5.4%, in 2013. The economy recovered gradually from the effects of a high-inflation episode and banking sector problems. Both consumption and investment grew at a steady pace. On the supply side, services continued to grow rapidly, while manufacturing picked up in the second half of the year. Nonetheless, there was a 12% increase in the reported number of firms that ceased operations in 2013, as compared with 2012. Reform of state-owned enterprises, which account for about 40% of GDP, would help enhance the quality of investment.

In the least developed countries in the subregion — Cambodia, the Lao People's Democratic Republic and Myanmar, industry's share of GDP more than doubled

over the past two decades. However, this increase has been concentrated in a few sectors, such as garments and mining. Agriculture still accounts for up to a third of total output in these economies. The pattern of structural change in other economies in the subregion has been more mixed, with industry's share rising in Indonesia but falling in the Philippines, where the services sector accounts for nearly 60% of GDP, making it the most services-driven economy in the subregion after Singapore. Overall, there has been a notable income convergence within South-East Asian economies. However, as highlighted in the *Survey 2013*,¹³ convergence has been arguably slower in education, health and other measures of human development. The least developed countries also significantly lag behind in terms of integration into global supply chains, which, in turn, limits their ability to diversify their economies and engage in higher value-added activities.

Intraregional investment and cooperation are important to narrow this gap. There is much potential to foster this, given the wide cross-country differences in levels of economic development and national savings, which ranged from 13% of GDP in Cambodia to 45% of GDP in Singapore in 2013. In the context of ASEAN, it is important that all countries can benefit from increased integration as envisioned in the ASEAN Economic Community plan. This would

require increased intraregional FDI inflows and technical assistance to the lower-income countries.

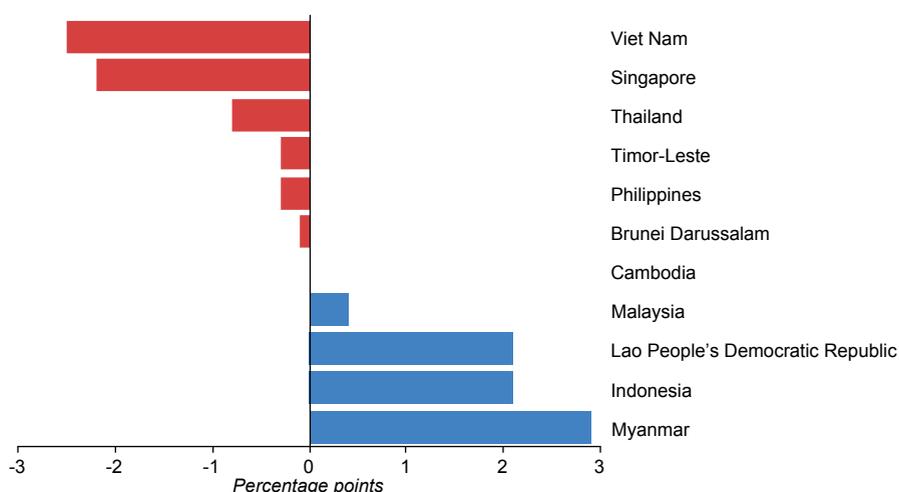
Stable inflationary pressure

Inflation was stable, at 3.9%, in the subregion as a whole in 2013. Several of the economies experienced lower inflation (see figure 2.16). Indonesia was not one of them. It faced steep price increases as subsidy rationalization pushed up prices of gasoline and diesel by 44% and 22%, respectively. Price pressures were further boosted by a weaker currency, resulting partly from capital outflows from the country. Inflation also increased rapidly in the Lao People's Democratic Republic and Myanmar, owing to high credit growth and new investments.

In Viet Nam, inflation moderated to 6.6% in 2013 following a series of fiscal and monetary tightening measures. Inflation was high, at 10.6%, in Timor-Leste due to supply-side bottlenecks and strong demand fuelled by public spending.

Elsewhere, price increases were modest despite policy changes and external factors that had the potential to raise price pressures. Inflation in Cambodia remained relatively low at 2.9% despite a minimum wage hike in the garment industry, and in Thailand, it stood at 2.2%, even though the minimum wage rates were

Figure 2.16. Inflation in South-East Asian economies, changes in 2013 relative to 2012



Sources: ESCAP, based on national sources; and CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014).

raised nationwide. In Malaysia, inflation remained low, at 2.1%, despite price subsidy cuts on sugar and fuel. Inflation was also largely stable in the Philippines, at 2.9%, although food prices surged in December 2013 in the wake of Typhoon Haiyan. Inflation in Singapore eased to 2.4%, but housing prices and transport costs remained at relatively high levels.

External current accounts: exports picked up towards year-end

A stronger recovery in developed markets towards the end of 2013 helped revive shipments in key exporting economies in the subregion, such as Malaysia and Singapore. Export growth in Thailand, on the other hand, was flat for the whole year, as key items, such as electronics and auto vehicles, performed poorly. Softer demand for, and prices of, primary commodities weighed on exports from Indonesia. Weak demand in developed economies held back exports in most South-East Asian economies in the early part of 2013.

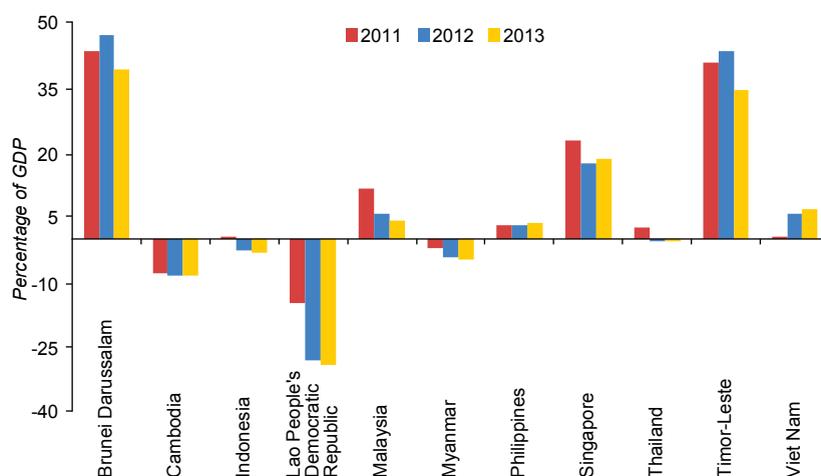
Overall, import growth in the subregion was subdued, in line with softer domestic demand in most of the economies. Imports of intermediate goods slowed in countries whose export products were based on the assembly of imported parts and components.

Imports of capital goods were more robust due to ongoing large public infrastructure projects in several of the countries. The economies of Malaysia, the Philippines, Singapore and Viet Nam recorded current account surpluses, while Thailand and Indonesia posted small deficits (see figure 2.17).

For 2013, portfolio capital inflows into the subregion continued strongly, although the prospects of a tapering of quantitative easing in the United States triggered a sharp reversal in midyear. These outflows resulted in weaker exchange rates in several of the subregion's economies. For the full year, the Indonesian currency depreciated by about 21% against the United States dollar and the currencies of Malaysia, the Philippines and Thailand depreciated 7-8%. Despite financial market turbulence in the middle of the year, Indonesia posted a \$9.8 billion net portfolio investment inflow for the year. The Philippines also recorded a sizeable net portfolio investment inflow in 2013.

FDI inflows were generally robust in 2013. In the first half of the year, the inflows increased by 3-14% in Indonesia, Malaysia, the Philippines and Viet Nam. Foreign investments in the garment and banking sectors in Cambodia and in the natural resources sector in Myanmar were steady. In contrast, investment inflows dropped by about 8%

Figure 2.17. External current account balance in South-East Asian economies, 2011-2013



Sources: ESCAP, based on national sources; and International Monetary Fund, International Financial Statistics database. Available from <http://elibrary-data.imf.org/> (accessed 15 June 2014).

in Singapore and by 53.5% in Thailand. Meanwhile, the Philippines and Viet Nam, two countries that receive sizeable workers' remittances, reported increases in remittance incomes of 5-7% in 2013.

FDI, particularly vertical FDI, has played an important role in the development of the subregion's extensive production networks. Investment in this area was initiated by the Japanese in the late 1980s, strengthened by the ASEAN Free Trade Agreement in 1993, and further expanded through trade with China. As countries prepare for the ASEAN Economic Community, it is important that the quality and quantity of FDI inflows to the lower-income economies improve. While FDI already accounts for a substantial portion of GDP in Cambodia, Myanmar and Viet Nam, it is often limited to only a few sectors. Even Indonesia, which has seen a rapid increase in inflows in recent years, could attract more FDI, considering the size of its economy; at \$18.4 billion in 2013, FDI accounted for only 2.1% of GDP, compared to up to 6% of GDP in Viet Nam. Meanwhile, the Philippines could benefit substantially from FDI to boost its total investment, but this would require policy measures, such as easing foreign ownership restrictions and improving the business environment. However, this should not include lowering labour and environmental standards or generous fiscal concessions. Finally, given that services account for a third of ASEAN

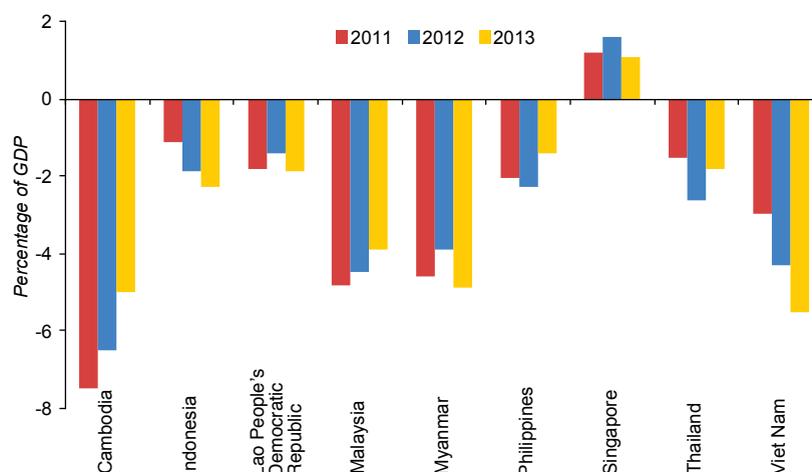
exports, expansion of intraregional FDI in services would boost export competitiveness and improve productivity in the domestic services sector, which remains generally low.

Policy responses and structural reforms: multi-faceted reform agenda moves forward

Monetary policy remained largely accommodative in the subregion in 2013. Malaysia has kept its policy interest rate at 3% since mid-2011, and in the Philippines, the policy interest rate has been held steady at 3.5% since late 2012. Thailand cut the rate three times in the period covering 2013 and early 2014 to 2%, amid falling market confidence and sluggish economic growth. Indonesia, on the other hand, raised its policy interest rate by 175 basis points between June and November 2013 to cope with rising inflation and to stem capital outflows. In addition to interest rates, countries used other monetary policy tools to manage liquidity and reign in asset bubbles. For instance, Indonesia lowered the minimum holding period for central bank bills from six months to one month in order to increase their liquidity and tighten the loan-to-value limits on mortgages for second and third residential properties.

Fiscal consolidation was witnessed in some countries in the subregion in 2013 (see figure 2.18). Indonesia,

Figure 2.18. Budget balance in selected South-East Asian economies, 2011-2013



Sources: ESCAP, based on national sources; and CEIC Data. Available from www.ceicdata.com (accessed 15 June 2014).

Malaysia and the Philippines rationalized energy price subsidies and/or raised electricity tariffs to restore medium-term fiscal sustainability. Poorly targeted energy subsidies have taken up a sizeable amount of the national budget in the past in Indonesia and Malaysia, with little impact on poverty reduction. Indonesia decided in mid-2013 to cut fuel subsidies to curb fiscal deficit, however, despite this, up to 13% of government revenues had to be spent on fuel subsidies in 2013. Malaysia also marginally reduced its fuel subsidies in September 2013, after spending some 2.5% of GDP on fuel subsidies in 2012. Both countries offered assistance to low-income households through compensatory cash transfers and increased welfare payments. Indonesia hiked fuel prices by a third on average and provided cash transfers to mitigate the impact on poor households. While the fiscal savings from subsidy cuts have been lower than expected due to a weaker currency, subsidy rationalization should help provide greater fiscal resources for social spending, such as on an universal health-care, which is to be introduced in 2014.

On the revenue side, Malaysia announced the introduction of a 6% tax on goods and services in an effort to widen the tax base; it will come into effect in April 2015. This measure could help lower the public debt, which increased to nearly 55% of GDP in 2013 from 40% of GDP prior to the global financial turmoil. However, any tax reform should take into account and address the possible impact on low-income households. A revenue-boosting effort may also be warranted in Indonesia, as non-oil tax revenue has been stagnant, at around 10% of GDP, in the past years despite rapid economic growth. In the Philippines, tax administration reforms raised the share of government revenue in GDP to 15.2% in 2013. In Thailand, however, government revenue deteriorated on the back of lower corporate tax rates and tax relief.

Countries in South-East Asia are introducing policy reforms on multiple fronts, including in reducing energy subsidies and boosting public expenditures on infrastructure, education, health and social protection. At the same time, monetary and financial authorities

are using various macroprudential measures to address such issues as financial instability. In the Philippines, the central bank redefined real estate activities to lessen exposure of banks to the sector. In Indonesia, a more stringent rule on down payments was introduced to slow credit for the purchase of housing and automobiles. Similarly, in Malaysia, asset price build-ups in certain sectors have been dealt with by using macroprudential measures rather than by increasing the policy rate, which could unnecessarily dampen overall domestic demand and hurt investment in productivity-enhancing projects.

Governments and central banks in the subregion are also working to expand access to financial services to low-income households and micro, small and medium-sized enterprises. For instance, the Philippines Development Plan 2011-2016 envisions a “development-oriented and inclusive financial system” with “effective interface of bank and non-bank products, delivery channels, technology and innovation to reach the financially excluded”.¹⁴ In line with this, the central bank is expanding its financial literacy training programmes and consulting financial sector stakeholders to draft a national strategy for financial inclusion.

Timely implementation of public infrastructure projects remains a challenge

Infrastructure development is a medium-term policy priority in several countries, but timely implementation of public sector projects remains a challenge. In Thailand, further delays in implementing major public investment projects in water management and public transport would undermine national competitiveness. In the Philippines, the Government may need to consider relaxing its fiscal-deficit cap of 2% of GDP in order to finance the reconstruction of Typhoon Haiyan-hit areas and to close infrastructure gaps in general. The Philippines have launched several projects under PPPs since 2012, while Indonesia has passed a land-acquisition bill to speed up the process for acquiring land for new infrastructure projects. In Malaysia, the Government’s Economic

Transformation Programme is helping to generate a pipeline of infrastructure investment projects.

Social protection schemes have increased in the Philippines and Viet Nam in recent years. In the Philippines, the share of the population covered by the government-owned health insurer increased from 62% in 2010 to 81% in 2013. Viet Nam introduced an unemployment insurance scheme in 2009, and decided in 2012 to extend social security to half of the labour force by 2020. With the aim to achieve universal health coverage, Viet Nam introduced government-subsidized health insurance premiums for vulnerable groups, with coverage being extended to two thirds of the population in 2013.

Outlook for 2014 and policy challenges

Economic growth in South-East Asian economies as a group is set to moderate further in 2014 relative to 2013. Growth projections for Indonesia, Malaysia, the Philippines and Thailand are discussed in detail in chapter 1. Briefly, Indonesia is projected to grow more slowly, at 5.4%, amid subdued commodity exports and tight monetary policy. The impact of a sudden acceleration in tapering of eased monetary policy in the United States can also be stronger than anticipated, especially if structural issues, such as current account deficits financed by short-term external borrowings, persist. In the Philippines, growth could ease to 6.7%, although strong remittance inflows would continue to sustain private consumption. In Malaysia, growth is projected to increase slightly to 5% on stronger exports and investment. Thailand is expected to experience another year of low growth, although political uncertainty has eased somewhat in recent months. Projected growth at 2.2% assumes a rebound in the second half of the year.

The economy of Singapore, which is highly dependent on exports of goods and services, should benefit from the expected global economic recovery. Growth is however projected at a slightly lower rate of 3.5% in 2014 mainly due to domestic challenges. Tight labour market conditions will weigh on growth. Rising labour costs without corresponding gains in

productivity is a cause of concern. The Government is actively pursuing policies to raise productivity through incentive policies, but the realization of gains will take time. Meanwhile, growth is projected to improve to 5.7% in Viet Nam amid improving credit conditions. Continuation of monetary policy caution and renewed focus on structural reforms, particularly the restructuring of state-owned enterprises and the banking sector, should support projected growth. Private investment is also expected to pick up.

Growth prospects for 2014 in the least developed countries are mixed. Output growth in Cambodia is expected to ease to 7.2%. Exports and investment should remain strong, but political and labour disputes are a concern. Similarly, growth in the Lao People's Democratic Republic could slow to 7.5% from a high base, with hydropower, construction and services activities as the main drivers. Growth of the non-oil sectors in Timor-Leste is expected to decelerate marginally to 8%, as public expenditure growth moderates amid efforts to ease demand-side pressures and enhance the quality of expenditures. In contrast, economic growth in Myanmar is likely to accelerate further to 7.8%, supported by increases in gas production, trade and agricultural output. Expansion of electricity supply could lead to higher growth than what is currently projected. However, the ongoing ethnic conflict could hold back Myanmar's progress.

One of the policy priorities is to tackle widespread informal employment

Key downside risks to these outlooks are increased financial volatility and subsequent monetary tightening that would be due to unexpected changes in the direction of monetary policy in the United States, a weaker-than-expected growth performance in China, and any sharp rise in international food and fuel prices led by supply shocks.

One of the medium-term priorities is to expand productive employment opportunities. Official unemployment rates remain relatively high in Indonesia

and the Philippines despite strong economic growth records. Another pressing concern is widespread informal employment, which tends to have limited job security and lower labour productivity. Countries are addressing these challenges through various policy tools, such as raising minimum wages in Thailand, ensuring financial support to small enterprises in Indonesia and strengthening vocational training in Viet Nam. Singapore also runs a worker training programme that targets low-wage workers. Improving industrial safety and working conditions is also critical, especially in the least developed countries of the subregion.

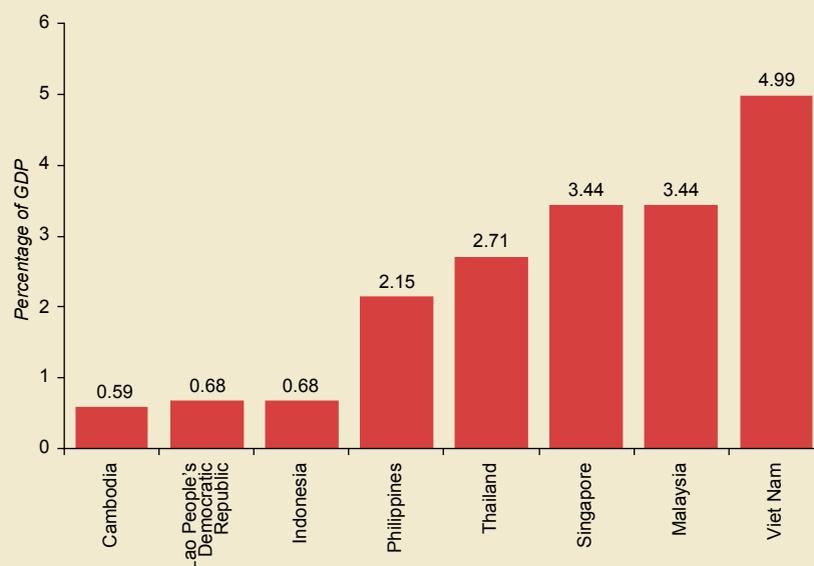
Rising and/or high inequality is also a concern. Therefore, fostering equitable economic growth is another important policy challenge. In Malaysia, the urban-to-rural income ratio edged up to 1.9 in 2012. In the Philippines, poverty incidence remained high, at 20%, in 2012. Higher level of inequality has weakened the positive impact of economic growth on poverty reduction. As recommended in the *Survey 2013*, investing in education, health services and social protection is generally affordable and helps enhance the social development gains from economic growth. In box 2.5, the need to strengthen social protection in South-East Asia is highlighted.

Box 2.5. ASEAN Declaration on Strengthening Social Protection

Access to social protection is deeply rooted in the Universal Declaration of Human Rights (1948) which upholds the rights of everyone to social security and to a standard of living adequate for the health and well-being of themselves and their families. This human right declaration, however, remains unrealized for 35% of the population in the ASEAN region, namely those living on less than \$2 a day, according to the ESCAP database. Having no security against unemployment, sickness, disability, economic shocks and natural disasters exacerbates vulnerabilities faced by the poor.

Despite significant wealth generated, conflicting political priorities and insufficient spending on effective social protection programmes mean that poverty rates remain high and inequalities are increasing. Public spending on social protection varies widely among ASEAN countries (see figure A).^a Malaysia, Singapore and Viet Nam each spent more than 3% of their GDP on social protection in 2010 while, in Cambodia, Indonesia and the Lao People's Democratic Republic, this figure was only 1%.^b

Figure A. Social protection expenditure as a share of GDP in selected South-East Asian economies, latest available data



Source: Asian Development Bank, staff estimate, using data from country sources. Downloaded from Asian Development Bank's Social Protection Index Database (SPI).

Box 2.5. *(continued)*

Extension of social protection can take place along two dimensions — horizontal and vertical. The horizontal dimension (breadth) refers to the number of persons covered by existing schemes. The vertical dimension (depth) refers to the levels of benefits in existing schemes. The reported variation in social expenditure among ASEAN member countries conceals information on the choices of breadth and depth of social protection schemes and, as a result, the impact on the lives of potential and actual beneficiaries.

The 2008 ASEAN Charter recognizes social protection as a key foundation for inclusive and sustainable development.^c To realize this commitment, ASEAN member countries adopted the Declaration on Strengthening Social Protection in October 2013 at the 23rd ASEAN Summit. Based on the Social Protection Floor framework, the Declaration sets common principles among countries, as they prepare for the ASEAN Economic Community, which takes effect in 2015. It recognizes social protection as a cross-cutting issue that requires participatory involvement of Governments, service providers, civil society and the private sector. Social protection is seen as an investment in people that should be supported by adequate resources.^d

Among its strategies to improve social protection, the Declaration advocates the expansion of social insurance to the informal sector and the strengthening of social assistance programmes for persons with disabilities, elderly, children and other vulnerable groups. Furthermore, it calls for collective progress towards universal health coverage. Overall, the Declaration manifests ASEAN aspirations of pushing beyond economic integration, toward the rights-based imperatives of broader social and political integration.

^a The calculation on social protection expenditures follows the definition of the Asian Development Bank Social Protection Index, as explained in ADB (2013b).

^b Expenditures for the provision of free public health care were not included in the calculation of the Social Protection Index and are thus not included as part of social protection expenditures. The indicator “Social protection expenditure as a percentage of GDP” only includes health expenditures that are implemented as forms of social insurance, or targeted as special assistance to particular vulnerable groups (social assistance).

^c Association of Southeast Asian Nations, The ASEAN Charter. Jakarta: ASEAN Secretariat, 2008. Available from www.asean.org/archive/publications/ASEAN-Charter.pdf.

^d ASEAN Declaration on Strengthening Social Protection, adopted in Bandar Seri Begawan, Brunei Darussalam, 9 October 2013. Available from www.asean.org/images/archive/23rdASEANSummit/5.%20asean%20declaration%20on%20social%20protection_final.pdf.

CONCLUSION

The present chapter provides a survey of macroeconomic developments during 2013 in the countries of Asia and the Pacific. In addition to economic growth, standard macroeconomic indicators, such as fiscal balance, external current account balance and inflation, are used. Generally, widening fiscal and external current account deficits and a rise in inflation are interpreted as a deterioration of an economy.

While they are useful indicators, their aggregate levels are not always informative about a country's macroeconomic health. For example, the IMF-World Bank Development Committee noted “the fiscal deficit is a useful indicator for purposes of stabilization and for controlling the growth of government liabilities,

but it offers little indication of longer term effects on government assets or on economic growth”.¹⁵ Since the external current account deficit generally mirrors fiscal deficits, the aggregate levels of external current account deficits, too, do not indicate a lot to guide policies.

The above, however, does not mean that policy-makers should ignore developments in those indicators. The spirit of the discussion here is to draw attention to the fact that the devil is in the details. The aggregate levels are just warning bells.

Policymakers need to examine whether the rise in fiscal deficits or public debt is due to falling revenue or rising expenditure. If it is due to falling revenue, then more efforts would be needed to raise the revenue base and collection efficiency — the subject

matter of next chapter. When a budget deficit is due to rising spending, countries should see whether it is used for such activities as building better schools and hospitals. If so, there should be less concern as long-term debt would become sustainable when productivity increases. Likewise, policymakers need to examine the structure of the external current account. Policy responses would differ depending on whether the widening current account deficit is due to imports of capital goods or luxury consumer goods, or it is driven by falling exports.

Policymakers also need to determine whether fluctuations in fiscal deficits are due to a short-term business cycle or long-term structural reasons. Fiscal deficits normally go up during an economic downturn due to both built-in automatic stabilizers (falling revenue and higher social security payments) and discretionary countercyclical spending. These kinds of deficits repair themselves over the cycle. On the other hand, rising fiscal deficits owing to structural reasons, such as inefficient tax administration or escalating public sector wage bills, would require fiscal reforms.

Finally, some level of inflation is unavoidable. It could be even necessary to encourage resources to shift towards desirable activities. Research shows that moderate inflation does not necessarily harm economic growth.¹⁶ In contrast, high interest rates needed to control inflation may constrain access to credit, especially to SMEs, and hence dampen job creation. Moderate inflation lowers real wages, which can be helpful for job growth. Moderate inflation also reduces the real value of corporate and private debt, thus boosting domestic demand.¹⁷ Policymakers should also understand the causes of inflation. Is it demand or supply-driven? Is its source primarily domestic or external? Policies to deal with inflation will differ based on answers to these questions.

Therefore, extreme caution is needed in interpreting aggregate macroeconomic indicators. Policymakers must not react to every movement in them. Policy design requires careful analysis of details at the disaggregate levels.

Endnotes

- ¹ See Lin (2011).
- ² In China, a value-added tax is levied on the difference between a commodity's price before taxes and its production cost while a business tax is levied on a business' gross revenue – for services revenue and does not provide credit for input tax. So the tax system overburdens the services industry compared to the manufacturing industry.
- ³ See China's 12th Five-Year Plan (2011).
- ⁴ See World Bank (2013b) and Isakova, Plekhanov and Zettelmeyer (2012).
- ⁵ See China Health and Retirement Longitudinal Study (2013).
- ⁶ See AusAID (2012).
- ⁷ See ADB (2013a).
- ⁸ For example, global car companies, such as General Motors and Toyota Motors, plan to cease vehicle productions in Australia by 2017. It would leave not only workers in the auto sector unemployed, but also affect those employed in downstream sectors, such as business services.
- ⁹ See IMF (2014).
- ¹⁰ See ESCAP-SSWA (2012).
- ¹¹ See India, Planning Commission (2013).
- ¹² See Andrés, Biller and Dappe (2013).
- ¹³ See ESCAP (2013b).
- ¹⁴ See Philippines, National Economic and Development Authority (2011).
- ¹⁵ See IMF-World Bank Development Committee (2006) and also IMF (2012c).
- ¹⁶ See Bruno and Easterly (1998).
- ¹⁷ See Akerlof and Shiller (2009).



DOMESTIC RESOURCE MOBILIZATION: OPTIONS FOR EXPANDING FISCAL SPACE

3

The previous chapters have highlighted some of the domestic challenges that economies in the region are facing, including infrastructure shortages, large budget deficits, inflationary pressure and rising and persistent inequality. With constrained growth prospects, productive and countercyclical government spending is critical in supporting inclusive growth and sustainable development. One of the most pressing issues for any country determined to invest in development is to raise the necessary resources. This chapter therefore explores various options of mobilizing domestic resources, with a particular focus on tax revenues.

Governments that wish to increase the resources available for development have a range of options for unlocking the fiscal space for such spending. They can, for example, increase their borrowing, either domestically or from abroad. They can also create fiscal space by making existing public expenditure more efficient; and they can reprioritize public expenditure to orient it more towards development.

Strengthening tax revenues is the primary route for creating fiscal space

The focus in this chapter is on strengthening tax revenues as the primary route for creating fiscal space in the Asia-Pacific region. For one, international experience demonstrates that for a country to successfully implement its development and public expenditure strategies, it needs to mobilize its tax revenues. Indeed, it has been argued that a country must be able to collect taxes amounting to between 25% and 35% of its GDP to fulfil one of the key conditions to becoming a developed country.¹ Yet, most developing countries in the region are far from this goal. In 2011, only seven developing economies in the region collected more than 20% of GDP as tax revenues, of which four were resource-rich. In contrast, tax-to-GDP ratios were close to, or in, single-digit levels in several other countries. In developing Asia and the Pacific, tax collection by central government averaged 14.8% of GDP in 2011, even lower than 16.3% of GDP in sub-Saharan Africa.

Indeed, tax revenues have in recent years increased at a higher rate than output in many countries in the region. Nevertheless, in many of the region's developing countries tax collection is neither sufficient nor equitable. Experience across the region has demonstrated numerous opportunities for improving all forms of taxation, direct and indirect, whether of corporations or individuals. Strengthening tax revenues must therefore be considered key to creating fiscal space and delivering more resources for Governments to invest in development. This is particularly the case in those economies that are not

fully utilizing their tax potential, which is equivalent to 5% of GDP or more in some economies. Thus, by embracing their tax potential and closing existing tax gaps, tax revenues could in some cases be increased by over 70%.

It is shown in this chapter how tax revenues may be enhanced through a number of policy measures. Those include, in particular, broadening tax bases and rationalizing tax rates to provide greater incentives for tax compliance. In any case, countries must strive to make tax administrations more effective and transparent to tackle tax evasion and tax fraud. This could be achieved by sequencing reforms of tax policy and of tax administration, including setting up special tax courts to deal with tax fraud.

Strengthening regional tax cooperation would further contribute by stemming tax competition and the illicit transfer of funds. Moreover, countries may wish to consider establishing an Asia-Pacific tax forum under the aegis of ESCAP. This could monitor the tax legislation of member countries and publish a regular review of tax reforms with a view to harmonizing tax regulations and sharing best practices.

In the following sections some of the challenges that the region faces in raising more resources for development are considered. The advantages and disadvantages of various options, including non-tax revenues, for expanding fiscal space are briefly outlined. After this brief outline of the various options available, the level and composition of tax revenues in selected Asia-Pacific countries (where data are available) are examined. The following section contains an estimate of the tax potential in the region. The chapter concludes with an analysis of the main challenges that countries face in raising tax revenues and the policy options that are available to overcome them.

Data for this chapter come from the Government Finance Statistics database, supplemented with data from CEIC, national data sources and several background studies commissioned for this report. More details on the data sources are provided in annex I.

CREATING FISCAL SPACE

There are a number of ways in which Governments can create fiscal space. For instance, countries with low levels of debt can consider borrowing to invest in development. In Kazakhstan and the Russian Federation, for instance, debt in 2012 was less than 13% of GDP, and in Cambodia, China and Indonesia it was less than 30%. In others, however, debt is significantly higher — more than 60% in India and Pakistan.²

Yet even in countries where levels of debt are low, expanding indebtedness can be risky. One problem is that the debt not utilized productively can lead to a drain on resources in the form of its servicing. In India in 2011, for example, net interest payments were equivalent to a quarter of total revenue, and in Pakistan they were one third. In the Philippines, debt in 2011 was equivalent to 36.2% of GDP, and interest payments were equivalent to a fifth of government revenue. In Turkey, debt reached 41.9% of GDP and interest payments were equivalent to one sixth of government revenues.

Other risks from borrowing include rising pressure on interest rates and potential crowding out of the private sector. Together, these developments complicate fiscal and monetary management as authorities struggle to tackle inflation or mitigate the consequences of capital outflows. Borrowings could also entail maturity mismatches — especially, if long-term projects are financed with short-term debt/funding from the financial system, which can cause problems if the short-term debt cannot be rolled over when its maturity expires. In the case of foreign currency borrowings, there will be additional risks including currency risks — as the Asian, Mexican and Russian experiences of the 1990s clearly demonstrated. Higher levels of foreign-denominated debt can also constrain countercyclical macroeconomic policy.³

Thus, as highlighted by the Development Committee (2006:14) of the IMF and World Bank, “the most attractive way for countries to create fiscal space is within existing borrowing parameters”. To avert

complications arising from borrowings (hedged or unhedged), Governments have the option to enhance the effectiveness and efficiency of existing resource use.⁴ This includes a shift in the composition of public expenditure, whereby funds are reallocated from current expenditure towards capital expenditure. Current expenditure includes spending on the wages and salaries of civil servants, interest payments, subsidies and expenditure on goods and services. Capital expenditure is associated with physical capital formation, including investment in infrastructure. Significant reallocating of expenditure is, however, often not possible as a certain level of current expenditure is always required for proper operation and maintenance in order to deliver quality services. Moreover, capital expenditure often entails current expenditure: greater investment to build schools, for example, will subsequently increase the demand for current expenditure on staff salaries.

Governments have the option to enhance the effectiveness and efficiency of existing resource use

Another option is to reduce expenditure on non-priority areas. One area to target for cuts would be defence expenditure, which makes little if any contribution to inclusive development. In several 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 some countries, defence expenditure exceeds that on health and education combined. Political compulsion and other rigidities, including expenses outside the normal budgetary scrutiny, limit a country's ability to rationalize and streamline the use of funds.

Another option would be to reduce various kind of subsidy — whether to consumers or producers, including public sector enterprises. In Bangladesh, the Islamic Republic of Iran, Pakistan and Thailand, for example, subsidies account for around 7% of total public expenditure, and in the Russian Federation for around 10%. In South-East Asia in 2012, energy

subsidies alone amounted to \$51 billion.^{5,6} While removing subsidies can be politically difficult, some interesting reforms have been achieved in certain areas (see box 3.1).

Governments seeking to increase fiscal space can also try to boost non-tax revenues, which primarily comprise royalties from natural resources, grants and revenues from property, and income from public enterprises that sell goods and services. In fact, many countries rely heavily on such revenues: in Afghanistan, Azerbaijan, Bhutan and the Islamic Republic of Iran, for example, non-tax revenues account for more than two thirds of total government revenues. In Cambodia, China, Hong Kong, China, Maldives, Mongolia, Myanmar, the Russian Federation and Turkey, they account for between one third and two thirds of government revenue (see table 3.1).

Non-tax revenues can be quite volatile and complicate fiscal planning

In many economies, non-tax revenues from natural resources play an important role. In Indonesia, natural resources account for more than 60% of non-tax revenues. In the Russian Federation, oil and gas revenues alone accounted for more than half of all revenues in 2012, and in the Islamic Republic of Iran, oil revenues also account for about one half of total revenues. Natural resources can deliver significant resources that Governments can use to forward development. However, managing such wealth poses additional challenges as Governments are often unable to tackle the institutional and policy challenges that come with natural resources. As a consequence, the human development indicators of many resource-rich countries compare less favourably with those of less-endowed countries.⁷

Between 2000 and 2011, a number of countries have seen significant changes in their non-tax revenues. This was particularly the case in the resource-rich economies of North and Central Asia, where non-tax revenues increased by 55% in the

Russian Federation and by more than 80% and 110% in Uzbekistan and Kazakhstan, respectively. In Azerbaijan, they increased more than fivefold.

On average, however, the increase in non-tax revenues in the region over this period was similar to that of tax revenues. Yet, non-tax revenues are significantly more volatile. This may be due not only to changes in prices of natural resources, but also a reflection of one-off revenues that may result, for instance, from the proceeds of privatizing state-owned enterprises or from other public sales, which can make year-to-year variations in non-tax revenues quite large. In Pakistan, for instance, non-tax revenues increased by more than 50% between fiscal years 2012 and 2013, largely due to central bank profits and an increase in external funds. Similarly, in India, where non-tax revenues have grown at a compound annual rate of more than 7.5% in the 10 years ending the fiscal year 2009/2010, the proceeds of auctions of wireless spectrum have recently contributed significantly to this growth, contrasting to more regular receipts of dividends and profits of state-owned enterprises, which have been rather sluggish.

Governments can increase non-tax revenues in a number of other ways. They can, for example, increase earnings from public enterprises by improving their efficiency and increasing their charges. Also, user fees charged for a variety of public services could be increased. However, there is a limit above which such fees cannot be raised, particularly as they are often more regressive in nature and adversely affect access of low-income groups. As far as natural resources are concerned, Governments can boost revenues by increasing royalty rates. However, these are often tied in with long-term contractual agreements that cannot be changed easily without upsetting investor confidence.

While non-tax revenues contribute significantly to overall revenue, the evidence above suggests that non-tax revenues can be quite volatile as they are influenced by one-off events or by global prices, which can change significantly without warning and

Box 3.1. Difficulties with removing consumer subsidies

Subsidies on fuel and energy are inefficient and primarily benefit the non-poor. Furthermore, they inherently encourage wastage, and energy subsidies result in fuel-intensive production. Yet, removing or reducing subsidies is politically difficult; in many countries the removal of fuel and energy subsidies has sparked protests.

To address these problems, some 12 countries in Asia and the Pacific are implementing subsidy reforms. To offset the impact of phasing out of subsidies for the poor, Governments may opt to have compensatory policies, such as cash transfers. Indonesia and Malaysia, for example, are reducing fuel and energy subsidies to consumers and industry, and replacing them with targeted safety nets. In the Philippines, there are plans to limit rice and transport subsidies and move instead towards more targeted conditional cash transfer programmes. Timor-Leste also intends to reduce subsidies on rice and electricity. Similarly in Palau, the Government is considering phasing out water and sanitation subsidies, while in Kiribati policy discussions are focused on reforming distortionary subsidies to copra producers and other state-owned enterprises.^a

Generally, the removal of subsidies helps create fiscal space to provide social protection, either targeted or universal. However, the real value of cash transfers, unless properly adjusted, could be eroded by inflation. Moreover, policies to remove subsidies must avoid one-size-fits-all approaches. Rather, reforms need to take into account their net welfare effect. For instance, if the subsidies that are being removed were benefiting primarily poor households, offering a meagre safety net only for the poorest may prove to be insufficient compensation to the extent that, in net terms, welfare will have declined. Policymakers also need to treat fuel or energy subsidies differently from food subsidies, which generally benefit low-income groups due to self-selection.

While many practitioners want to alleviate hardship with minimal targeted interventions for the poor, countries should aim for more. In particular, universalism is being increasingly espoused. For instance, world leaders, who were gathered at the High-level Plenary Meeting of the General Assembly on the Millennium Development Goals in 2010, declared that "... promoting universal access to social services and providing social protection floors can make an important contribution to consolidating and achieving further development gains".^b This was reiterated in the outcome document of United Nations Conference on Sustainable Development, which was held in Rio de Janeiro, Brazil, from 20 to 22 June 2013.^c Similarly, in 2011, 193 Member States of the WHO committed to move towards universal health coverage.^d This policy is also supported by the World Bank.^e

The huge savings from the removal of subsidies should allow policymakers to be more ambitious and consider universal social protection systems and other policies that work for all citizens, instead of for a few. For instance, recent estimates of subsidies on fuel alone reached nearly 2% of GDP in the fiscal year 2011/2012 in India; in 2011, energy subsidies exceeded 3% of GDP in Bangladesh, Brunei, Indonesia and Pakistan and exceeded 5% of GDP in Kyrgyzstan, Turkmenistan and Uzbekistan.^f According to ESCAP estimates, savings from these subsidies would, for example, in India and Bangladesh be sufficient to finance a comprehensive policy package comprising income security for the entire elderly population and all those with disabilities, as well as providing universal access to health and education.^g 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.

^a See http://policydialogue.org/publications/working_papers/age_of_austerity.

^b General Assembly resolution 65/1, para. 51.

^c See General Assembly resolution 66/288, annex, p. 107.

^d Resolution WHA64.9 (available at http://apps.who.int/gb/ebwha/pdf_files/WHA64/A64_R9-en.pdf) of the Sixty-fourth World Health Assembly, held in May 2011.

^e See www.worldbank.org/en/topic/health/publication/universal-health-coverage-study-series.

^f IMF (2013).

^g ESCAP, *Economic and Social Survey of Asia and the Pacific 2013: Forward-looking Macroeconomic Policies for Inclusive and Sustainable Development*. (United Nations publication, Sales No. E.13.II.F.2). Available from www.unescap.org/resources/economic-and-social-survey-asia-and-pacific-2013.

Table 3.1. Revenue mobilization in selected Asia-Pacific economies, 2000 and 2011

(Percentage of GDP)

	Total revenue		Tax revenue		Non-tax revenue	
	2000	2011	2000	2011	2000	2011
East and North-East Asia						
China ^{a,b}	26.3	27.6	15.6	18.2	10.7	9.4
Hong Kong, China ^c	14.7	23.5	9.0	14.1	5.7	9.5
Macao, China	19.9	39.9	16.6	37.5	3.3	2.4
Mongolia ^d	32.5	38.4	19.1	24.5	13.4	13.9
Republic of Korea ^a	28.3	29.4	21.8	23.0	6.5	6.4
North and Central Asia						
Armenia ^d	21.7	25.6	14.4	17.7	7.3	7.9
Azerbaijan ^e	17.9	45.5	12.7	12.2	5.2	33.3
Georgia	15.7	28.2	11.8	25.2	3.9	3.0
Kazakhstan	22.6	31.7	20.2	26.6	2.4	5.1
Russian Federation	37.9	45.0	24.3	23.8	13.6	21.2
Uzbekistan	27.9	21.9	26.7	19.7	1.2	2.2
Pacific						
Australia ^b	36.6	32.5	29.6	25.7	7.0	6.8
Fiji	25.4	26.8	19.9	25.7	5.5	1.1
New Zealand ^b	39.7	37.7	33.0	30.5	6.7	7.2
Papua New Guinea	25.8	27.3	24.3	26.1	1.5	1.2
South and South-West Asia						
Bangladesh ^f	10.6	12.3	7.8	10.0	2.8	2.4
Bhutan ^g	43.7	39.8	11.1	10.9	32.6	28.9
India	17.0	20.3	13.6	16.0	3.4	4.2
Iran (Islamic Republic of) ^{f, g}	24.0	31.2	7.1	10.0	16.9	21.2
Maldives ^b	32.2	34.0	13.8	15.3	18.4	18.7
Pakistan	14.9	12.6	10.1	9.3	4.8	3.3
Sri Lanka	17.2	14.5	14.5	12.4	2.7	2.1
Turkey	n.a.	34.7	18.6	18.5	n.a.	16.1
South-East Asia						
Cambodia ^b	14.1	17.6	8.2	10.4	5.9	7.2
Indonesia	14.8	16.3	8.3	11.8	6.5	4.5
Malaysia	17.4	21.0	13.2	15.3	4.2	5.7
Myanmar ^{b,h}	5.3	6.5	3.0	3.3	2.3	3.2
Singapore	28.6	17.9	16.6	13.8	12.0	4.1
Thailand	17.6	22.7	14.7	18.8	2.9	3.8

Source: International Monetary Fund, Government Finance Statistics database.

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 data; for others, it is central government data.

a Begins 2005.

b Ends 2010.

c Begins 2002.

d Begins 2003.

e Begins 1999.

f Begins 2001.

g Ends 2009.

h Ends 2004.

are all but impossible to predict reliably. This volatility can clearly complicate fiscal planning. Moreover, as non-tax revenue from, for instance, natural resources will decline as resources are exhausted, they should not be considered as the main pillar of resources for long-term development planning. As a recent OECD (2012:23) report observes, “Taxation is key to promoting sustainable growth and poverty reduction. It provides developing countries with a stable and predictable fiscal environment to promote growth and to finance their social and physical infrastructural needs. Combined with economic growth, it reduces long-term reliance on aid and ensures good governance by promoting the accountability of governments to their citizens.”

In sum, while Governments have a range of options for increasing fiscal space, tax revenues bear the most potential as a source for reliable funding, especially when the current tax effort is low. The remainder of this chapter focuses in greater detail on tax revenues and related policy issues.

BOOSTING TAX REVENUES

In recent years, many economies in the Asia-Pacific region have been transformed. Some have moved from agriculture towards more diversified and industrialized economies. Some have transited from centrally-planned to more market-based economies. Yet, despite this general move up the value chain, overall in Asia and the Pacific, revenue collection is quite weak.

Compared with the developed economies, the developing countries in Asia and the Pacific are less successful in raising government revenue. In 2011, while overall government revenue (tax and non-tax) for the developed economies was 39.7% of GDP, for the developing countries it averaged only 26.1%. There were, however, notable differences between subregions — total revenue as a proportion of GDP was higher in East and North-East Asia at 31.8%, in North and Central Asia at 30.1%, in South and South-West Asia at 26.1% and the

Pacific at 25.5%, but lower in South-East Asia at 16.6%. As indicated in table 3.1, there were also large variations among countries — ranging from 45.5% of GDP in Azerbaijan to 6.5% in Myanmar. Table 3.1 also shows that between 2000 and 2011 some countries, including a number in North and Central Asia, managed to increase their revenues. In contrast, revenues decreased in several countries, including in Australia and Uzbekistan.

There are similar patterns in revenues specifically from tax. Overall Asia and the Pacific is less successful in tax collection than other developing regions — averaging only 14.8% of GDP in developing Asia-Pacific countries in 2011 for central government revenues, compared to an average of 17.1% of GDP in Latin America and the Caribbean, and 16.3% in sub-Saharan Africa.

Asia and the Pacific is less successful in tax collection than other developing regions

In several countries, general government tax revenues are significantly greater than central government revenues. Taking this into account for the countries mentioned in annex I, developed countries of the region were more successful, generating 24.2% of GDP compared with 16.9% for the developing economies. Again, too, there are marked differences among countries. In Fiji, Kazakhstan and Papua New Guinea, for example, tax revenues were equivalent to more than 25% of GDP, whereas in Afghanistan, Bangladesh, the Islamic Republic of Iran, Myanmar and Pakistan the proportions were close to, or at, single-digit levels. Nevertheless, many countries have been able to strengthen their tax revenues over the past decade — with notable progress in Georgia, for example, and Mongolia.

All Governments need to collect taxes effectively. As mentioned earlier, one of the conditions for becoming a developed country is the ability to collect taxes amounting to between 25% and 35% of GDP.³ Most developing countries in Asia and the Pacific are far

from this goal: in 2011, only seven, of which four were resource rich, collected tax revenues of more than 20% of GDP, while several had tax-to-GDP ratios in single digits. The IMF has estimated that if low-income and emerging market economies were to raise their tax effort by 10 percentage points, their revenues would increase by 3% of GDP.⁹

Some Governments will find it easier to raise tax revenues than others — depending on their economic structures, their geographical characteristics or their development histories. Much will also depend, for example, on a country's endowment of natural resources. Countries with the highest tax revenues include some with abundant natural resources, including Australia, Kazakhstan, Mongolia, Papua New Guinea and the Russian Federation. Similarly, small island economies, the ports of which are easier to monitor, are typically better able to gather taxes on international trade than landlocked countries, into which goods are easier to smuggle.

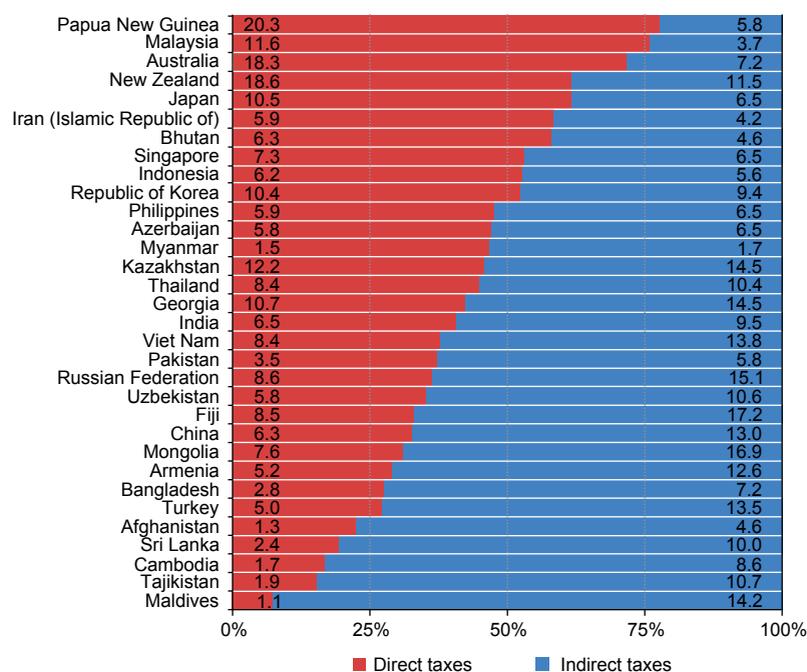
COMPOSITION OF TAX REVENUES

The two main categories of tax are indirect and direct. Indirect taxes are levied on goods, services and international trade. Direct taxes are levied on income, profits and capital gains for corporations or individuals.

Indirect taxes

For more than half the countries in the Asia-Pacific region the largest sources of tax revenues are indirect taxes (see figure 3.1). On average, these make up 53% of tax revenue in South-East Asia, 60% in East and North-East Asia, almost 65% in North and Central Asia, 67% in South and South-West Asia, and 45% in the Pacific island developing economies. On the other hand, the proportion is considerably lower in the developed countries — at around 35%. Nevertheless, it should be noted that in recent years the share of indirect taxes in total tax revenue has, in general, been declining.

Figure 3.1. Share of direct and indirect taxes in tax revenue, and tax revenues as a percentage of GDP, 2011



Sources: ESCAP calculations based on data from International Monetary Fund, Government Finance Statistics database, and official data sources.

Notes: The numbers inside the figure denote the size of the respective taxes in terms of percentage of GDP. Data are for 2011 except for: Myanmar and Tajikistan (2004), Afghanistan (2007), Bhutan and the Islamic Republic of Iran (2009), and Maldives, Cambodia and China (2010).

Taxes on trade – A substantial component of indirect taxes in the region, particularly in the Pacific, is on international trade. Governments have in the past imposed significant duties on exports and imports — partly to protect domestic producers but also as a way of extracting revenue from primary products. In recent years, in order to encourage trade many Governments have liberalized trade and reduced trade-related taxes significantly. Thus, liberalization has reduced the tax revenues from international trade — which have been declining both as a percentage of GDP and as a proportion of overall indirect taxes. In some countries the declines have been substantial — between 1990 and 2011, they amounted to around 5% of GDP for Azerbaijan, Maldives and Pakistan (panel B, figure 3.2). Tariff reforms may thus have been at the expense of government revenues.

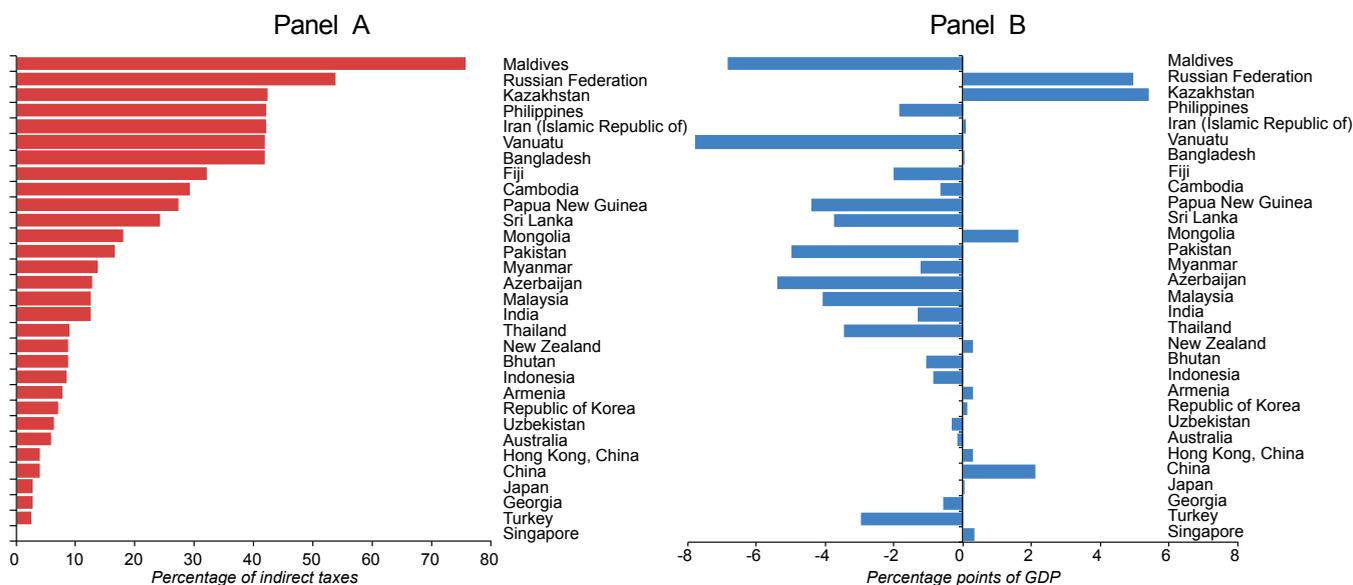
of indirect taxes and in Fiji one third (panel A, figure 3.2). Elsewhere they can be much less significant — in some landlocked economies, such as Armenia, Azerbaijan, Bhutan and Uzbekistan, trade taxes represent only between 6% and 13% of indirect taxes.¹⁰

Taxes on goods and services – To offset a decline in taxes on trade, many countries have been increasing taxes on goods and services, such as through value added tax (VAT) or a general sales tax (GST). The first country in the region to introduce VAT was the Republic of Korea in 1976. Now almost every country in Asia and the Pacific has such taxes. Since 1990, VAT or GST has risen from less than a fifth of indirect taxes to around one half — levied currently at an average rate of 12.5%.¹¹

Nevertheless, trade taxes remain important sources of income, particularly for some island economies: in Maldives they make up more than three quarters

One of the most striking changes was in Fiji. In 1992, before the introduction of VAT, indirect tax revenue came entirely from international trade, now

Figure 3.2. Contribution of taxes on trade to indirect taxes, 2011 (panel A) and changes in tax revenue from international trade, 1990-2011 (panel B)



Source: ESCAP calculations based on data from International Monetary Fund, Government Financial Statistics database.

Notes: The starting year differs as follows: Fiji and Uzbekistan from 1992; Azerbaijan from 1995; Australia and India from 1999; Kazakhstan and the Russian Federation from 2000; Bangladesh and the Islamic Republic of Iran from 2001; Cambodia, Hong Kong, China, and Mongolia from 2002; Armenia and Georgia from 2003; Turkey from 2004; and Japan, Republic of Korea and New Zealand from 2005. The end point differs for: Vanuatu until 1999; Indonesia and Myanmar until 2004; Singapore until 2007; Bhutan, India, the Islamic Republic of Iran and Papua New Guinea until 2009; and Cambodia, China and Maldives until 2010.

two thirds comes from VAT. Similarly, in Papua New Guinea, Singapore and Thailand the proportions increased from close to zero to more than 40%. Nevertheless, in many countries such as Malaysia, Pakistan and Vanuatu, the revenue from consumption taxes has not offset the fall in revenues from taxes on trade (see figure 3.3).

Direct taxes

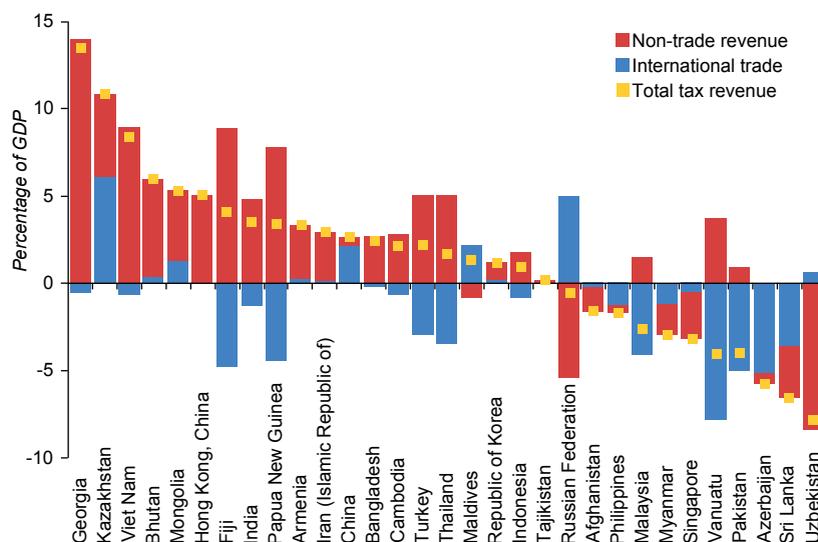
The potential for raising direct taxation from individuals is low in developing countries. For one, due to low incomes, many people would be exempted from tax. Moreover, a high proportion of people work informally or in agriculture, activities from which it is difficult to collect taxes. But even the wealthier individuals in these countries may pay little income tax due to high tax avoidance and non-compliance. As a result, income tax concerns only a small proportion of the population. In Bangladesh, for example, only around 1% of the population pays income tax.¹² In India, the proportion is only 3%.¹³

In Pakistan, less than 1% of the population filed an income tax return in 2011. In Viet Nam, only 0.3% of the total population is estimated to have paid personal income taxes in 2003.¹⁴

In most countries in Asia and the Pacific, less than half of tax revenues are therefore raised directly — and less than 20% in Cambodia, Tajikistan and Maldives. As the economy grows, however, and more people work in government and the formal sectors, the situation changes.¹⁵ Governments are in a stronger position to levy taxes not just on corporations but also on individual employees who are not only earning more but from whom taxes are also easier to collect.

As countries develop, they are therefore likely to derive more of their tax revenue from direct taxes. This shift to direct taxation is generally desirable as indirect taxes affect prices and thus affect resource reallocation.¹⁶ Direct taxes are also generally more equitable since they can be progressive — with

Figure 3.3. Net change in non-trade tax revenue, trade taxes and overall revenue between 1990 and 2011



Source: ESCAP calculations.

Notes: The yellow square represents the net change in total tax revenue as a result of changes in non-trade tax revenue and tax revenue from international trade. Thus, if it is below the horizontal axis, changes in revenue from international trade have not been offset by changes in non-trade revenue, such that in net terms the country has lost tax revenue over the last two decades.

The starting year differs for: Fiji and Uzbekistan from 1992; Azerbaijan from 1995; Australia and India from 1999; Kazakhstan and the Russian Federation from 2000; Bangladesh and the Islamic Republic of Iran from 2001; Cambodia, Hong Kong, China, and Mongolia from 2002; Armenia and Georgia from 2003; Turkey from 2004; and Japan, Republic of Korea and New Zealand from 2005. The end point differs for: Vanuatu until 1999; Indonesia and Myanmar until 2004; Singapore until 2007; Bhutan, India, the Islamic Republic of Iran and Papua New Guinea until 2009; Cambodia, China and Maldives until 2010.

higher rates at higher levels of income. Yet, this will not happen at a similar pace in each country as the changes will also depend, for example, on natural endowments or on specific social and political factors. Nevertheless, for the region as a whole, this is the predominant trend. Over the last two decades, about two thirds of the countries with available data have seen increases in direct tax revenues. For instance, in Bhutan, India, Malaysia and Pakistan, the share of direct taxation in overall tax revenues has increased by approximately 25 percentage points. Nevertheless, in many cases, the increases have been relatively small, less than 2% of GDP.

Overall, developing countries in the region often collect more tax from corporations than from individuals. In some countries, such as Bhutan, Cambodia, the Islamic Republic of Iran, Kazakhstan, Maldives and Viet Nam, corporate income tax accounts for more than three quarters of direct tax revenues (see figure 3.4).

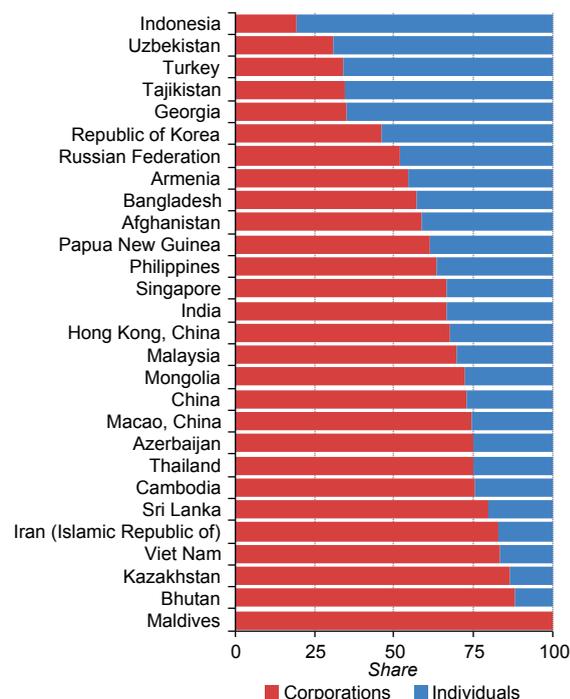
MONITORING TAX REVENUES

Governments need to be able to monitor their tax systems closely.¹⁷ One measure in this respect is “tax elasticity” — which is the responsiveness of tax revenue to a change in national income or output. If a tax is elastic, a 1% increase in GDP results in a greater than 1% increase in revenue from the tax. However, it can be difficult to measure elasticity accurately. This is because of the need to control for such factors as changes in tax rates or a widening of the tax base. Moreover, few developing countries have long, consistent data series on tax revenues.

Tax buoyancy

Most studies of tax responsiveness rely instead on a different measure, namely “tax buoyancy”. If the nominal tax revenue rises faster than nominal GDP, the buoyancy coefficient will be greater than unity, resulting in a rising tax-to-GDP ratio. Thus, tax buoyancy is a more “rough and ready” measure, which does not distinguish between discretionary

Figure 3.4. Distribution of corporate income and personal income taxes, 2011 or latest year



Source: ESCAP calculations.

and automatic growth of revenue. Nevertheless, it has the advantage of being easier to calculate using the available data.

Table 3.2 shows buoyancy coefficients for a sample of Asian countries from the 1990s to 2012. Details on the calculations are given in annex II. It is reassuring to note that in the most recent period, 12 of these countries had buoyancy coefficients greater than unity – indicating that, despite the global economic and financial crisis, they had managed to increase their tax-to-GDP ratios.

A number of countries have buoyancy coefficients greater than 1.5 — indeed this is the case in all of the least developed countries with available data, such as in Bangladesh (1.66), Bhutan (2.19), the Lao People’s Democratic Republic (1.58) and Nepal (1.74). Those four countries have low tax-to-GDP ratios — less than 15% — so higher buoyancies augur well for the future, indicating that as their GDPs grow these countries should be able to

Table 3.2. Buoyancy of tax revenue in selected countries

	1990s	2000-2006	2007-2012
Azerbaijan	0.60	1.45	0.37
Bangladesh	1.49	1.67	1.66
Bhutan	1.83	0.81	2.19
China	0.73	1.50	1.27
Georgia	n.a.	2.67	1.52
India	0.78	1.33	0.92
Indonesia	1.01	0.90	1.13
Iran (Islamic Republic of)	1.69	0.73	0.78
Kazakhstan	n.a.	0.99	1.88
Lao People's Democratic Republic	0.65	1.06	1.58
Malaysia	0.74	1.24	1.43
Myanmar	0.40	n.a.	n.a.
Nepal	1.29	1.01	1.74
Pakistan	0.98	0.87	0.87
Papua New Guinea	1.13	1.65	n.a.
Philippines	0.92	1.16	0.71
Republic of Korea	0.99	0.96	0.72
Russian Federation	n.a.	1.12	0.68
Singapore	1.03	0.32	1.29
Sri Lanka	0.70	1.01	0.72
Thailand	0.70	1.65	1.32
Viet Nam	n.a.	1.91	1.06

Source: ESCAP calculations.

Note: For details on the method of calculation, see annex II.

generate more tax revenue. Moreover, in a number of countries buoyancy has increased — as in Bhutan, Kazakhstan, Nepal and Singapore.

Elsewhere, however, tax buoyancies have fallen — as in Georgia, India, Philippines, the Russian Federation and Viet Nam. Between 2007 and 2009, revenues declined by more than 10% in India, Indonesia and the Russian Federation; in Kazakhstan they declined by almost a quarter. In fact, in terms of revenue, the global crisis continues to affect those countries where tax buoyancy has declined; in India, Kazakhstan, the Philippines, the Russian Federation and Viet Nam tax revenues as a percentage of GDP in 2012 were still below their pre-crisis levels.

In some countries, buoyancy may have been affected by tax reductions to provide economic stimuli during the global recession. In mid-2008, Malaysia, for example, granted greater tax deductions to employers that hired retrenched workers in order to reduce

unemployment. Malaysia also widened tax exemptions for retrenchment benefits.¹⁸ Indonesia, too, cut taxes to increase consumption expenditure — entitling some companies to a 5% reduction in the highest rate of corporate income tax.¹⁹ Yet, in these two countries, tax buoyancy was higher in the latter period than during the first years of the millennium.

Tax potential

A country's ability to raise taxes will depend on many factors — structural, developmental, institutional and socio-economic.²⁰ One of the most important factors is income: economies with higher per capita incomes are likely to have higher tax revenues. Another significant structural factor is the share of agriculture in GDP; if this is high, then tax income is likely to be lower — partly because agricultural workers tend to have lower incomes but also because wages are paid in cash and not properly recorded. The same applies to the activities in the informal

sector. Moreover, agriculture primarily produces food and basic raw materials, which are often either exempt from tax or subject to relatively low rates.

Another structural factor will be the openness of the economy and the extent of international trade, which can be measured by the combined share of exports and imports in GDP. Countries more open to trade are likely to raise more revenue, since taxes on international trade are relatively easy to collect.

When judging a country's capacity to raise more tax, it is important to allow for such factors. For this report, an econometric analysis has been carried out taking these differences into account.²¹ For a selection of countries for which sufficient data are available, this indicates their "tax potential" — the level suggested by a comparison with other countries. The results are reported in table 3.3, which shows that 17 economies in the region are estimated to be currently collecting tax revenues below their potential. The largest gap is in Hong Kong, China,

the current tax-to-GDP ratio of which is 14.2, while its potential ratio is 26.7. The economy's additional tax potential is thus quite sizeable, equivalent to 12.5% of GDP, or almost 90% of its current tax revenue. The gap arises probably because of a low-rate tax regime: there is no sales tax, and the top marginal tax rate on corporate and personal income is relatively low. Moreover, there are tax incentives for foreign firms. At the other end of the scale is Thailand, which has an additional tax potential of only 0.2% of GDP, so the country is already close to its potential. In the case of Pakistan, the tax-to-GDP ratio has declined significantly in recent years, such that the country now faces an additional tax potential of 1.8% of GDP.

If countries could realize their tax potentials, they would be able to finance urgently needed investment. Closing the tax gaps in the 16 developing economies listed in table 3.3 would lead to a total increase in tax revenues of over \$300 billion. For selected countries, the *Economic and Social Survey*

Table 3.3. Estimated tax potential in selected Asian economies

	Year	Tax-to-GDP ratio (percentage of GDP)		Tax gap (percentage of GDP)	Tax gap as a proportion of current tax revenue
		Actual	Potential		
Afghanistan	2011	8.8	15.0	6.2	70.5
Azerbaijan	2012	12.9	15.1	2.1	16.6
Bangladesh	2013	10.5	18.0	7.5	72.1
Bhutan	2009	9.2	16.0	6.7	72.9
Cambodia	2011	10.0	13.0	3.0	30.4
China	2012	19.4	21.2	1.8	9.4
Hong Kong, China	2011	14.2	26.7	12.5	88.1
Indonesia	2012	11.9	16.6	4.7	39.3
Iran (Islamic Republic of)	2013	5.8	13.1	7.2	124.5
Japan	2012	17.0	19.3	2.2	13.1
Malaysia	2012	16.1	17.4	1.3	7.9
Maldives	2010	10.7	16.5	5.8	54.2
Nepal	2013	15.2	16.1	0.9	5.6
Pakistan	2012	10.3	12.1	1.8	17.3
Philippines	2012	12.9	14.3	1.5	11.4
Singapore	2011	13.8	20.7	6.9	50.3
Thailand	2011	18.8	19.0	0.2	0.9

Source: ESCAP calculations.

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 in the year with most recent data (listed in column 2). Only countries with a positive tax gap are listed in this table (that is, countries that are raising more revenue than the model outlined in annex III — and would therefore have a negative tax gap — are not listed). This is the case for only a few countries where the negative tax gap is relatively small.

of Asia and the Pacific 2013: *Forward-looking Macroeconomic Policies for Inclusive and Sustainable Development* estimated what would be required for public investment in a package of basic programmes comprising employment guarantees, education, health care, income support for elderly and disable persons and access to modern energy. In seven of these countries, tax collection is significantly below its potential. Table 3.4 compares the investment required with the tax potential. Indonesia, for example, would require 3.4% of GDP for such an investment. Since its additional tax potential is 4.7% of GDP, the country should be more than capable (over 137%) of financing this investment from more effective taxation.

RATES OF MAJOR TAXES

Corporate taxes

In Asia and the Pacific, corporate tax rates are somewhat lower than in other global regions (see table 3.5). The average corporate rate in 2013 was 28.2% compared with 32.2% in Latin America and 29.8% in Africa.

Standard corporate tax rates can, however, vary greatly among countries, from 15% in Georgia

to 35% in Pakistan (see table 3.6).²² Countries having high corporate tax may not necessarily be the ones with higher corporate tax collection, as often the effective tax rates are lower than the nominal rate. Also, in some economies, specific sectors can be subject to higher corporate tax rates. In Bangladesh, for instance, the normal rate is 27.5% but for banks it is 42.5% and for mobile phone operators it is 45%. India has a standard rate of 34% but levies a rate of 40% on foreign companies. In Malaysia, where the standard rate is 25%, petroleum companies pay 38%.

In many countries in the region, corporate tax rates are often low because Asia-Pacific countries have reduced taxes competitively in order to attract foreign direct investment. Generally, those that are small or have more open economies set lower corporate tax rates.²³ Table 3.7 indicates that in a sample of 24 Asian economies, two thirds have brought down their corporate tax rates over the past seven years; the average rate has fallen from 28.5% to 22.5%. Countries that have made large reductions include China, from 33% to 25%; Sri Lanka, from 32.5% to 28%; Fiji from 31% to 20% and Thailand, from 30% to 20%.

Countries engaged in tax competition need to carefully examine the net impacts of lower corporate tax rates

Table 3.4. Additional requirements for public investments in six policy areas and the additional tax potential of selected economies, 2013

	Required investment ^a (percentage of GDP)	Additional tax potential ^b (percentage of GDP)	Additional tax potential covering required investment (percentage)
Bangladesh	11.1	7.5	68.2
China	2.6	1.8	71.4
Indonesia	3.4	4.7	137.2
Malaysia	1.9	1.3	65.3
Pakistan	5.4	1.8	33.3
Philippines	5.1	1.5	28.9
Thailand	4.6	0.2	3.7

Source: ESCAP calculations.

^a As estimated in ESCAP (2013b) for the year 2013.

^b As estimated in table 3.3.

Table 3.5. Tax rates in developing countries by global region

(Percentage)

	Asia	Latin America	Africa
Corporate income tax rate			
2007	28.5	28.3	30.6
2009	25.7	28.0	28.8
2011	23.1	29.0	28.6
2013	22.5	27.6	28.6
Individual income tax rate (highest rate)			
2007	28.2	31.5	29.5
2009	28.0	31.3	26.9
2011	27.5	32.0	26.9
2013	28.2	32.2	29.8
VAT or sales tax rate			
2007	11.8	14.4	13.9
2009	11.7	14.1	14.1
2011	11.6	12.8	14.1
2013	12.4	12.9	14.4

Source: KPMG International (2013b).

Notes: Regional rates have been calculated as simple averages of cross-country rates for corporate income tax rates and VAT or sales tax rates. For individual income tax rates, the average of the highest marginal tax rate across countries in respective regions has been taken.

Table 3.6. Corporate, personal income and sales tax rates in selected Asian economies

(Percentage)

	Corporate tax rate	Maximum personal income tax rate	Standard sales tax rate
Bangladesh	27.5	25	15.0
China	25.0	45	17.0
Georgia	15.0	20	18.0
Hong Kong, China	16.5	15	0.0
India	34.0	30	12.5
Indonesia	25.0	30	10.0
Kazakhstan	20.0	10	12.0
Malaysia	25.0	26	10.0
Pakistan	35.0	30	16.0
Philippines	30.0	32	12.0
Republic of Korea	24.2	38	10.0
Singapore	17.0	20	7.0
Sri Lanka	28.0	24	12.0
Thailand	20.0	37	7.0
Turkey	20.0	35	18.0
Viet Nam	20.0	15	10.0

Source: KPMG International (2013b).

Table 3.7. Evidence of tax competition in corporate taxation in selected economies

(Percentage)

	Corporate income tax		Trend		Corporate income tax		Trend
	2006	2013			2006	2013	
Afghanistan	20.0	20.0	→	Malaysia	28.0	25.0	↘
Armenia	20.0	20.0	→	New Zealand	33.0	28.0	↘
Australia	30.0	30.0	→	Pakistan	35.0	35.0	→
Bangladesh	30.0	27.5	↘	Papua New Guinea	30.0	30.0	→
Cambodia	20.0	20.0	→	Philippines	35.0	30.0	↘
China	33.0	25.0	↘	Russian Federation	24.0	20.0	↘
Fiji	31.0	20.0	↘	Samoa	29.0	27.0	↘
Hong Kong, China	17.5	16.5	↘	Singapore	20.0	17.0	↘
India	34.0	34.0	→	Sri Lanka	32.5	28.0	↘
Indonesia	30.0	25.0	↘	Thailand	30.0	20.0	↘
Japan	40.7	38.0	↘	Turkey	20.0	20.0	→
Kazakhstan	30.0	20.0	↘	Viet Nam	28.0	25.0	↘

Source: KPMG International (2013b).

on total revenue and investment. In particular, studies do not find a significant correlation between lower corporate tax rates and foreign direct investment.²⁴ Keen and Simone (2004) found that tax competition harmed developing countries more than developed countries. One recent IMF study of corporate tax developments in emerging and developing economies found mixed results.²⁵ While reducing the tax rate also reduces tax revenues, the loss is likely to be smaller in the medium to long term, if a low tax rate encourages investment. But in many countries, investment cannot be encouraged through lowering tax rates as any tax-sensitive investment often already takes place under a special regime, so that the standard tax rate is irrelevant.

Income taxes

Making a tax system more equitable means giving greater weight to income taxes, which can be levied in a progressive fashion — effectively placing more of the tax burden on upper-income households. The degree of “progressivity” will be higher when the maximum rate is higher and when it becomes payable at a relatively high-income level. On this basis, as indicated in table 3.8, income tax is quite progressive in China, Thailand and Viet Nam.

At the other extreme, some countries have introduced “flat-rate taxes”. In 2002, Kazakhstan, for instance,

Table 3.8. Progressivity of personal income tax in selected countries

	Maximum rate (percentage)	Applied at taxable income (times per capita income)		Maximum rate (percentage)	Applied at taxable income (times per capita income)
Bangladesh	25	18	Philippines	32	23
China	45	25	Republic of Korea	38	12
Georgia	20	flat	Singapore	20	5
India	30	10	Sri Lanka	24	8
Indonesia	30	15	Thailand	37	24
Kazakhstan	10	flat	Turkey	35	4
Malaysia	26	3	Viet Nam	15	30
Pakistan	30	50			

Source: KPMG International (2013b).

harmonized all its income tax rates into a single rate of 10%. In 2001, the Russian Federation set a flat rate of 13% for all Russian tax residents. Georgia also has a flat rate, equivalent to 20%.

Flat taxes have advantages. The principal one is that they simplify the system, making it cheaper to administer. Simpler rules might also encourage greater tax compliance. Moreover, lowering the marginal tax burden might create incentives for investment and encourage employment especially of individuals in higher income brackets.²⁶ However, there is little evidence that these benefits have been realized. In the Russian Federation, for example, revenues from personal income taxation did increase but this was due not to the reform but to improvements in tax administration. Moreover, the rate reduction did not seem to lead to improved compliance or greater work effort.²⁷ Importantly, flat taxes are highly regressive. Given the widespread increase in income inequality in the region, the progressivity of taxes (or lack of) needs to be looked at very carefully.

An appropriate move may be to a dual income tax system that taxes income on labour and capital separately

Given that flat taxes are regressive, a more appropriate move may be a dual income tax system that imposes increasing marginal rates on income but also taxes income on labour and capital separately.²⁸ Capital income is usually taxed at a lower rate than labour income. This encourages savings and investment. Taxation of capital income separately allows flexibility to address global tax competition to attract capital. While the Nordic countries (Denmark, Finland, Norway and Sweden) were the first countries to set up such a dual income tax system, where labour income and capital income are taxed separately, others have followed. Yet, in most developing countries, tax systems do not treat labour and capital income separately. The complexity of dual tax systems raises many challenges, however, including separation of labour

and capital incomes. Further work is needed on the suitability of such a system for developing countries and how to overcome difficulties in its implementation.

Sales taxes

For sales taxes, a number of Asia-Pacific countries have made the transition to VAT, including Bangladesh, Georgia, Indonesia, Kazakhstan, Pakistan, Sri Lanka, Thailand and Turkey. Other countries are also contemplating this move. Although sales taxes can raise considerable revenues they also have drawbacks. The main concern 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.²⁹ In Bangladesh, for example, it has been found that VAT places a relatively higher burden on people in lower income groups.³⁰ Another disadvantage is that the informal sector largely escapes the VAT net, discouraging businesses from making the transition to formal activities.³¹

It is possible to offset these effects to some extent by zero-rating or exempting certain goods and services. Indeed most countries also have exemptions and lower rates for certain items such as food (see table 3.9). However, the benefits of doing so must be weighed against increases in administrative costs.

The effectiveness of VAT and GST can be assessed through “collection efficiency”, which is the actual rate of taxation of value added in goods and services as a percentage of the standard rate. As indicated in table 3.10, collection efficiency is relatively high in Thailand, Turkey and some North and Central Asian countries, but much lower in Bangladesh, China, India and Pakistan, indicating tax exemptions and difficulties in implementation of the tax.

Taxation of imports

In the early stages of industrialization, countries generally levy high import tariffs — both to raise

Table 3.9. Items exempt or taxed at lower rates in selected Asia-Pacific countries, 2013

	Type of tax	Standard rate	Special rates
East and North-East Asia			
China	VAT consumption tax	17%	<ul style="list-style-type: none"> • Reduced rate on transportation services (11%) and “modern services”, such as ICT and consulting services (5%) • Reduced rates on goods for export (0%) and utility services (13%). Refunds for zero-rated exports are often only partial • Small business pay VAT on turnover (3%)
North and Central Asia			
Armenia	VAT	20%	<ul style="list-style-type: none"> • Exemptions: sales of books, scientific research, financial services and insurance
Georgia	VAT	18%	<ul style="list-style-type: none"> • Zero-rating provisions
Kazakhstan	VAT	12%	<ul style="list-style-type: none"> • Exemptions: exports, and financial, medical and insurance services
Russian Federation	VAT	18%	<ul style="list-style-type: none"> • Exemptions: medical, financial and educational services, rents, etc.
Pacific			
New Zealand	GST	15%	<ul style="list-style-type: none"> • Exemptions: exports, financial services and rents • GST reverse charge for imported services
Papua New Guinea	VAT	10%	<ul style="list-style-type: none"> • Exemptions: exports and medical supplies (zero-rating) • Exemptions: medical and educational services, road transport and books
Samoa	VAT	15%	<ul style="list-style-type: none"> • Zero-rating of exports and medical services • Exemptions: food, financial services, electricity and transport
Vanuatu	VAT	12.5%	<ul style="list-style-type: none"> • Zero-rating: exports, education, rents, etc.
South and South-West Asia			
Bangladesh	VAT	15%	<ul style="list-style-type: none"> • Railways (10%), construction companies (5.5%), garments (5%), English-medium schools (4.5%), ICT services (4.5%), dental clinics (2.25%), land developers/apartments (1.5%) • VAT exemptions on social welfare, training, etc.
India	Sales tax with some VAT features	12.5%	<ul style="list-style-type: none"> • ICT products, capital goods, fertilizers, cotton, drugs and medicines, iron and steel, tractors (4.5%), gold, jewellery, etc. (1%) • Exemptions: books, electrical energy, food items • Exports are zero rated
Pakistan	VAT partial	Goods 17% Services 16%	<ul style="list-style-type: none"> • Local supplies of export goods (5%) • Exemptions: food, construction materials, computer software, etc.
Turkey	VAT	18%	<ul style="list-style-type: none"> • Reduced rate on textiles, education services and hotels (8%) • Food and books (1%)
South-East Asia			
Indonesia	VAT	10%	<ul style="list-style-type: none"> • Exemptions: food, banking and insurance, finance and leasing, hotels and restaurants, employment and manpower services, various social services, and the supply of electric power
Malaysia	Sales tax/ service tax	10%	<ul style="list-style-type: none"> • Reduced rate on food stuffs, alcoholic beverages and tobacco (5%) • Service tax (6%)
Singapore	GST	7%	<ul style="list-style-type: none"> • Reduced rate on the export of goods and on financial services (0%)

Source: KPMG International (2013b).

Table 3.10. Collection efficiency of sales tax/VAT, latest available data

(Percentage)

	Actual tax revenue on goods and services as a percentage of value added	Standard rate of sales tax/VAT	Collection efficiency
Bangladesh	4.8	15.0	32.2
China	8.0	17.0	46.8
Georgia	18.0	18.0	99.3
India	3.7	12.5	29.7
Indonesia	5.6	10.0	56.1
Kazakhstan	7.8	12.0	65.3
Malaysia	36.1	10.0	36.1
Pakistan	6.4	16.0	40.0
Philippines	4.3	12.0	35.9
Sri Lanka	7.1	12.0	59.0
Thailand	9.6	7.0	136.8
Turkey	16.3	18.0	90.8

Source: World Bank, World Development Indicators.

revenue and protect domestic industry. The countries of South Asia, in particular, followed strategies of import substitution. Since the 1990s, however, most countries have embarked on trade liberalization, which has meant scaling down customs duties.

Currently, the lowest tariffs in the region are in the wealthier countries. Average tariffs in Australia and New Zealand are below 3%, and in Singapore imports are duty free. Rates are also relatively low in South-East Asia, in East and North-East Asia, and in Central Asia — on average below 10%. In

contrast, import tariffs remain relatively high in South Asia — average rates are 14.4% in Bangladesh, 13.5% in Pakistan, 13.7% in India and 9.9% in Sri Lanka (see table 3.11).

Most countries impose the highest duties on beverages and tobacco, with lower tariffs on machinery, cotton, petroleum products and textiles. They also impose higher tariffs on agricultural imports. In India, for example, the average customs duty on non-agricultural items is 10.4% while on agricultural goods it is 33.5%. Figure 3.5 shows a stylized pattern of import tariffs.

Figure 3.5. Stylized pattern of import duties

Level of import duty

High



Low

Goods

- Beverages and tobacco
- Transport equipment
- Agricultural food items
- Textiles
- Other manufactured consumer goods
- Agricultural raw materials
- Minerals
- Industrial raw materials and intermediate goods
- Machinery

Source: World Trade Organization, International Trade Centre and United Nations Conference on Trade and Development (2013).

Table 3.11. Import-tariff structure in selected Asia-Pacific countries

(Percentage)

	Year	Average most-favoured-nation tariff			Binding coverage
		Agriculture	Non-agriculture	Total	
East and North-East Asia					
China	2011	15.6	8.7	9.6	100.0
Mongolia	2012	5.1	5.0	5.0	100.0
North and Central Asia					
Azerbaijan	2012	13.4	8.3	9.1	n.a.
Georgia	2012	6.7	0.6	1.5	100.0
Kazakhstan	2012	13.4	8.8	9.5	n.a.
Pacific					
Australia	2012	1.2	2.9	2.7	97.1
Fiji	2012	20.6	16.3	16.9	51.3
New Zealand	2012	1.4	2.2	2.0	100.0
Papua New Guinea	2010	14.8	3.6	2.1	100.0
South and South-West Asia					
Bangladesh	2011	17.2	14.0	14.4	15.5
India	2012	33.5	10.4	13.7	73.8
Pakistan	2012	15.5	13.2	13.5	98.7
Sri Lanka	2012	25.8	7.5	9.9	38.1
Turkey	2011	41.2	4.8	9.6	50.3
South-East Asia					
Cambodia	2012	15.2	10.3	10.9	100.0
Indonesia	2012	7.9	6.9	7.0	96.6
Malaysia	2012	11.2	5.8	6.5	84.3
Philippines	2012	9.8	5.7	6.2	67.0
Singapore	2012	1.4	0.0	0.2	69.7
Thailand	2011	21.8	8.0	9.8	75.0
Viet Nam	2012	16.1	8.4	9.5	100.0

Sources: World Trade Organization, International Trade Centre and United Nations Conference on Trade and Development (2013).

Notes: Most-favoured-nation (MFN) tariffs are the standard rates charged on imports from all World Trade Organization members, excluding preferential rates, or lower rates charged within quotas. "Binding coverage" refers to the percentage of products (or "tariff lines") in a member's list of commitments (or "tariff schedule") that are legally committed (or "bound") in the World Trade Organization.

EXEMPTIONS AND CONCESSIONS

Currently, most countries in the region aim to attract foreign direct investment by offering special tax exemptions and allowances. These can take the form of tax holidays, reduced corporate income tax rates, investment tax allowances and partial profit exemptions to reduce the cost of capital. These policies have in the past been pursued extensively in South-East Asia, for example, where countries have used tax policies to encourage investment, and promote exports, R&D and skill training.

Indonesia, Pakistan, the Republic of Korea, Sri Lanka and Thailand, for example, currently tax small

companies at substantially lower than standard rates. Some countries offer preferential tax treatment for a whole sector — as in Sri Lanka for tourism and construction, in India for insurance, and in Pakistan where power-generating companies are permanently exempted.

Certain types of individuals also enjoy special treatment. Senior citizens and working women, for example, generally face lower tax rates. And in most countries, all taxpayers can take advantage of tax deductions and credits for contributions to provident funds, pensions, investments in approved securities, and interest payments on consumer loans, especially those for housing.

Table 3.12. Tax expenditure as a percentage of GDP in selected countries, latest available data

	In customs duty	In corporate income tax
Bangladesh	0.1	n.a.
China	8.1	0.1
Georgia	0.3	0.5
India	0.5	0.0
Indonesia	0.6	0.2
Malaysia	0.8	0.2
Nepal	n.a.	0.2
Pakistan	1.2	n.a.
Philippines	1.5	0.6
Sri Lanka	n.a.	0.3
Tajikistan	n.a.	0.6
Turkey	0.6	0.3

Source: ESCAP calculations.

Notes: Tax expenditures in customs duties are computed by calculating the tariff loss that arises if the actual applied tariff is less than the average-weighted MFN tariff for each country. The tax expenditure on corporate income taxes is computed by comparing the actual corporate income tax rate with the statutory rate.

The revenues foregone as a result of these deductions and allowances are referred to as “tax expenditures”. In some countries, these can be significant, reaching 0.5% of GDP or more in Georgia, the Philippines and Tajikistan. In several countries, tax expenditures are also significant in customs duties, reaching more than 1% of GDP in Pakistan and the Philippines and more than 8% of GDP in China (see table 3.12).

Table 3.13 identifies the types of “tax expenditure” most commonly observed in Asia and the Pacific. The table also indicates where revenues foregone are likely to be relatively large.

Some concessions are useful. Corporate tax concessions can be worthwhile if they lead to higher investment, especially in employment-intensive sectors. If that happens, the losses due to the concessions can be offset by more rapid economic

Table 3.13. Major types of tax expenditure in Asia-Pacific countries

	Likely magnitude of revenue foregone
Corporate income tax	
• Accelerated depreciation allowance	High
• Lower tax rates for small corporate entities	Medium
• Tax exemption of profits from special economic zones	Medium
• Lower rates on capital gains	Medium
• Charitable contributions	Small
• Tax holidays or lower tax rates for special industries and regions	Small
• Lower tax rates for publicly quoted companies	Small
• Tax exemptions for trusts and non-profit organizations	Small
Personal income tax	
• Tax credit/allowance for investments in securities	Medium
• Lower tax rates for senior citizens or women	Small
• Exemption of interest on investment in long-term bonds	Small
Indirect taxes (domestic)	
• Exemption of food items	High
• Exemption of services like education and health	Medium
• Exemption of financial services	Medium
• Zero-rating of exports	Medium
• Threshold level of exemption for small units	Medium
• Area-based exemptions	Small
Customs duties	
• Lower rates ^a for manufactured goods	High
• Lower rates ^a for special regions and export processing zones	High
• Lower rates ^a for special sector inputs (for example, textiles and pharmaceuticals)	Medium
• Lower rates ^a for public sector imports	Small

Source: ESCAP calculations.

^a In comparison with statutory import duties.

growth. It can also be worthwhile to extend tax privileges to certain groups of individuals to address inequalities and offer incentives to increase the share of vulnerable or socially disadvantaged groups in employment.

Offering investment incentives can be costly and counterproductive

However, in many cases these concessions are unproductive.³² The IMF recently compared the cost of tax concessions in terms of revenues forgone with the benefits in terms of increased foreign direct investment. It found that the “costs are very large, while the benefits appear to be marginal at best. Forgone tax revenues range between 9.5% and 16% of GDP per year, whereas total foreign direct investment does not appear to depend on concessions”. Thus, it urged “rethinking of the use of concessions”.³³ Several OECD studies have also concluded that offering investment incentives can be costly and counterproductive if the fundamentals of the potential investment fail to meet the requirements of serious investors.³⁴

If foreign investors can offer something extra compared with domestic investors, it may be useful to offer them special incentives.³⁵ If they do not, preferential tax treatment only distorts competition and puts local companies at a disadvantage. Industrial policy in developing countries should instead aim to attract foreign investors by offering more extensive modern infrastructure and a more highly skilled workforce.

POLICY OPTIONS TO ENHANCE TAX REVENUE

Countries with untapped tax potential can enhance tax revenues in a number of ways. Box 3.2 provides a few examples of innovative tax reforms in Asia and the Pacific. However, there are a number of priorities for most countries in the region. These include the need to broaden the tax base and rationalizing rates; tackling tax evasion and tax fraud;

improving tax administration and sequencing reforms appropriately; and promoting regional cooperation.

Broadening the tax base and rationalizing rates

Governments can take a number of measures to rationalize and extend their tax systems. One objective is to avoid very high rates, which lead to disproportionate welfare losses and increase the incentive for tax evasion. There are also disadvantages of high import tariffs. By providing high levels of protection to domestic industry, they reduce competition and the incentive for achieving higher levels of efficiency. They also encourage smuggling, illicit trade and under-invoicing of imports.

Overall the objectives should be to have large tax bases with relatively low and consistent tax rates such that they do not create distortions in the allocation of resources. Potential measures include:

- (a) Reducing “tax expenditure” — Frequently, tax expenditure reflects rent-seeking behaviour by powerful, vested interests, so reducing it would make the tax system more equitable. Countries could review their tax system and retain only those exemptions or concessions that are achieving their stated objectives;
- (b) Increasing collection efficiency — Electronic tax returns and pay-as-you-earn systems can enhance collection efficiency. Countries can also think of setting up “one stop” tax collection centres at convenient locations during the annual tax return period. This has been found quite successful in Bangladesh. In the case of GST and VAT, countries could aim for simpler, more consistent systems;
- (c) Extending VAT/GST — VAT/GST frequently apply only to goods and the manufacturing sector. There is therefore substantial scope for extending VAT to services, which are often provided by large corporate entities, especially in banking and insurance, telecommunications, business-related services, information technologies, various

Box 3.2. Recent innovative tax reforms in the Asia-Pacific region^a

A number of countries in the Asia-Pacific region have implemented innovative tax reforms. In Fiji, a number of new taxes have been introduced to mobilize more domestic resources and offset a recent reduction in individual and company tax revenue. For instance, a 2% levy on all credit card purchases and payments, inclusive of interest and other bank charges, has been introduced. Fiji and India have also introduced additional taxes on high-income individuals: in Fiji, a “social responsibility tax” is levied once chargeable income goes beyond about \$142,000, in addition to the normal income tax; in India a “super tax” is levied on individuals whose income exceeds about \$170,000. Meanwhile, the Ministry of Finance of Pakistan recently published a tax directory of all taxpayers, in the hope that non-taxpayers — whose names do not appear on the list, but who are known to have significant incomes — would be shamed into compliance.

Taxes can be earmarked for high-priority expenditure. India, for example, has introduced a 3% education levy (“cess”) on income tax, corporation tax, excise and customs duties and service tax; the funds are used to provide universal access to quality basic education. Meanwhile, countries such as Bangladesh and Turkey have extended GST/VAT to private education and health providers, albeit at lower rates; whereas in India and the Philippines, a “reverse charge mechanism” on imported services has been expanded, whereby the recipient (rather than the provider) of an imported service is expected to pay the sales tax.

A number of countries have taken measures to increase corporate tax revenues. For instance, to stop avoidance of capital gains tax, in 2004 India introduced a securities transaction tax. To ensure that taxpayers refrain from incurring excessive debt levels to claim higher tax deductions, Fiji links the tax deductibility of financial charges to a maximum debt-equity ratio. In Bangladesh, an “excess profits tax” is levied on commercial banks if their profits exceed 50% of capital and reserves. In Sri Lanka, a deemed dividend tax is designed to encourage boards of companies to increase their dividends to a reasonable level; thus, tax is levied at 15% (compared to the usual dividend tax of 10% for resident companies) unless 10% or more of the distributable profits of the prior tax year are distributed by 30 September following the end of a tax year.

“Green taxes” have been used to raise revenue and to change business and consumer behaviour. In a recent report on 21 economies, the Republic of Korea, China and India ranked 2nd, 3rd and 4th in the use of tax incentives to influence corporate activity. Available tools include, for example, tax rebates for investment in renewable energy and energy conservation, and the levy of “green taxes” on polluting industries.

^a This box draws upon various country studies, and the KPMG Green Tax Index 2013. Available at www.kpmg.com/greentax.

types of consultancy services, and private security. Another challenge is to extend the tax to wholesale and retail transactions, especially bringing into the tax net entities such as shopping malls, supermarkets and departmental stores in large cities. This is unlikely to worsen progressivity as low-income individuals normally do not shop there;

(d) Taxing imports of services — As countries develop, the share of trade in services increases significantly. There is therefore a case for expanding the base for customs duties to the

import of services, as it has already been done in some countries;

(e) Taxing capital gains — Capital gains are seldom taxed effectively. That 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 should be more widely implemented. For instance, investment income is

taxed at a flat withholding rate of 20% in China. As advocated above, the introduction of a dual income tax system in the region may be appropriate and could address the taxation of capital gains. Such a proposal should be examined more closely;

- (f) Taxing foreign operations — As countries develop business interests abroad through outward foreign direct investment, it is necessary to develop mechanisms for proper apportionment of costs between their domestic and foreign operations, so that there is no loss of tax revenues, especially in the presence of treaties for avoidance of double taxation. It is essentially through such transfer pricing that many multinational corporations are reducing their tax liabilities;
- (g) Harmonizing income tax rates — Ideally, the rate should be the same for companies and for high-income individuals. This is necessary not only to preserve the progressivity of the tax system but also to prevent distortions in the organizational form of economic activities and to prevent income shifting to reduce tax liabilities.

Tackling tax evasion and tax fraud

Significant financial resources flow out of developing countries illicitly.³⁶ Some estimates for the losses range up to \$5.9 trillion for developing countries as a whole for the period between 2001 and 2010.³⁷ The Asia-Pacific region is considered the major source of these outflows, accounting for more than 60% of all illicit outflows from the developing world; 6 of the 10 countries with the largest illicit capital flows are in the Asia-Pacific region. Of all least developed countries, illicit outflows from Bangladesh are the largest, reaching \$35 billion between 1990 and 2008.³⁸

One mechanism for this is trade mispricing, that is overstating the value of imports or understating the value of exports, which has the effect of transferring profits from one country to another, generally from high- to low-tax regimes. Estimates of foregone tax revenues due to bilateral trade 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.³⁹

Significant financial resources flow out of developing countries illicitly

Countries have adopted different mechanisms to reduce tax evasion and fraud. The most popular way is to deduct the tax at source, through withholding or advance taxes, an approach which has been applied most extensively to combat evasion of personal income tax. Table 3.14 shows the different types of deductions at source, including those on earned or unearned income, on asset transactions, on particular types of expenditure and on economic activities or sectors.

There are two potential problems with such methods. First, there can be some loss of equity, especially where the burden of the tax deduction is shifted forward. Second, there is the likelihood of high levels of refunds. In some cases, this has been avoided by converting the withholding tax into a fixed or presumptive tax. Nevertheless, the contribution of withholding taxes can be large. For example, in Pakistan and Bangladesh they account for more than half of revenue from direct taxes. Moreover, given the difficulties in collecting sales taxes from wholesalers and retailers, some countries have introduced a withholding tax at the time of sale by manufacturers to traders. Alternatively, the tax paid by the manufacturer is not on the ex-factory price but on the retail price.

Another popular instrument for tackling tax evasion is the introduction of minimum taxes on companies and associations of persons. Tax is levied either on turnover or on booked gross profits. At the same time, some South Asian countries have incorporated a provision in their income tax laws whereby certain types of persons are required compulsorily to file returns of income and wealth. Penalties are prescribed in the event of non-filing. Table 3.15

Table 3.14. Types of withholding or presumptive taxes

Withholding or presumptive taxes	
On earned income	On consumption expenditure
• Salaries	• Education fees (above a minimum level)
• Technical fees	• Electricity bills
• Commissions	• Telephone — prepaid cards
• Non-residents	• Air tickets
On unearned capital income	On particular economic activities/sectors
• Dividends	• Imports
• Bank interest and securities	• Exports
• Payment of royalties	• Services
• Return on savings schemes	• Petrol stations
On asset transactions	• Shipping
• Income from property	• Exploration
• Cash withdrawals from banks	• Aircraft
• Registration of cars	• Power projects
• Purchase/sale of shares on the stock exchange	• Cigarette manufacturers
	• Brick manufacturers
	• Marriage halls

Source: ESCAP, based on the tax laws of different countries.

indicates the types of persons who are covered under this provision. This approach has met with varied success.

Non-compliance with and evasion of VAT payments remain important issues in several countries. In Indonesia, for instance, estimates of VAT “gaps” have been put at between 50% and 60%.⁴⁰ Improving VAT compliance requires measures to strengthen the incentives for doing so voluntarily, in addition to stricter controls in the case of suspected non-compliance. Voluntary compliance could be enhanced by simplifying a number of procedures,

including not requiring an original invoice for every single transaction, faster processing of refund claims and a reduction in the number of VAT audits. At present, VAT refunds often automatically trigger a tax audit, as in Indonesia for example, making participation in the VAT system onerous and putting a heavy burden on the limited resources of the tax administration.

While tax evasion and tax fraud will always remain a problem, special tax courts could be set up to deal with this. For instance, as long ago as 1960, it was argued — in the *Economic Survey of Asia*

Table 3.15. Types of persons for compulsory filing of tax returns

- If income exceeds a certain minimum level
- If owner of property above a certain minimum size of plot in urban locations
- If telephone subscriber
- If operating a bank account and a trade license
- If registered in any professional association
- If member of any trade association
- If in possession of a taxpayer identification number
- If NGO, non-profit organization or welfare organization
- If owner of a motor vehicle (above a certain minimum size)
- If a subscriber to an industrial or commercial electricity connection

Source: ESCAP, based on the tax laws of different countries.

and the Far East 1960 — that “Special tax courts, instead of the ordinary legal machinery for civil suits, may be instituted and the legal processes tailored to deal expeditiously with the specific problems of tax evasion. A stricter supervision of the lucrative profession of company accountants and tax advisers or consultants might also bring to light the deficiencies of tax legislation and its practical application and administration.”⁴¹

Improving tax administration

A tax system that is both equitable and efficient will require a high-quality and effective tax administration — and one that is free from corruption, political interference and pressure from vested interests. One way to move in this direction is to give the revenue agencies a degree of institutional autonomy. Pakistan, for example, has recently established state-level autonomous revenue collection agencies.

Efficient tax administration requires adequate flows of information. Traditionally, different taxes have been collected by multiple agencies, which has made it difficult to collate information on individual taxpayers. In response, some countries have reorganized their systems along functional lines so that agencies dealing with issues such as intelligence, surveys, audits, legal issues and human resources provide inputs across all taxes.

Tax administrations should support taxpayers, lessen transaction costs and reduce the potential for corruption

One of the primary tasks for tax offices is to detect new or evading taxpayers. A wealth of information can be derived from an information system on payment of withholding tax. Cross-checking against returns filed provides the basis for determining the extent of under-filing. Also, the national statistical agency should periodically undertake censuses of establishments.

Most modern tax systems rely on the filing of returns by taxpayers on the basis of self-assessment. Ideally, all taxpayers should be able to file their returns electronically. To deter evasion this has to be backed up by an effective audit system for examining a certain proportion of returns. This should be risk based, focusing on the taxpayers who are more likely to evade. A system of rewards that is linked to the amount of tax evasion identified could be established for tax officials.

Countries also have to decide on the extent of the powers of tax officials. India, for example, allows officials to raid premises. Pakistan has recently passed legislation allowing the tax agency to access bank accounts on a selective basis — though this has been vociferously resisted by taxpayers as an invasion of privacy, and banks are also reluctant to divulge this information. Any granting of powers to tax officials must not become a source of harassment or corruption. Moreover, it is essential that taxpayers have access to a fair and judicious appeals process. Some countries have tribunals run by tax officials. A better option is to have specialized tax courts, as mentioned earlier, under the judiciary. Delays in judgements will have to be avoided by specifying a maximum time limit for a decision.

The process of documentation can be facilitated by a system of taxpayer identification numbers. The numbers can be recorded in certain specified transactions. An electronic “data warehouse” of transactions can then provide evidence for the tax liability of an individual with a taxpayer identification number.

To boost revenues some countries have periodically granted tax amnesties. For example, Pakistan has recently announced immunity from audit to taxpayers who declare 25% higher income or make a fixed payment against previous non-filing of returns. The problem with amnesty schemes is that they erode the integrity of the tax system and create a disincentive for honest taxpayers.

The overall approach of tax administrations should be to support taxpayers, lessen transaction costs and reduce the potential for corruption. The World Bank collects information on performance indicators of tax administrations. These are given in table 3.16 for a sample of Asian countries. Two conclusions emerge. First, some countries have too many taxes; countries could improve their collection efficiency by focusing on the more lucrative sources of revenue or rationalizing their tax systems. Second, the time required for filing returns can be very long; this can be reduced by simplifying returns and making them more taxpayer friendly. Electronic filing of returns will also minimize contact with tax officials and reduce the incidence of bribes. Taxpayer facilitation and guidance centres should be established.

Transparency in the formulation of tax policies and administrations could be greatly enhanced by publishing an annual tax directory, and issuing a statement of tax expenditures as part of the budget presentation. To stem corruption among tax officials, a list of their total assets should be published at regular intervals. Corruption within the tax administration could also be addressed by special tax courts.

Sequencing tax reforms

Countries should sequence their tax reforms carefully. In hindsight it is clear, for example, that before reducing customs duties and other trade taxes, some countries should have made greater efforts to build up their income tax and VAT systems. Several countries, including India and Pakistan, failed to do so and experienced significant reductions in their tax-to-GDP ratios. Reforms should be sequenced for both tax administration and tax policy:

- (a) In the first phase of reform of the tax administration, efforts must be made to expand human capacity and to organize the administration along functional lines. At the same time, computer systems should be integrated, especially with a view to electronic filing of tax returns. This would facilitate objective, risk-based auditing;
- (b) A second phase of reforms should aim at broadening the tax base by detecting new taxpayers and improving the refunds and appeals processes. This would give taxpayers greater incentives to comply;

Table 3.16. Indicators of the quality of tax administrations in selected Asian countries

	Number of tax payments	Average number of meetings with tax officials	Percentage of firms expected to give gifts to tax officials	Time to prepare and pay taxes (hours)
Bangladesh	20	1.3	54.4	302
China	7	1.2	10.9	318
Georgia	5	0.6	8.4	280
India	33	2.6	52.3	243
Indonesia	52	0.2	14.0	259
Kazakhstan	7	2.6	25.1	188
Malaysia	13	2.1	n.a.	133
Pakistan	47	1.5	58.8	577
Philippines	36	1.5	21.8	193
Singapore	5	n.a.	n.a.	82
Sri Lanka	58	1.3	7.7	210
Turkey	11	1.3	4.0	226
Viet Nam	32	0.9	33.7	872

Source: World Bank, World Development Indicators.

Notes: Number of tax payments refers to the total number of taxes paid by businesses, including electronic filing; a tax is counted as paid once a year even if payments are more frequent. Average number of meetings with tax officials provides information on how often management meet with tax officials. Time to prepare and pay taxes is the time, in hours per year, it takes to prepare, file and pay (or withhold) three major types of taxes: corporate income tax, value added or sales tax, and labour taxes, including payroll taxes and social security contributions.

(c) A third phase would involve second-generation reforms in which tax assessments would be based on collateral evidence collected across government departments. Compliance could be strengthened further by reducing the multiplicity of taxes.

Governments will also need to sequence their reforms of tax policy.

- (a) A first phase should aim at broadening the tax base by, for instance, expanding withholding and advance tax regimes, by expanding VAT to cover both goods and services, and in particular by reducing exemptions and concessions;
- (b) A second reform phase would rationalize tax rates to reduce distortions and remove any existing tax anomalies;
- (c) Finally, a third phase could tackle second-generation reforms by, for instance, strengthening laws to regulate transfer pricing and to determine global incomes liable for taxation. These reforms should also move from a withholding and presumptive tax regime to one based on self-assessment through filing of returns.

Promoting regional cooperation

Regional cooperation can play an important role in mobilizing domestic resources. Greater cooperation between countries would not only enable them to harmonize taxes and avoid tax competition, but would also help avoid double taxation, while tackling transfer pricing by multinational corporations. Regional cooperation can also be a useful tool to deal with tax havens. A regional tax forum of tax experts and officials could share best practices in tax policies, tax administration and tax reforms.

Harmonizing tax rates — Competition for foreign direct investment is leading to a “race to the bottom” in terms of taxation of profits. Countries belonging to regional associations, such as the South Asian Association for Regional Cooperation or the Association of Southeast Asian Nations,

may therefore wish to consider some degree of harmonization of taxation of profits of multinational companies.

*Greater cooperation between countries
would enable them to harmonize taxes
and avoid tax competition*

Harmonizing import duties for transit trade — Another area for tax harmonization is for transit trade. There is, for example, significant transit trade via Pakistan to Afghanistan, of which a high proportion is smuggling. This happens because of the non-payment of taxes on goods meant for Afghanistan at Karachi port. The two countries could harmonize their import duties on smuggling-prone items in their customs tariff schedules. Revenues on transit cargo could be collected at the port of entry in Pakistan and reverted to Afghanistan, once certification is provided of the entry of goods into Afghan territory.

Combating transfer pricing — Multinational corporations often price transactions between subsidiaries so as to divert more profits to low-tax countries. Regional cooperation can address such transfer pricing more forcefully. Around 20 Asian countries have already adopted transfer-pricing rules in their tax laws, mostly based on OECD lines. For instance, Indian legislation prescribes five methods to compute the “arm’s length price”. Tax officials must use the most appropriate method. The Income Tax Department of India ensures that most multinational corporations are audited for transfer pricing. This issue also highlights the case for greater harmonization of corporate tax rates.

Combating tax havens and illicit transfers — Regional cooperation will also be important to address the issue of tax havens and of illicit transfers of resources. Most of the options for addressing individual evasion involve better information reporting and additional enforcement. But there are also options that would involve fundamental changes in the law, such as shifting from a residence to a source basis for “passive income”, which comprises,

for instance, rental income, interest earnings and dividends. An option that appears likely to recover significant revenues is the European Union Savings Directive (Council Directive 2003/48/EC), which requires member States to exchange information about interest earned on savings accounts held by non-residents. If the beneficial owner cannot be identified, a withholding tax could be imposed — a refund would be allowed if evidence of reporting to the home country could be shown. This directive has since been extended to cover all relevant income from both EU and non-EU investment funds (Council Directive 2014/48/EU).

There are also proposals for bilateral information treaties to provide for regular and automatic exchanges of information. This would relate to both civil and criminal issues. It would not require suspicion of a crime other than tax evasion, and would override bank secrecy laws in tax havens.

Agreements on double taxation — A further important aspect of regional cooperation will be to broaden double tax avoidance agreements (DTAAs). These bilateral agreements aim to avoid taxing enterprises twice for the same activity. This gives corporations greater confidence and encourages investment. India, for example, has comprehensive DTAAs with 88 countries. Under the Income Tax Act 1961, sections 90 and 91 provide specific relief to taxpayers to save them from double taxation. Similarly, Pakistan has DTAAs with 63 countries. ESCAP could prepare a generic DTAA and encourage member countries to sign bilateral agreements. It can work closely with the Committee of Experts on International Cooperation in Tax Matters, which is a subsidiary body of the Economic and Social Council. The Committee is responsible for keeping under review and updating, as necessary, the United Nations Model Double Taxation Convention between Developed and Developing Countries⁴² and the *Manual for the Negotiation of Bilateral Tax Treaties between Developed and Developing Countries*.⁴³

There is a strong case for establishing an Asia-Pacific tax forum

An Asia-Pacific tax forum — Finally, there is a strong case for establishing an Asia-Pacific tax forum, possibly under the aegis of ESCAP. This forum could monitor the tax legislation of member countries and publish a regular review of tax reforms. It could also hold seminars on emerging tax issues with the participation of tax officials, experts and the private sector with a view to sharing best practices. The forum could also provide training and capacity development.

CONCLUSION

Countries across the Asia-Pacific region have significant potential for enhancing tax revenues. They can improve the quality of tax administration, rationalize tax rates, scale down tax expenditures and introduce mechanisms for curbing tax evasion.

While taxation is primarily a domestic policy issue, there are also many regional dimensions. Greater regional cooperation can strengthen domestic resource mobilization — particularly by enabling countries to avoid tax competition and to harmonize tax rates. Such cooperation could also involve exchanging information on cross-border capital flows into tax havens, tackling illicit transfers of funds, and signing agreements on double taxation.

The United Nations could play a useful role in developing conventions for the exchange of information among Asia-Pacific countries and between regions. ESCAP could set up an Asia-Pacific tax forum, which could act as a repository of tax laws, conduct periodic tax reviews of countries and hold seminars on emerging tax-related issues.

Annex I. Data used in this chapter

Data on tax revenue in this chapter have been sourced from the Government Finance Statistics database of the IMF and augmented by data from CEIC, national data sources and several background country studies that were commissioned for this chapter.

In principle, data are available for 34 developing countries, including: Afghanistan; Armenia; Azerbaijan; Bangladesh; Bhutan; Cambodia; China; Fiji; Georgia; Hong Kong, China; India; Indonesia; Iran (Islamic Republic of); Kazakhstan; Kyrgyzstan; Macao, China; Malaysia; Maldives; Mongolia; Myanmar; Nepal; Pakistan; Papua New Guinea; Philippines; Republic of Korea; Russian Federation; Singapore; Sri Lanka; Tajikistan; Thailand; Turkey; Uzbekistan; Vanuatu and Viet Nam. Data were also available for the three developed countries in the region: Australia, Japan and New Zealand.

The data cover the period from 1990 to 2011, unless otherwise noted. However, gaps exist for individual countries at different points in time. Also, unless otherwise noted, the data refer to central government data for all countries except for China, India, the Islamic Republic of Iran, Kazakhstan, Malaysia, the Russian Federation and Thailand. For these countries, data refer to general government data (unless otherwise noted) due to the significant difference (defined here as equivalent to more than 1 percentage point of GDP) between revenues collected at the central and at the general government level.

Annex II. Computation of tax buoyancy

There are a number of ways to calculate tax buoyancies (see Haughton, 1998). Due to the limitations of data availability, tax buoyancies in this chapter were estimated by calculating the ratio between the growth rate of nominal tax revenue and the growth rate of nominal GDP between two points in time. One advantage of this method helps to overcome short-term exceptional deviations and provides a broad picture of the reactivity of the fiscal system of a country.

Specifically, buoyancies were computed by using the following formula for two periods, t and $t+k$:

$$b_{t+k,t} = \frac{\Delta TAX_t / TAX_t}{\Delta GDP_t / GDP_t}$$

where ΔTAX represents the change in nominal tax revenues received by the Government during the period $[t; t+k]$ and ΔGDP represents the change in nominal GDP during the period $[t; t+k]$.

Annex III. Estimation of tax potential and tax gap

Tax potential represents the potential level of tax revenues as a percentage of GDP which corresponds to the structure of the economy. To capture the structure of economies, three commonly used variables were included in the estimation: the valued added of the agricultural sector, expressed as a percentage of GDP (*AGRI*); GDP per capita (*GDPPC*); and the degree of trade openness in a country (*TRADE*), calculated as the sum of exports and imports as a percentage of nominal GDP. Thus, the following equation was estimated over the period between 1990 and 2012 for a total of 144 countries:

$$tax_{it} = \beta_1 \cdot AGRI_{it} + \beta_2 \cdot GDPPC_{it} + \beta_3 \cdot TRADE_{it} + C + D + \varepsilon_{it}$$

i and t correspond respectively to cross-section identifiers and to time and C denotes the intercept.

Regional dummies (D) were introduced to consider regional differences for Asia and the Pacific (*AP*), Europe (*EU*), sub-Saharan Africa (*SS*), Latin America and the Caribbean (*LAC*), and the Middle East (*ME*).

The estimation of coefficients was based on a generalized-least-squares approach with panel data. Potential heteroskedasticity of residuals was overcome by applying cross-section weights. The results of the estimation, with relevant test statistics showing a relatively good fit, are reported in table A1 below.

Table A1. Estimation results

Variable	Coefficient	Standard error	t-statistic
TRADE	0.01	0.00	7.98
AGRI	-0.24	0.01	-34.36
GDPPC	0.34	0.04	8.32
LAC	4.15	0.40	10.36
ME	5.62	0.49	11.39
SS	10.36	0.41	25.23
AP	6.28	0.40	15.72
EU	8.46	0.37	22.72
Constant C	12.24	0.39	31.42
R ²	0.75	S.E. of regression	6.58
Adjusted R ²	0.75	Sum-squared residuals	81 264.54
F-statistic	694.01	Prob (F-statistic)	0.0

Source: ESCAP calculations.

On the basis of estimated coefficients, predicted values of tax revenues (as percentages of GDP) were computed as follows:

$$\widehat{tax}_{it} = \widehat{\beta}_1 \cdot AGRI_{it} + \widehat{\beta}_2 \cdot GDPPC_{it} + \widehat{\beta}_3 \cdot TRADE_{it} + \widehat{Cte} + \widehat{D}$$

For each country, the ratio between the actual tax-to-GDP ratio and the predicted ratio was computed:

$r_{it} = \frac{tax_{it}}{\widehat{tax}_{it}}$; where tax_{it} represents the observed value of the tax revenue. The tax potential was determined as follows:

$$tax\ potential_{it} = \frac{tax^*_{it}}{\frac{1}{n} \sum r_{it}}$$

where n represents the number of observations for a country i and tax^*_{it} represents the most recent value of the tax revenue (which may not have been considered in the regression).

For each country, the tax gap is equal to the difference between the tax potential and the most recent tax revenue received by the Government. If the difference is positive, countries are currently collecting fewer taxes than the structure, as captured by their level of income per capita, the size of their agricultural sector, and the openness of their economies, would suggest.

Endnotes

- 1 Kaldor (1963) points out that “whereas the ‘developed’ countries collect 25% to 30% of their GNP in taxation, the underdeveloped countries typically collect only 8% to 15%”. He further argued that, if a country wishes to become “developed”, it needs to collect in taxes an amount greater than the 8% to 15% found in many developing countries. He highlighted that the “developed” countries collected 25% to 30% of their GNP in taxation. Martin and Lewis (1956) held that “... the government of an under-developed country needs to be able to raise revenue of about 17% to 19% of GNP in order to give a not better than average standard of service”.
- 2 However, levels of public indebtedness still compare favourably considering an average level of more than 90% of GDP in the eurozone and 116% of GDP in the developed G20 economies.
- 3 For instance, with foreign denominated debt, any currency depreciation in a recession would increase the debt ratio as the domestic currency value of debt increases. That could trigger a debt crisis as the Government would have to pursue countercyclical fiscal policy to respond to recession.
- 4 The IMF (2013:27) also points this out, stating that “[a] reorientation of public spending (for example, through the reduction of subsidies and containment of wage spending, complemented with targeted measures to protect the poor) could facilitate faster consolidation while supporting growth and social conditions.”
- 5 IEA (2013).

- ⁶ Subsidizing some critical sectors of an economy may be needed for building productive capacity and acquiring competitive advantage. But there is always the risk of perpetuating infant industries unless subsidies are given with a very clear objective, for example, to be able to export a certain proportion of the product subsidized by a targeted year. Likewise, while consumption subsidies are important for the poor, they are also an inefficient way to reach policy objectives as they may not be well targeted.
- ⁷ See IMF (2010).
- ⁸ See endnote 1.
- ⁹ As highlighted by the IMF (2013:29).
- ¹⁰ In two other landlocked countries, Mongolia and Kazakhstan, taxes on international trade remain relatively important, accounting for between 20% and 40% of indirect taxes. However, these two countries may represent outliers, benefitting from their abundant natural resources.
- ¹¹ KPMG International (2013a).
- ¹² Karim and Alauddin (2012).
- ¹³ India, Ministry of Finance (2012).
- ¹⁴ Shukla and others (2011).
- ¹⁵ Musgrave (1969).
- ¹⁶ Atkinson and Stiglitz (1976) consider the interaction of direct and indirect taxes in the attainment of efficiency and equity goals and show that when individuals differ only in their earning ability, Government can impose a general income tax and where the utility function is separable between labour and all commodities, there is no need to employ indirect taxation in the optimum tax design.
- ¹⁷ As noted in ESCAP (1983:107), “the calculation of such measures can be a useful preliminary exercise in national tax policy self-assessment and can activate policy makers in efforts towards improved resource mobilization performance”.
- ¹⁸ Doraisami (2011).
- ¹⁹ Deloitte (2009).
- ²⁰ Musgrave and Musgrave (1989).
- ²¹ Details of the econometric analysis and method of calculation of the tax gap and the tax potential are provided in annex III.
- ²² However, in Pakistan small companies may be taxed at 25% subject to specific conditions.
- ²³ Chen, Huang and Regis (2013).
- ²⁴ See, for example, Myers (2011).
- ²⁵ Abbas and Klemm (2012).
- ²⁶ Saavedra (2007).
- ²⁷ Ivanova, Keen and Klemm (2005).
- ²⁸ Bird and Zolt (2011).
- ²⁹ Bernardi, Gandullia and Fumagalli (2005).
- ³⁰ Faridy and Sarker (2011).
- ³¹ Emran and Stiglitz (2005).
- ³² Bernardi, Gandullia and Fumagalli (2005).
- ³³ Chai and Goyal (2008).
- ³⁴ Oman (2000) and OECD (2001).
- ³⁵ Blomström, Kokko and Mucchielli (2003).
- ³⁶ The term “tax avoidance” refers to transactions that take place by individuals and corporations that fall within the scope of national and international laws, such as by moving revenues to lower-tax jurisdictions to reduce tax liabilities. “Tax evasion” and “tax fraud” refer to transactions that take place to conceal resources and remove them illicitly from any taxation. Examples of tax evasion and tax fraud include, for instance, under-reporting taxable income or transferring it illicitly outside of relevant tax jurisdictions.
- ³⁷ Kar and Freitas (2012).
- ³⁸ Kar (2011).
- ³⁹ Christian Aid (2009).
- ⁴⁰ Silvani and others (2008).
- ⁴¹ Economic Commission for Asia and the Far East (1961).
- ⁴² United Nations (2011b).
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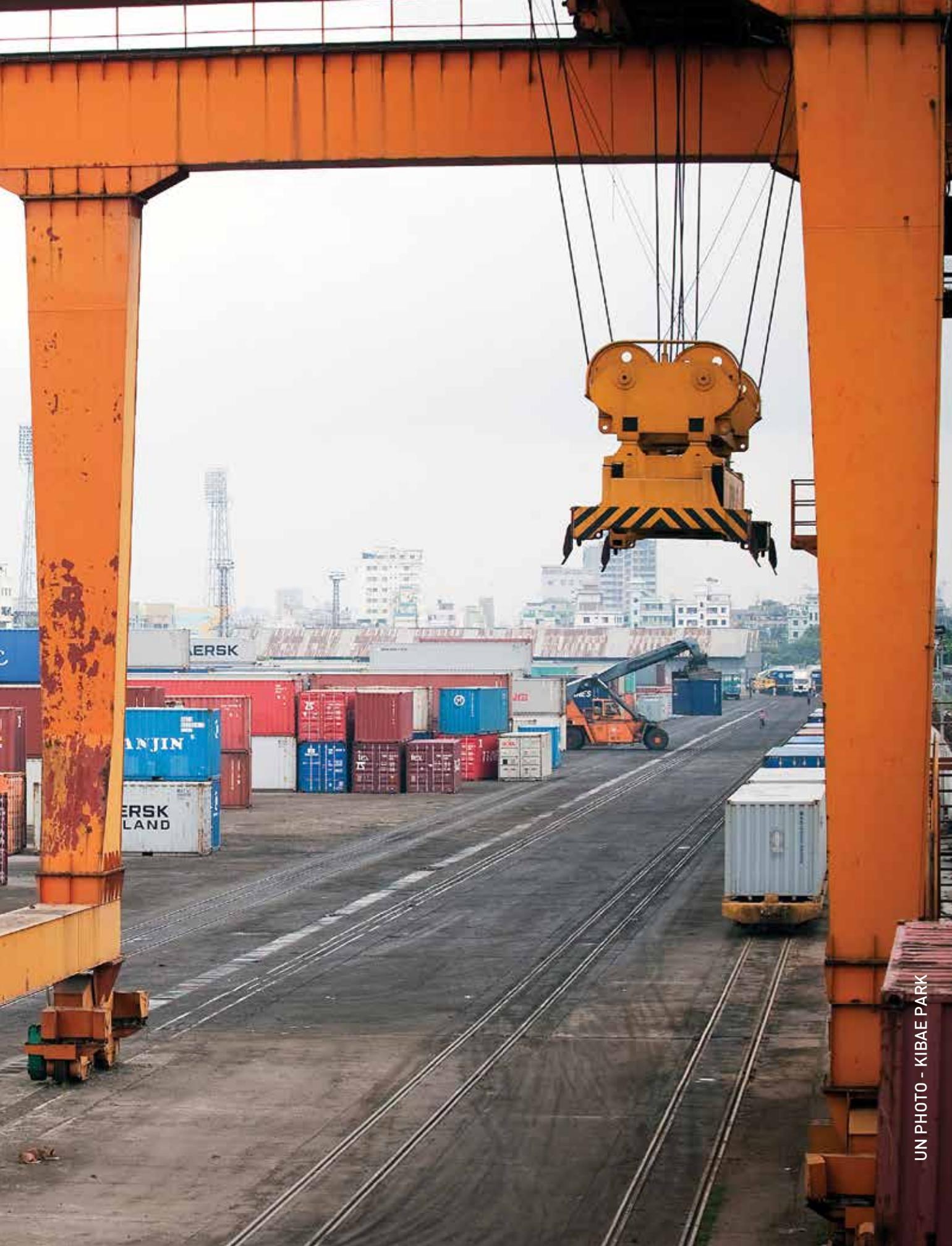
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PART II

REGIONAL CONNECTIVITY FOR SHARED PROSPERITY



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REGIONAL CONNECTIVITY FOR SHARED PROSPERITY

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The Asia and the Pacific region has grown rapidly, with the intensification of its networks of trade, production and people. However, these networks are denser and more productive in some parts of the region than in others. Over the coming decades, countries across Asia and the Pacific will be looking for ways to expand connectivity and to ensure that the region's growing prosperity is more widely shared.

INTRODUCTION

Asia and the Pacific is the world's most dynamic region. Over the past 50 years it has experienced unprecedented economic growth, much of which has been export driven, initially among the newly industrialized economies, but more recently also in China and in India. This growth, along with better standards of education and health, has contributed to dramatic falls in poverty. The region's achievement in poverty reduction has been remarkable: despite an overall population increase of about 900 million people, the population living below \$1.25 per day dropped from about 1.6 billion in 1990 to under 750 million in 2011.¹

However, as noted by the Asian Development Bank, ESCAP and the United Nations Development Programme in the publication entitled *Asia-Pacific Aspirations: Perspectives for a Post-2015 Development Agenda*, the region still has unacceptable levels of poverty.² According to this report, almost two thirds of the world's poor, as measured by the \$1.25 poverty line, live in this region. Indeed, reflecting the large populations of China, India, Indonesia and Pakistan, there are currently more poor people living in middle-income countries than in low-income countries. There are also large numbers of people living just above the extreme poverty line, or in "near poverty": if \$2 per day is used as a benchmark, the number of poor people doubles from 743 million to 1.64 billion. In other words, about 40% of the region's population subsists on less than \$2 a day.³

Furthermore, the region's growing prosperity has not been shared equally, and there are clear signs of rising inequality, both within and between countries. As discussed in part I of the *Economic and Social Survey of Asia and the Pacific 2014*, inequality has declined in some countries since the early 1990s, but has increased in some larger economies, including China, India and Indonesia. Just as significant is the extent of inequality between countries. A recent study concluded that, in Asia, "the gap between advanced economies and the least developed is the largest of any region of the world".⁴

Connecting countries creates new opportunities for development

One of the most important contributors to the region's economic growth has been infrastructure development – particularly in the transport, energy and telecommunications sectors.⁵ At the national level, public investment has been shown to have a direct impact on GDP growth, with some analyses suggesting that, on average, a 1% increase in the stock of infrastructure lifts GDP by 0.08%.⁶ These critical infrastructure networks have stimulated growth by providing domestic enterprises with access to a greater pool of resources and markets, thereby enabling them to scale up their production and reach a broader consumer base. Recent research also shows that improved telecommunications have enhanced the access of rural communities to information and financial services.⁷

At the regional level, progress has been made in forging linkages between countries through the development of regional infrastructure networks, thereby opening up both physical and virtual access to regional and global markets. Today, most countries in continental Asia are connected through the Asian Highway and Trans-Asian Railway networks, while coastal countries and small island developing States are linked through maritime services. Moreover, in most of the region's capitals and major cities, it is now possible to connect to broadband Internet.

These linkages have driven the region's economic success by facilitating international trade, foreign direct investment (FDI) flows, and the establishment of global and regional production networks and global value chains. These new systems for manufacturing, distribution and consumption have helped many countries in the region to diversify their economies, reducing their dependence on traditional sectors, such as agriculture and natural resource extraction, and creating new jobs, particularly in labour-intensive sectors, such as garments and electronics.

Emerging economies in particular have benefited from regional and global value chains. In China, for

example, the income derived from trade flows within global value chains, measured as “export of domestic value added,” increased six-fold between 1995 and 2009, and the number of jobs generated by export of value added increased from 89 million in 1995 to 146 million in 2008.⁸ However, not all countries in the ESCAP region have been as successful in terms of expanding trade and attracting more investment to their economies.

It is therefore timely that the Commission selected the theme of “Regional connectivity for shared prosperity” for its seventieth session, held in 2014. On one hand, it is evident that countries and people in the ESCAP region are becoming more and more connected in a variety of ways. On the other, it is less evident how this increasing connectivity has shaped the region’s recent development, and what kinds of connectivity will be needed to help to reduce poverty and to achieve more balanced and inclusive growth across the region. This year’s Theme Study, which constitutes part II of the *Economic and Social Survey of Asia and the Pacific 2014*, explores these questions and presents a set of regional strategies for strengthening regional connectivity in Asia and the Pacific.

Understanding “regional connectivity”

In recent years, the concept of “connectivity” has broadened and entered into mainstream development discourse. A good example is the Master Plan on ASEAN Connectivity, which was one of the first comprehensive strategic policy frameworks to explicitly address the issue of connectivity in various sectors. ESCAP has also promoted connectivity as a necessary and integral aspect of regional integration and has identified a number of key regional networks at the core of regional connectivity, namely trade and transport, information and communications technology (ICT), energy infrastructure and people-to-people networks.⁹ These regional networks reinforce each other and as such their simultaneous development is critical in achieving effective regional connectivity and in maximizing its benefits.

It is becoming evident that regional connectivity will offer best results if it enhances the effectiveness of regional networks to facilitate flows of goods, services, people and knowledge. It is therefore necessary to look beyond traditional analyses of connectivity, which were focused on the physical dimensions of networks, to consider also their qualitative aspects. Given that the effectiveness of each network is increasingly dependent on the connectivity of other networks, the multisectoral nature of these networks also needs to be considered.

The present chapter begins with a discussion of recent drivers of economic growth in the ESCAP region. It traces the evolution of international trade and FDI and the role of trade and transport connectivity in supporting these flows. It then contains a discussion of future drivers of growth that have the potential to transform the spatial pattern of the region’s economic and social development, and the types of connectivity that will be needed in order to benefit from these drivers.

THE ROLE OF REGIONAL CONNECTIVITY IN SUPPORTING GROWTH AND DEVELOPMENT

Various factors have shaped the pace and pattern of the region’s economic and social development. Some are related to geography – in terms of location and topography, as well as natural factor endowments and population densities. Other factors are related to domestic government policies or the occurrence of wars or natural disasters. However, numerous studies suggest that the main drivers behind the region’s economic success have been international trade, FDI and the establishment of global and regional production networks and global value chains.¹⁰

Regional integration efforts drive initial trade growth

Trade in the ESCAP region has expanded as a result of a combination of converging and mutually

enhancing factors. One of the most significant has been the acceleration of regional integration, driven primarily by government efforts to liberalize trade. The 1997/98 Asian financial crisis served as a catalyst for countries in the ESCAP region to pay greater attention to the benefits of regional economic integration and to make stronger political commitments to trade liberalization.¹¹ For example, the Association of Southeast Asian Nations (ASEAN) began formalizing ties with China, Japan and the Republic of Korea, resulting in the first annual ASEAN Plus Three Summit in 1998. At about the same time, member States of the South Asian Association for Regional Cooperation (SAARC) started developing the Agreement on South Asian Free Trade Area (SAFTA), which came into force in 2006.

Countries that recognize the potential gains from regional connectivity typically start by reducing border trade barriers. Since the mid-1990s, many countries have also been actively negotiating trade or broader economic partnership agreements on a bilateral basis. Today, there are 149 preferential trade agreements, bilateral and plurilateral, in force in the Asian and Pacific region (see figure 4.1). Another 73 agreements are at various stages of negotiation. Further liberalization is expected following the ongoing negotiation of several “mega-bloc agreements,” such as the Trans-Pacific Partnership Agreement,

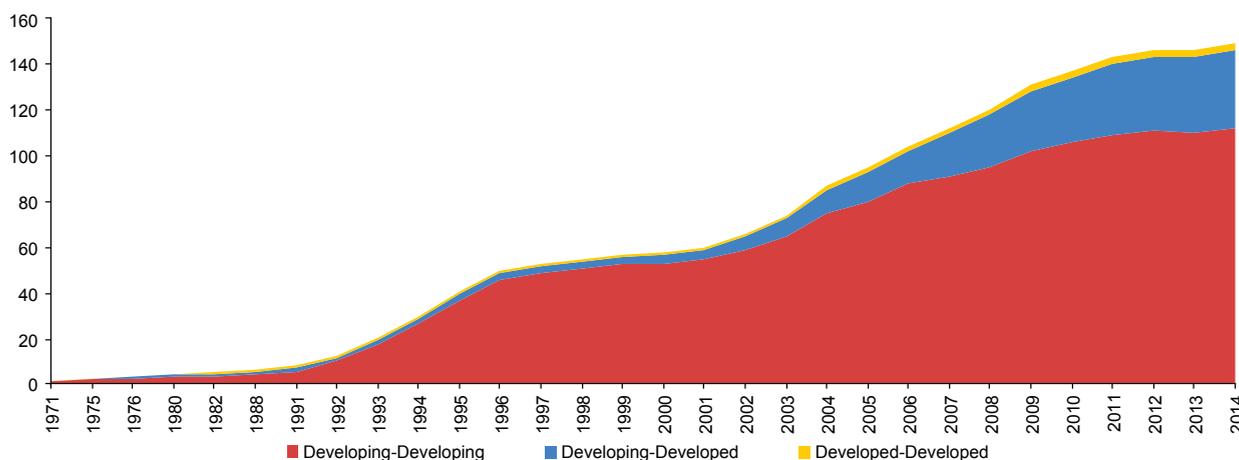
led by the United States of America, and the Regional Comprehensive Economic Partnership, led by ASEAN and six of its major partners: Australia, China, India, Japan, New Zealand and the Republic of Korea.

ESCAP has estimated that the welfare gains associated with region-wide liberalization through the expansion of existing trade agreements or the implementation of new ESCAP-wide agreements may amount to as much as \$140 billion.¹² While a detailed discussion of trade policy and preferential trade agreements is beyond the scope of this publication, it is important to keep in mind that they provide the institutional foundation on which regional connectivity may be achieved.¹³

Emergence of regional production networks and value chains

Progress in trade liberalization contributed to the rise and the reach of FDI flows, which, together with technological changes in manufacturing processes and the diffusion of ICT, created conducive conditions for regional production networks.¹⁴ Industries were able to divide their value chains into portable components and relocate parts of those industries in other countries – leading to the emergence of “global production sharing”.¹⁵ This process

Figure 4.1. Trade agreements in Asia and the Pacific



Source: ESCAP calculations, based on data from the ESCAP Asia-Pacific Preferential Trade and Investment Agreements Database.

is essentially a reflection of “efficiency-seeking industrial restructuring”, or the spatial fragmentation of industry across borders to exploit economies of scale, specialization and savings in labour and material costs.¹⁶

Thus, starting in the 1980s, businesses from Europe, Japan, North America and the Republic of Korea began relocating their industrial production first to Hong Kong, China; Singapore; and Taiwan Province of China, and then in the late 1990s and 2000s to China and South-East Asia, particularly Indonesia, Malaysia, the Philippines and Thailand. As production costs rose in these economies, investors began turning to Viet Nam and other ASEAN member States as potential destinations. As a result, in 2012, ASEAN members comprised the only area in the ESCAP region to experience positive growth in FDI inflows.¹⁷

The changing spatial distribution of regional production networks partly explains why, since

2009, intraregional trade has been growing faster than trade with the region’s more traditional trading partners in Europe and North America – and also why in 2012, East and North-East Asia and South-East Asia accounted for about 75% of total intraregional trade (see table 4.1). This growth in intraregional trade reflects the increase in the trade of intermediate goods. The emergence of these networks also explains why intraregional FDI flows, mostly originating in East Asian countries but also increasingly from within ASEAN, have increased significantly in the last 10 years.

Clearly China has played a pivotal role, emerging as a critical link in the assembly of products coming from East Asia and South-East Asia and consumed in global markets. In 2011, nearly 50% of China’s imports of intermediate goods were from developing Asian and Pacific economies and Japan.¹⁸ This explains why East Asia has the deepest degree of trade integration of all subregions, as measured by intra-subregional trade. This is followed by South-East

Table 4.1. Trends in intraregional merchandise trade of developing Asia and Pacific countries (2000, 2008 and 2012)

Share of intraregional exports by destination (percentage of intraregional exports)

Exports to	East and North-East Asia			South-East Asia				South and South-West Asia				North and Central Asia		Pacific	
	Total	China	Rest	Total	Singapore	ASEAN5	Rest	Total	India	SAFTA excl. India	Rest	Total	Russian Federation	Rest	
2000	46.0	13.8	32.2	40.2	13.8	25.0	1.4	9.1	3.1	3.0	3.0	4.2	2.4	1.8	0.5
2008	45.9	16.2	29.7	31.4	8.4	21.8	1.1	13.4	5.8	3.0	4.7	8.5	4.4	4.0	0.8
2012	46.6	12.5	34.0	32.3	7.1	23.5	1.7	13.3	5.6	3.4	4.3	7.2	3.8	3.4	0.7
Change from 2011 (percentage points)	-2.0	-5.3	3.3	1.0	0.0	0.7	0.2	0.0	-0.8	0.7	0.1	1.5	0.3	1.1	-0.4

Share of intraregional imports by source (percentage of intraregional imports)

Imports from	East and North-East Asia			South-East Asia				South and South-West Asia				North and Central Asia		Pacific	
	Total	China	Rest	Total	Singapore	ASEAN5	Rest	Total	India	SAFTA excl. India	Rest	Total	Russian Federation	Rest	
2000	50.4	31.4	18.9	37.0	11.1	25.3	0.6	6.2	2.7	0.8	2.7	6.2	4.5	1.7	0.2
2008	48.7	31.9	16.8	32.8	8.8	23.1	0.8	10.0	4.4	0.6	5.0	8.4	6.5	1.9	0.2
2012	49.4	30.8	18.6	32.9	8.0	24.2	0.8	8.7	3.9	0.7	4.1	8.9	6.2	2.7	0.2
Change from 2011 (percentage points)	-0.4	-1.0	0.6	-0.9	-0.3	-0.7	0.1	-0.7	-0.6	0.0	0.0	1.6	1.0	0.6	0.0

Source: ESCAP calculations, based on data from the United Nations Commodity Trade Statistics Database (2013).

Notes: ASEAN5: Indonesia, Malaysia, Philippines, Thailand and Viet Nam. SAFTA: Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. Rest: rest of the world.

Asia, where countries such as Malaysia and Thailand have become important players in electronics and automobile production networks.

Explaining differences in subregional performance

In contrast, other subregions have participated much less in intraregional trade and investment. As table 4.1 shows, in 2012, South and South-West Asia accounted for only 13% of exports and 8.7% of imports, while North and Central Asia had even smaller shares at 7.2% and 8.9% of exports and imports, respectively. Intraregional FDI followed similar patterns. Meanwhile, intra-subregional trade and investment flows in these subregions have been dominated by two large countries, namely India in South and South-West Asia, and the Russian Federation in North and Central Asia.

Almost all countries in the ESCAP region have taken significant measures to liberalize their markets. The differences in subregional trade performance are therefore only partly explained by preferential and

regional trade and investment agreements. Other factors, particularly trade costs, significantly influence business decisions on where to invest and trade. This result is confirmed by the ESCAP-World Bank Trade Cost Database (see table 4.2).¹⁹ This database provides a comprehensive aggregate measure of all costs involved in trading goods internationally with another partner (that is, bilaterally) relative to those involved in trading goods domestically. It therefore captures not only international transport costs and tariffs but also other trade costs, such as the direct and indirect costs associated with cumbersome import or export procedures and inefficient logistics or payment services, as well as differences in currencies and languages.

According to the above-mentioned ESCAP-World Bank database, comprehensive trade costs between South Asian economies (SAARC-4: Bangladesh, India, Pakistan and Sri Lanka) and South-East Asian economies (ASEAN-4: Indonesia, Malaysia, Philippines and Thailand) are higher than those between either subregion and the European Union or the United States. Meanwhile, the data also suggest

Table 4.2. Intraregional and extraregional comprehensive trade costs (excluding tariff costs) in the Asian and Pacific region, 2006-2011

Region	ASEAN-4	East Asia-3	North and Central Asia	Pacific Islands Developing Economies	SAARC-4	Australia-New Zealand	EU-3
ASEAN-4	77 (10)						
East Asia-3	77 (8)	52 (-8)					
North and Central Asia	387 (6)	220 (-11)	141 (0)				
Pacific Islands Developing Economies	263 (31)	268 (36)	308 (17)	107 (-31)			
SAARC-4	124 (2)	124 (2)	270 (-10)	342 (13)	107 (4)		
Australia and New Zealand	99 (2)	91 (-2)	323 (-5)	137 (48)	144 (5)	54 (4)	
EU-3	111 (8)	86 (-4)	166 (-3)	327 (38)	114 (7)	110 (1)	46 (0)
USA	84 (13)	63 (-1)	189 (2)	228 (19)	107 (8)	97 (2)	67 (1)

Source: ESCAP-World Bank (2014).

Notes: Trade costs may be interpreted as tariff equivalents. Percentage changes in trade costs between 2000-2005 and 2006-2011 are in parentheses. ASEAN-4: Indonesia, Malaysia, Philippines and Thailand. East Asia-3: China, Japan and Republic of Korea. EU-3: France, Germany and United Kingdom of Great Britain and Northern Ireland. SAARC-4: Bangladesh, India, Pakistan and Sri Lanka. Pacific island developing economies: Fiji, Papua New Guinea, Tonga and Vanuatu. North and Central Asia: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan and Russian Federation.

that trade costs between Pacific island developing economies and all other subregions are significantly higher than those between other subregions, while trade costs between ASEAN-4 economies and North and Central Asia are also relatively high.

The analysis shows that trade costs within several of these subregions are also high. For example, trade costs within North and Central Asia, Pacific island developing economies and SAARC-4 economies are more than double the trade costs between China, Japan and the Republic of Korea. Bringing these costs down within subregions is therefore as important as addressing costs between subregions.

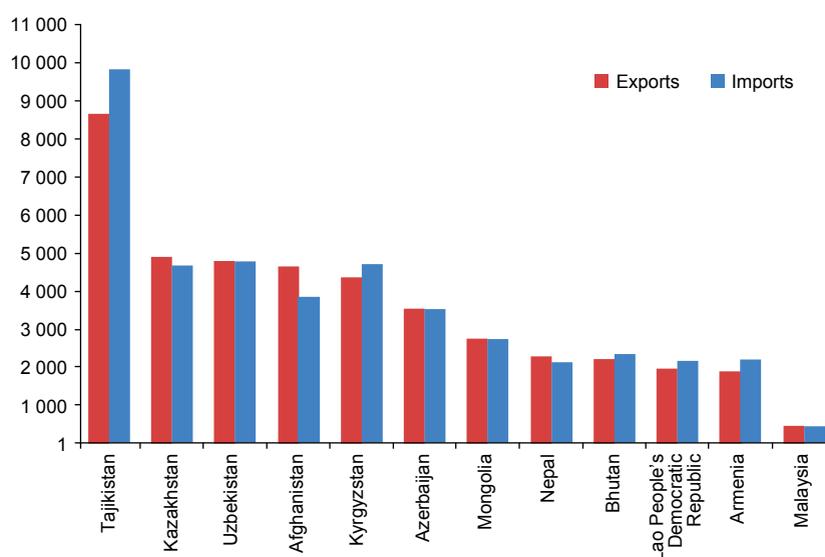
The role of trade and transport connectivity

Given that over 80% of global merchandise trade by volume is carried by sea transport, access to maritime shipping services has been an important factor in facilitating countries' participation in global and regional production networks. For example, China's participation in the global economy depended on reaching international markets, particularly in North

America, Europe and Japan. The Government's policies were strategically geared to supporting industries in the country's special economic zones, located first in coastal areas and then extended to other major cities and regions. Government investment in maritime and other transport infrastructures positively reinforced these policies, as they made it cheaper and faster to transport imports and exports between China's maritime ports and major production centres.²⁰

Conversely, landlocked developing countries remain at a competitive disadvantage. This is due to the extra costs and time goods spend in transit and at border crossings before reaching their nearest ports. Studies have found that international investors are discouraged from investing in landlocked developing countries because of the high costs and poor quality of transport services.²¹ For transport operators, long travel times imply fewer turnovers for a given vehicle over a given period, while cabotage restrictions and other domestic regulations result in most vehicles returning empty, thereby adding to transport costs. Thus, as figure 4.2 shows, in 2013 the average

Figure 4.2. Average cost of importing and exporting containers: comparison of ESCAP landlocked developing countries and Malaysia



Source: World Bank, *Doing Business 2014* (Washington, D.C., World Bank, 2014).

Notes: Cost in United States dollars of getting one container of exports or imports to or from the nearest port, excluding tariffs. Based on business surveys in each country's largest business centre.

cost of exporting goods from a landlocked country in the region was 8.5 times higher than it was from Malaysia, a country with one of the lowest trade costs, while the average cost of importation was 9.2 times higher.²²

Meanwhile, numerous studies have also identified the poor quality of transport infrastructure as a major barrier to trade in the region.²³ In South Asia, for example, the poor quality of roads, as well as missing sections and limited capacity near border crossings, reduces the connectivity of countries.²⁴ Thus, the quality of infrastructure, as well as availability, has been an important determinant of trade and transport connectivity.

Economies of scale in transport, competition and non-physical barriers to trade²⁵

The export-oriented growth of East and South-East Asian economies coincided with the rise of containerized transport. Containers revolutionized the way goods were packed and shipped. Not only did they reduce the costs of transporting goods and

make it economically viable to spread production and assembly activities across borders, they also enabled different modes of transport to be integrated into seamless systems by simplifying the transfer of freight between modes (see box 4.1).

Containerization also allowed the volume of freight to be expanded. The competitiveness of maritime transport is based on the principle of economies of scale: ships can carry more volume than other transport modes at lower costs per unit. As container ships grew in size, the average price of container transport fell, offsetting the increase in fuel prices.²⁶ The principle of economies of scale also partly explains the configuration of shipping liner services, which are typically based on hub-and-spoke systems: feeder ships from small ports carry goods to larger hub ports for consolidation, before large liner ships carry the freight to major consumption centres.

Thus, by investing in the development of container ports and shipping facilities, economies in East Asia and South-East Asia were able to take advantage of cheaper and more efficient modes of transport. This is reflected in the remarkable growth of container

Box 4.1. Containerization and the growth of international trade

The history of containerization holds several important lessons for the region's connectivity agenda. Improved interoperability between transport modes transformed the economic geography of manufacturing, as low shipping costs made it economically feasible to manufacture many more goods in one country and consume them in another. Combined with ICT connectivity, this also led to the evolution of just-in-time manufacturing processes, with further savings in logistics costs.

The impact of containers was rooted in the fundamental principle of standardization. As early as 1961, the International Organization for Standardization set standard sizes for all containers, which enabled the shipping industry to develop and invest in new types of ships, containers and port facilities, and to expand into such new businesses as logistics. A recent study which looked at the effects of containerization on international trade found that containerization accounted for a 790% rise in bilateral trade between 22 industrialized countries over a period of 20 years, leading *The Economist* magazine to conclude that "the container has been more of a driver of globalization than all trade agreements in the past 50 years taken together."

Thus, containers had far-reaching impacts on the evolution of international trade, manufacturing and logistics practices, demonstrating that relatively simple innovations can make a great difference to connectivity if all the relevant stakeholders agree to adopt them.

Source: "The humble hero," *Economist* (May 2013).

throughput in Asia's maritime ports: the container ports of China (including Hong Kong, China), Taiwan Province of China, Japan, the Republic of Korea (Busan) and Singapore between them accounted for more than 40% of the global total in 2012, while other ports in the region also experienced significant growth in container throughput between 2008 and 2012 (see figure 4.3).

This explains why it is difficult for shipping operators to offer regular shipping services for small countries such as small island developing States. Despite being linked to international maritime shipping routes, the small scale of operations, remoteness and geographic spread of islands, as well as various institutional and organizational constraints, contribute to the high cost of transport for these countries. For small island developing States in the Pacific, these issues are compounded by imbalanced cargo flows, low unit values for exports, irregular traffic volumes and low port capacity.²⁷

Finally, the experience of East Asia and South-East Asia also shows that the simplification and harmonization of documents involved in international

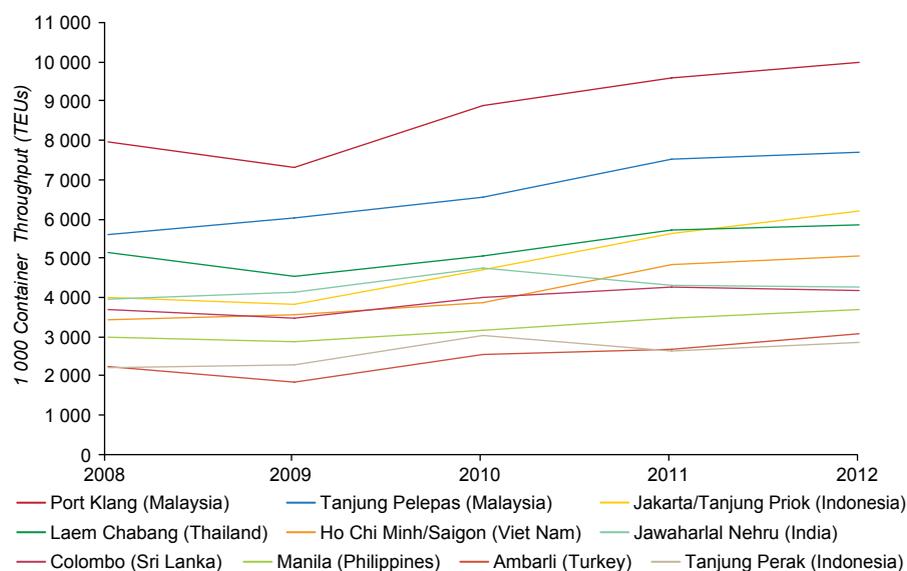
trade and transport helped businesses in these subregions to engage with each other. In fact, research done by ESCAP has found that many types of trade costs can be addressed through appropriate policy and regulatory reforms. For example, research suggests that 60-90% of trade costs are now derived from policy-related non-tariff costs, including costs at borders, the regulatory environment, maritime connectivity and services, trade procedures and currency fluctuations.²⁸ In other words, in addition to tariffs and "natural" trade costs derived from geographical and cultural factors, there are many other types of policy interventions that can help to bring down the costs of trade.

NEW DRIVERS OF GROWTH SHAPING DEVELOPMENT PATTERNS INTO THE FUTURE

Trade and transport connectivity remains a priority

The recent economic slowdown has exposed the region's vulnerability to fluctuations in the global

Figure 4.3. Growth in container throughput, selected ports in Asia



Source: Containerisation International, *The Containerisation International Yearbook*, various years (London, Informa plc). See *Containerisation International Yearbook 2013* for the most recent year.

Note: TEU: twenty-foot equivalent unit.

economy, in particular to spending and investment policies of the United States and of European countries.²⁹ Thus, attention is shifting to the development of domestic and regional markets as a means of stimulating growth and raising living standards, while creating new trade opportunities for the region's poorer and smaller countries.

Nevertheless, the spreading of growth opportunities from the region's more dynamic middle-income countries to their smaller and poorer neighbours cannot be taken for granted. Despite significant investment in transport infrastructure at the national level, cross-border and regional land-transport infrastructure networks remain underutilized for international trade. In many countries, the poor quality of infrastructure, lack of maintenance and unregulated use of roads by heavy vehicles also add to costs and reduce the efficiency of these networks.

At the same time, thanks to technological advances, trade and investment are now determined less by geographical distance and more by other factors, such as competitiveness, timeliness and security. This has led to a growing interest in improving "soft" infrastructure underpinning trade and transport, as well as other means of reducing logistics costs. Both ASEAN and the Asia-Pacific Economic Cooperation, for example, focus on trade and transport facilitation as part of their "institutional connectivity" agendas, while the Ninth World Trade Organization Ministerial Conference, held in Bali, Indonesia, from 3 to 6 December 2013, attempted to address the issue through its Agreement on Trade Facilitation.³⁰

Thus, one of the region's main priorities should be to enhance trade and transport connectivity. For this purpose, countries can capitalize on various technological advances. At the same time, trade and transport connectivity can be pursued only in conjunction with efforts to enhance other types of regional connectivity. As the region attempts to consolidate its position in the global economy, as well as to lessen the development gaps between countries, Governments need to consider ways to harness new drivers of growth.

ICT connectivity as an enabler and driver of growth

Continuous advances in ICT, in the form of mobile telecommunications and the Internet, are accelerating regional economic integration in Asia and the Pacific. ICT is both a new engine of economic growth in its own right and a valuable source of innovation across all economic sectors. Access to the Internet is transforming the conduct of business and the delivery of social services. Instant communications are becoming increasingly important in determining the efficiency of trade and services, including financial services, information and data management services, and transport and logistics services.

New forms of ICT connectivity are opening doors to knowledge generation and sharing

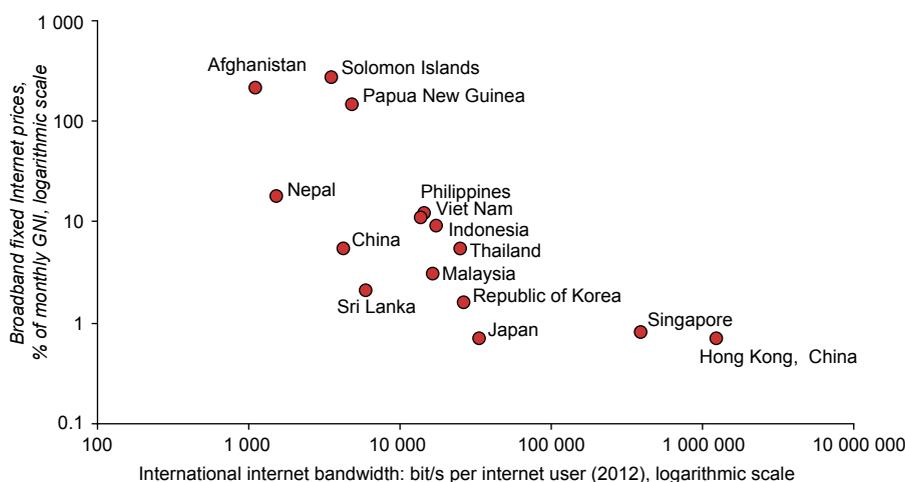
Meanwhile, the foremost tool for people-to-people connectivity across cities, countries and regions is the Internet. New forms of ICT connectivity are opening doors to knowledge generation and sharing: distance learning and broadband-enabled classrooms are increasing educational opportunities, bringing digital textbooks and teachers to remote cities and villages. Nowhere has this been more evident than in the Pacific, where islanders now have new opportunities to participate in tertiary education through distance learning courses (see box 5.8 in the next chapter). Through the Internet, knowledge networks and communities of practice are emerging in every field, ranging from scientific research platforms to disaster management networks to cultural interest groups.

However, Asia and the Pacific remains the most digitally divided region in the world. The high cost of international bandwidth has made Internet access unaffordable for much of the region. It is estimated that roughly 30% of people in Asia and the Pacific use the Internet, while only 7.4% are believed to have access to high-speed fixed broadband.³¹ Paradoxically, low levels of international bandwidth correlate with the high prices of basic monthly

broadband Internet packages in most developing economies in Asia and the Pacific (see figure 4.4). Particularly disadvantaged are least developed markets, such as Myanmar and the Lao People's Democratic Republic, where domestic user prices are more than 10 times higher than those of Singapore.

In 2014, ESCAP undertook a study to assess the contribution of broadband to economic growth and found that broadband penetration had a positive impact on growth in GDP per capita (see box 4.2). On average, a 10% growth in broadband penetration was found to be associated with a 1.34 percentage

Figure 4.4. Broadband indicators, selected Asian and Pacific economies, 2012



Sources: International Telecommunication Union, *Measuring the Information Society* (Geneva, ITU, 2013). International Internet bandwidth for Nepal: World Bank and International Telecommunication Union, *The Little Data Book on Information and Communication Technology 2013* (Washington, D.C., World Bank and ITU, 2013).

Box 4.2. Measuring the contribution of broadband to economic growth

In 2014, using the World Bank's methodology, ESCAP assessed the contribution of broadband to economic growth by replicating the cross-country growth model and data for 35 developing economies in Asia and the Pacific, from 1997 to 2012 (see annex I). Both growth models are based on the endogenous growth theory.

The results for the developing economies in the ESCAP region show that broadband penetration has a positive impact on growth in GDP per capita. On average in ESCAP developing countries, a 10% growth in broadband penetration was found to be associated with a 1.34 percentage point increase in GDP per capita growth. The estimated impact is strong for some countries, notably Kazakhstan, which experienced an increase of \$162.40 in per capita GDP, while for Turkey and Malaysia the corresponding figures are \$142.90 and \$139.80 respectively. Even such small island developing States as Maldives and Tonga experienced increases of \$88 and \$60.20, respectively.

Moreover, beyond certain thresholds of a critical mass in broadband penetration, the positive impacts of broadband access increase progressively, probably due to network externalities and productivity gains across various sectors of the economy.

Source: ESCAP calculations, based on C.Z-W. Qiang, C. Rossotto and K. Kimura, "Economic impacts of broadband", in *Information and Communications for Development 2009: Extending Reach and Increasing Impact* (Washington D.C., World Bank, 2009).

Notes: Results were statistically robust with a positive and significant coefficient at a 1% level. The R-squared was 0.4349, while the coefficient of broadband penetration impact on GDP growth between 1997 and 2012 was positive at 0.134.

point increase in GDP per capita growth for ESCAP developing countries, amounting to an average of \$49.60 in GDP per capita. ESCAP further estimated that a sizeable impact on GDP per capita can be achieved by increasing Internet access, as measured by target 4 of the Broadband Commission for Digital Development which states: “By 2015, Internet user penetration should reach 60% worldwide, 50% in developing countries and 15% in LDCs”.³²

Businesses and markets are driven and rewarded by the uptake of new technology and the speed at which information can be accessed. Similarly, individuals who can access broadband Internet are increasingly at an advantage over those who cannot. Thus, the “digital divide” is translating into new types of inequality that cut across geography, gender, age groups and levels of income and education. For example, even among the new “digital natives,” or those young adults who have interacted with digital technologies throughout their lives, there are enormous disparities between countries: in the Republic of Korea, 99.6% of young people have been active on the Internet for at least 5 years, while in Timor-Leste this figure is less than 1%.³³ This stark divide – young people in the region living in two vastly different digital worlds – has enormous implications for the future. The key challenge for countries in the region will be to develop physical infrastructure to strengthen ICT connectivity, as well as to make the Internet accessible for all.

Expanding the region’s trade in services

During the recent period of global and regional recovery, global trade in goods has been outpaced by global trade in services, particularly in developing economies. Since the early 2000s, the Asian and Pacific region has been performing better than the rest of the world. Between 2002 and 2012, its share of global exports of services rose from 23% to 28%, while its share of imports of services also rose, from 27% to 31%.³⁴

In particular, the region is becoming an increasingly important player in commercial services exports,

broadly categorized as transportation, travel and other commercial services. Notably, the export growth of the region’s developing economies is faster than that of the region’s developed economies.³⁵ Today, China; Hong Kong, China; India; the Republic of Korea; and Singapore are the region’s leading exporters of commercial services, while some non-traditional services exporters, such as Azerbaijan; Georgia; Kyrgyzstan; Macao, China; and Mongolia have increased their share in total Asian services exports.³⁶

The region’s most dynamic commercial services sector is travel, with growth driven by intraregional demand

Services, in particular so-called infrastructural services, have wide-reaching effects on other sectors. Recent research has led to changes in the way that services are estimated (in value added terms) and to a recalculation of the role of services in global trade, including in the production of goods.³⁷ This research suggests that services that support better connectivity, namely transport, logistics, communications, finance, and business and professional services facilitate the expansion of trade in goods, as well as travel and international tourism.³⁸

Meanwhile, the region’s most dynamic commercial services sector is travel, with growth driven by intraregional demand. In 2013, the Asian and Pacific region captured close to 23% of total global international tourist arrivals, with South-East Asia and South Asia leading the way in increasing their market share (see table 4.3). Improved air connectivity has supported this growth. According to statistics on airport passenger numbers, in 2012 the region registered nearly 1.69 billion passengers, an increase of 8% from that of the previous year. This number exceeds the total number of passengers arriving and leaving airports in Europe and North America, excluding transit passengers.³⁹

For many least developed countries, landlocked developing countries and small island developing

Table 4.3. International tourism trends, 1990-2012

	International tourist arrivals (millions)							Market share (per cent)	Average annual growth
	1990	1995	2000	2005	2010	2011	2012	2012	2005-2012
World	436	529	677	807	949	995	1 035	100	3.6
Asia & the Pacific	5.8	82.0	110.1	153.6	205.1	218.2	233.6	22.6	6.2
North-East Asia	26.4	41.3	58.3	85.9	111.5	115.8	122.8	11.9	5.2
South-East Asia	21.2	28.4	36.1	48.5	70.0	77.3	84.6	8.2	8.3
Oceania	5.2	8.1	9.6	11.0	11.6	11.7	12.1	1.2	1.4
South Asia	3.1	4.2	6.1	8.1	12.0	13.5	14.1	1.4	8.2

Source: World Tourism Organization, *Tourism Highlights: 2013 Edition* (Madrid, UNWTO, 2013).

States, tourism is a significant and growing source of foreign exchange. The formation of the proposed ASEAN Economic Community in 2015 is expected to provide the ASEAN region with an additional boost in tourism, especially in Cambodia, the Lao People's Democratic Republic, Myanmar and Viet Nam, the so-called CLMV economies. Tourism can also be seen as a form of cultural exchange that contributes to greater respect and understanding among the region's diverse peoples.

In the future, these service sectors will offer alternative sources of growth for countries that are distant from major regional production and consumption centres, including landlocked developing countries and small island developing States. However, as services increasingly rely on fast and reliable Internet and telecommunications systems, their growth will depend on the availability of broadband connectivity.

Energy connectivity and security

Asia and the Pacific remains heavily dependent on fossil fuels. In 2011, the region accounted for about 40% of global oil and gas consumption, and 70% of global coal consumption.⁴⁰ The situation is unlikely to change as the region's economic growth and rising affluence is resulting in a growing demand for energy resources. For example, the Asian Development Bank has estimated that, by 2035,⁴¹ the region will consume more than half of the world's supply of energy, with electricity consumption more than doubling between now and 2035. Because the region is heavily reliant on fossil fuels, its energy

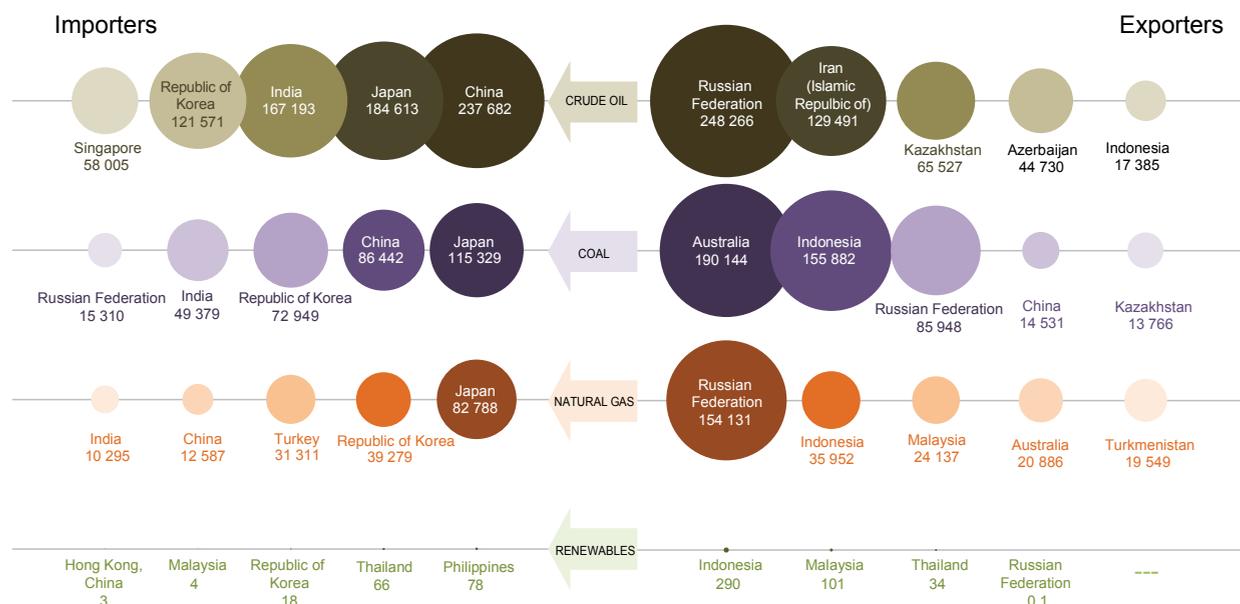
use is contributing to climate change, with its share of global carbon dioxide emissions increasing from 38% in 1990 to about 50% in 2008.⁴²

While several countries in the region are net exporters of energy, only a few countries satisfy their energy needs from their own resources (see figure 4.5). The region as a whole is a net importer of primary energy. Notably, some countries are both major importers and exporters of energy, suggesting that even energy-rich countries are dependent on others for energy security. Meanwhile, other countries, particularly in the Pacific, are heavily dependent on imports of fossil fuels for their energy needs. The uneven distribution of energy supplies results in significant differences in power generation costs.

Meanwhile, access to energy varies widely from country to country, and even within countries. As of 2010, there were still 628 million people in the region without access to electricity and 1.8 billion people using traditional biomass – a distinctive characteristic of poverty.⁴³ Populations with low electricity access are concentrated in South Asia and in the Pacific, where more than 70% of their populations still lack access to on-grid electricity.⁴⁴

Sustainable human development depends on adequate, reliable and affordable supplies of energy, that is, energy security. Without energy security, the region will miss significant growth opportunities, and the impact will be on both energy-poor and energy-rich countries. It is therefore critical to optimize the region's available resources.

Figure 4.5. Top five importers and exporters by energy resource in Asia and the Pacific, 2010 (ktoe)



Source: ESCAP, *Statistical Perspectives: Focus Areas for Realizing Enhanced Energy Security* (2013)

In this regard, many countries in the region, particularly those that have grown rapidly in recent years, are involved in cross-border initiatives to secure energy from other countries (see box 4.3). These initiatives can be divided into three main groups: infrastructural projects of inter-subregional

or subregional significance; infrastructural projects of bilateral significance; and maritime energy trade projects. Previous ESCAP studies have described the status of these initiatives, as well as longer-term plans for subregional and multi-country cooperation in energy.⁴⁵

Box 4.3. Growing energy demand fuels China's regional energy connectivity efforts

China's rapid economic growth is reflected in the country's swift expansion of energy production and consumption. In 2010, China's energy production (solid, liquid, gas and primary electricity) was estimated to account for about 36% of the region's total production, while its share of total regional consumption was estimated to account for about 41%. Although total energy imports into China amount to only approximately 4% of its total energy demand, the country depends on imports for approximately 50% of its liquid fuel (oil and petroleum products) and 10% of its gaseous fuel.

The Government has therefore followed a variety of strategies to improve energy connectivity. Starting with neighbouring countries, such as the Russian Federation, it has expanded its trade in energy to the Democratic People's Republic of Korea, the Lao People's Democratic Republic, Myanmar, Thailand and Viet Nam. On 21 May 2014, Gazprom in the Russian Federation and the China National Petroleum Corporation signed a 30-year contract on Russian natural gas supplies to China via the eastern route worth a total of \$400 billion. The deal involves the supply of 38 billion cubic metres of natural gas to China annually. A number of power trade agreements with Kazakhstan and Mongolia are under negotiation.

Box 4.3. (continued)

Meanwhile, the Government has also invested in the region's physical infrastructure, such as pipelines and power grids. For example, the surge in imported gaseous fuel in China is the result of the completion of the gas pipeline from Turkmenistan to China through Uzbekistan and Kazakhstan in 2009. Unlike oil and gas, power grid connection has also provided opportunities for China to export its electricity to other countries. For instance, Viet Nam has signed a power purchase agreement with China Southern Power Grid to purchase 200 million Kwh annually, while Thailand is negotiating with China to have joint investment in hydropower projects in Yunnan and expects to buy electricity from China. Like other rapidly growing economies, China has become one of the major drivers of the region's energy integration and interdependence.

Source:

United Nations Economic and Social Commission for Asia and the Pacific, *Statistical Perspectives: Focus Areas for Realizing Enhanced Energy Security*. Available from www.unescap.org/resources/statistical-perspectives-focus-areas-realizing-enhanced-energy-security

International Energy Agency, IEA World Energy Statistics and Balances database (2013). Available from www.oecd-ilibrary.org/energy/data/iea-world-energy-statistics-and-balances_enestats-data-en.

Financial Times, *China and Russia to sign \$400bn gas deal*. (21. May 2014) Available from www.ft.com/intl/cms/s/0/d9a8b800-e09a-11e3-9534-00144feabdc0.html

Xinhua New Net, "The National Report on Economic Cooperation between China and GMS" (in Chinese). (September 2013). Available from baike.baidu.com/view/7109510.htm

What is needed now is greater energy connectivity at the regional level, along with measures to improve energy efficiency and to adopt greener options. This would reduce the gaps between supply and demand. One important measure would be to transfer power from energy-rich or lower-cost power countries to energy-poor or high-cost power countries, which would help to bridge the growing energy divide and to ensure energy security for the region as a whole.

Responding to population dynamics

A defining feature of the Asian and Pacific region is its demographic heterogeneity. The population is changing on a scale and at a pace never before witnessed in human history: between 1950 and 2013, the region's population nearly tripled, from 1.5 billion to 4.3 billion people.⁴⁶ This unprecedented growth in the population is a manifestation of the demographic transition, where countries move from a regime of high mortality and high fertility to first low mortality and then low fertility.

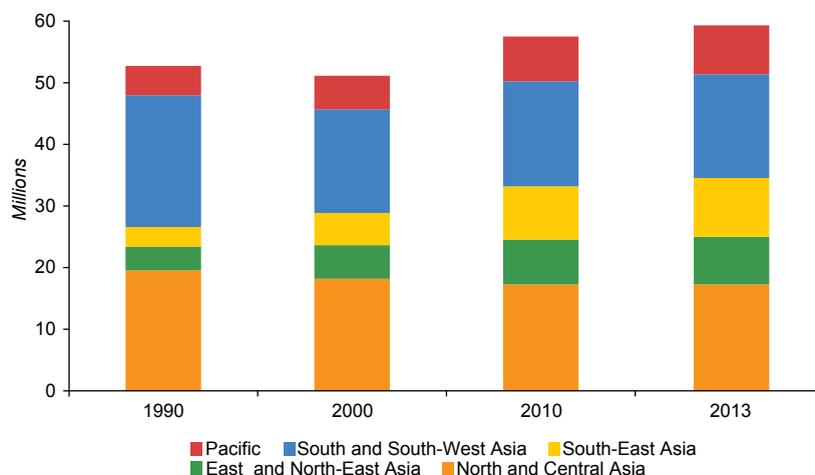
Since the 1970s, one implication of the demographic transition has been the increase in the proportion

of the population of working ages (ranging from 15 to 59 years in most countries but from 15 to 64 years in a few countries).⁴⁷ The number of young people in Asia and the Pacific recently peaked and is projected to decline to 717 million in 2014, with almost half (47%) living in South and South-West Asia.⁴⁸ At the same time, irrespective of their stage in the demographic transition, the populations of all countries in the region are currently ageing.

Today, the Asian and Pacific region is host to 59 million migrants – or one quarter of the world's total stock.⁴⁹ Figure 4.6 shows the distribution of migrants across ESCAP subregions, with the largest increases taking place in South-East Asia and the Pacific. In 2013, the largest number of migrants lived in the Russian Federation, followed by Australia, India, Pakistan and Thailand. Furthermore, international migrants now constitute more than one third of the population in economies such as Macao, China (59%); Brunei Darussalam (49%); Hong Kong, China (39%); and Singapore (43%).⁵⁰

The implications of these demographic trends are significant for the future economic and social development of the region, and point to the urgent need for

Figure 4.6. Stock of international migrants in the ESCAP region, selected years



Source: United Nations Department of Economic and Social Affairs, "Total international migrant stock" (New York, 2014). Available from <http://esa.un.org/unmigration/TIMSA2013/migrantstocks2013.htm?mtotals>.

effective policy responses. For example, countries in the earlier stages of the demographic transition need to expand education and employment opportunities for their growing numbers of young people, while countries that are rapidly ageing need seriously to consider ways to tap into the region's labour supply.

As the region's economies develop and integrate, it is also likely that the demand for migrants will become more diversified. An increasingly important global challenge will be to manage international labour migration in ways that protect migrants, while contributing to sustainable development in countries of origin as well as in host countries.⁵¹

Transitioning to knowledge-based economies

Global economies are increasingly based more on knowledge and information and less on physical inputs or natural resources. Knowledge is now recognized as one of the main sources of growth, driving the emergence of knowledge-intensive industries and increasing productivity across sectors. As the region becomes more connected, people in Asia and the Pacific should be able to access a wide variety of educational, training and income-

earning opportunities, thereby benefiting from the region's growing knowledge base.

With the continuing diversification of economic activities in countries in the region, the demand for more highly skilled workers is likely to increase. At the national level, this will require more investment in education, including professional and vocational training. The Asian and Pacific region is already home to many leading research institutions and universities, but countries can also take advantage of the new opportunities for tertiary education, as well as knowledge generation and sharing that are emerging from improved transport and ICT connectivity.

These forms of connectivity are also facilitating the sharing of knowledge and research between universities, researchers and industry. Some countries have successfully replicated the "Silicon Valley" model of firms with close links to universities, enabling them to benefit from knowledge spillovers generated by the universities. This is contributing to the development of high-tech clusters in some industries, such as computer software development. By strengthening regional knowledge-sharing networks, more countries could participate in different types of clusters.

REGIONAL STRATEGIES FOR STRENGTHENING CONNECTIVITY IN THE ESCAP REGION

Regional connectivity is thus multifaceted: the connectivity of one sector influences the connectivity of others. The experience of East Asian economies suggests that trade and transport connectivity are intricately intertwined, while ICT connectivity is becoming an integral part of all networks. This highlights the need for greater coordination, not only across borders but also across sectors. At the same time, there will be new opportunities for enhancing the quality of these networks by combining the various elements in different ways.

Developing regional networks in a coordinated way can help to spread the benefits from increasing regional connectivity more evenly across countries, particularly to the least developed countries, landlocked developing countries and small island developing States. Given the unique spatial contexts in which they are located, these countries need to draw on their current endowments and focus on the specific aspects of connectivity that are expected to become important in the future.

With this in mind, the next chapter describes the current status of the connectivity of trade and transport, ICT, energy and people-to-people networks, and outlines regional strategies for strengthening these critical networks. Chapter 6 emphasizes the importance of strengthening institutional coordination and cooperation to address the multifaceted and cross-sectoral nature of regional connectivity, and recommends ways of enhancing regional connectivity for shared prosperity. Chapter 7 concludes the present publication with a summary of key recommendations.

Annex I. Measuring the impact of broadband infrastructure on economic growth

Studies on the contribution of broadband infrastructure to economic growth and income have mostly focused

on developed countries, and even then due to the newness of the technology, the timespan of the data and research is not sufficient to refine methodologies and results. Notwithstanding this, the pervasiveness of these technologies and their ever growing potential for wealth creation and transformative development, has given rise to a flurry of studies seeking to better understand the contributions.

In 2009, the World Bank published a study which examined the economic impact of broadband, through a cross-country regression analysis based on the endogenous growth theory. The World Bank model reviewed 120 developing and developed countries. The oft quoted results show a positive impact of broadband penetration on GDP per capita growth rates, with “a 1.38 percentage point increase [in per capita GDP growth] for each 10% increase in [broadband] penetration”, in developing countries.⁵²

Additionally, other studies have shown that unless countries strive to dramatically increase their broadband deployment, the impacts will remain below their potential. One study shows that with low broadband access (under 20%) an increase of 10% in broadband penetration contributes 0.08% to GDP growth.⁵³ For countries with medium broadband access (20-30%), GDP increases by 0.14% and with broadband access higher than 30%, the effect 0.23%.

In 2014, ESCAP undertook a study using the World Bank’s methodology to assess the contribution of broadband on per capita GDP growth. ESCAP replicated the World Bank’s cross-country regression analysis for 35 developing economies of its region, using updated data i.e. data from 1997 - the year when ITU started collecting data on broadband penetration - up to 2012, the latest available. The equation used is as follows:

$$\text{GDP9712} = \text{B0} + \text{B1} \cdot \text{GDP97} + \text{B2} \cdot \text{Literacy97} + \text{B3} \cdot \text{TELPEN} + \text{B4} \cdot \text{IY9712} + \mu$$

Definition of Variables

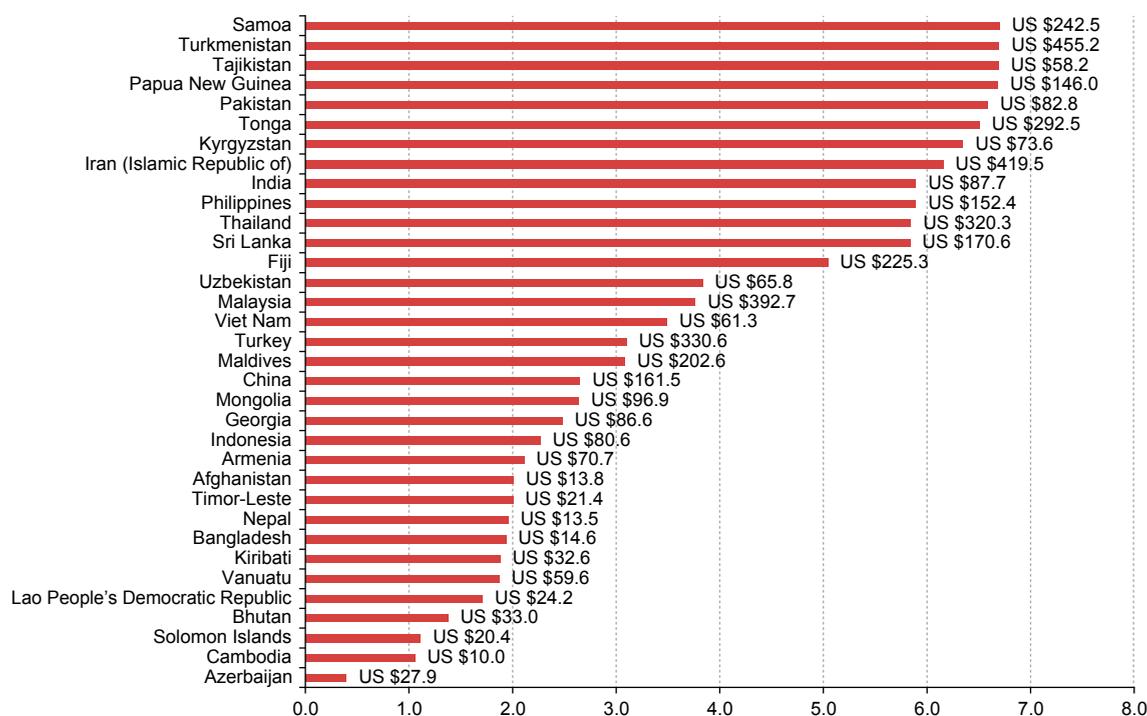
Dependent Variable	GDP9712	Average growth rate of real GDP per capita in US\$ over 1997-2012
Control Variable 1	GDP97	Level of real GDP per capita in 1997
Control Variable 2	Literacy97	Literacy rate in 1997
Control Variable 3	TELPEN - BBND_MOB - BBND_FIX	Average penetration of broadband between 1997 to 2012
Control Variable 4	IY9712	Average share of investment in GDP from 1997-2012

Source: ESCAP

Findings

1. The results for developing countries of the ESCAP region show that broadband penetration has a positive impact on growth in GDP per capita. On average, a 10% increase in broadband penetration is associated with a 1.34 percentage point increase in per capita GDP growth, which amounts to an additional \$49.6 in per capita GDP, on average, for ESCAP developing countries. The impact is strong for some countries, notably Kazakhstan which experiences an increase of \$162.4 in per capita GDP, while for Turkey and Malaysia the corresponding figures are \$142.9 and \$ 139.8 respectively. Even small island developing economies such as the Maldives and Tonga experience increases of \$88.0 and \$60.2 respectively.
2. Reaching the Broadband Commission target 4 on “Getting people online – by 2015” would translate in an even more sizeable impact on GDP per capita. For ESCAP developing countries

Impact of attaining Broadband Commission Target 4



Source: ESCAP staff calculations.

Note: Horizontal axis shows the gains in per capita GDP growth, associated with reaching Target 4 of the Broadband Commission, as percentage points. The figures next to the bars show the equivalent US\$.

on average, attaining the Broadband Commission Target 4 would yield an increase in per capita GDP of \$133.7 while, as shown in the figure, the impact is even larger for some countries such as Samoa and Turkmenistan. Even in a country such as Azerbaijan that already has a relatively high broadband penetration of 47%, reaching the target would add \$27.9 to per capita GDP. China, which has a penetration rate of 30% would experience an increase in per capita GDP of \$161.5. Fiji, India, the Islamic Republic of Iran, Kyrgyzstan, Pakistan, Papua New Guinea, Philippines, Samoa, Sri Lanka, Tajikistan, Thailand, Tonga, and Turkmenistan would see per capita GDP growth rates increase by more than 5 percentage points.

3. The above results could have a downward bias, due to the relatively low current penetration levels of broadband. Nevertheless, they suggest that broadband penetration has growth benefits. It should also be noted that because demand for broadband increases with wealth, penetration rates are potentially endogenous, possibly overestimating the results.

Policy implications

Beyond certain thresholds of a critical mass in broadband penetration, the positive impacts of broadband access increase progressively, due to network externalities, productivity gains and increases in human knowledge and skills that leave no sector of the economy untouched. Consequently, this should encourage policymakers to prioritize investments in broadband infrastructure deployment at the national and regional levels, and make a big push towards the attainment of the targets set out by the Broadband Commission. In unserved or underserved areas, public-private partnerships would enhance the sustainability of investments and ensure that the goal of affordable and reliable connectivity available to all, at all times, is attained.

Deeper assessment of the linkage between ICT and variables such as market structure, competition and prices together with other measurable aspects

of prosperity (income, employment, cost of living) would require more data, including longer time series, that would allow the establishment of multiple data points for each economy in an endogenous growth regression. The Partnership on Measuring ICT for Development, of which ESCAP is a member, would need stepped up support so that it is in a position to continue leading the global efforts in producing more and better data on ICT.

Endnotes

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REGIONAL STRATEGIES FOR STRENGTHENING REGIONAL CONNECTIVITY

5

Regional connectivity requires integrating different types of regional networks, ranging from infrastructure networks to those concerned with knowledge-sharing. As they evolve, these networks are becoming more complex and interdependent. Developing regional networks in a strategic and coordinated way will spread the benefits more evenly across Asia and the Pacific, particularly to the least developed countries, landlocked developing countries and small island developing States. Given the unique spatial contexts in which they are situated, these countries will require different approaches and modalities for strengthening regional connectivity.

One of the most important contributions to economic growth is extensive and efficient infrastructure – particularly systems for transport, energy and communications. Investment in physical infrastructure networks generally results in net income gains at both national and local levels.¹ This is especially true for countries that depend heavily on external trade. Linking national investments to regional priorities in an integrated manner can expand the benefits to a wider group of countries. Regional networks can thus be seen as a type of “regional public good”, whereby the collective benefit for the region exceeds the cost of the individual sections of the network.

Meanwhile, across Asia and the Pacific, countries are exploring new forms of people-to-people connectivity. With the extension of transportation links, people in the Asian and Pacific region are travelling more quickly to more places and at lower costs than ever before. Many are labour migrants travelling abroad to earn money to send home as remittances, providing income and employment in both countries of origin and countries of destination. Others are travelling as academics or students and are contributing to the development of the region’s knowledge economies. Meanwhile, regional business networks and tourist flows are growing rapidly, thanks largely to the expansion of aviation links.

The contribution of these various networks to economic and social development depends on the policy, legal, regulatory and institutional frameworks in which they are located. These frameworks can be considered as “soft” infrastructure and are as important in determining the effectiveness of networks as physical capacities.²

In the past, the development of “hard” and “soft” infrastructure was by and large delegated across authorities that used different parameters and methodologies to analyse and “cost” investments. However, it is evident that “hard” and “soft” infrastructures are fundamentally complementary, and that multifaceted approaches achieve better outcomes.

At the same time, it is becoming evident that connectivity is multisectoral, with the connectivity of one sector influencing the connectivity of others. This interdependence demands greater cross-sectoral coordination.

One final challenge is to extend these networks across borders. There are already examples of cooperative approaches that have enhanced regional connectivity, including both formal arrangements, such as intergovernmental agreements, and less formal approaches, such as the adoption of common principles or codes of practices. However, the benefits of either approach have yet to be fully realized due to weaknesses in institutional collaboration and in capacity for implementation.

The fact that countries in the region are at different stages of development is an opportunity for countries to configure new infrastructure that makes best use of the natural differences between countries and contributes to more sustainable and inclusive forms of development. The future of regional connectivity depends on how closely they can work together to strengthen networks in four critical areas: trade and transport connectivity; information and communications technology (ICT) connectivity; energy connectivity; and people-to-people connectivity.

TRADE AND TRANSPORT CONNECTIVITY

The status of trade and transport connectivity in the region

As noted in the previous chapter, the expansion of trade depends on having appropriate transport infrastructure and an enabling environment for private businesses to engage in trade. Trade connectivity and transport connectivity are thus two sides of the same coin, and both “hard” and “soft” infrastructures need to be improved to enhance access to global and regional markets.

From the perspective of physical transport infrastructure, some countries in the Asian and Pacific

region have made major strides in expanding their road networks, with an estimated 300,000 km of roads being added every year over the past decade.³ Furthermore, there has been tangible progress in the development of the region's railway networks. Australia, China, India, the Islamic Republic of Iran, Japan, the Republic of Korea, the Russian Federation and Turkey have expanded and upgraded their railway networks, while in Mongolia and Turkmenistan, new tracks are being laid to carry mineral exports to international markets.

However, there are still significant gaps in transport infrastructure connectivity. One study estimated that, by 2020, developing Asian countries could gain 6% of real income, or close to \$1 trillion, if the estimated transport investment needs in Asia were met and appropriate infrastructure were constructed.⁴ What is needed in particular are better linkages from landlocked developing countries and least developed countries to the region's maritime ports and airports, as well as the upgrading, integration and operationalization of regional transport networks.

Under the auspices of ESCAP, member States have formulated a number of regional strategies on trade and transport connectivity. The Regional Action Programme for Transport Development in Asia and the Pacific, phase II (2012-2016), for example, identifies 10 thematic areas for developing an integrated, intermodal, international transport and logistics system in the ESCAP region.⁵ Meanwhile, ESCAP is promoting trade facilitation through a variety of channels, including the United Nations Network of Experts for Paperless Trade in Asia and the Pacific (UNNEXT).⁶ Within the framework of these initiatives, countries should prioritize the issues described below to strengthen trade and transport connectivity in the region.

Upgrading and integration of regional transport networks

Many of the principal regional approaches to infrastructure have been facilitated by ESCAP. In particular, these led to intergovernmental agreements

on the Asian Highway and Trans-Asian Railway networks – which today comprise 143,000 km of roads and highways, and 117,500 km of rail routes of international importance, including approximately 11,000 km of sections that have yet to be constructed, that is, the so-called “missing links”.⁷ Given that the road transport sector carries the majority of overland freight, the Asian Highway Network is especially important for carrying bilateral trade between contiguous countries.

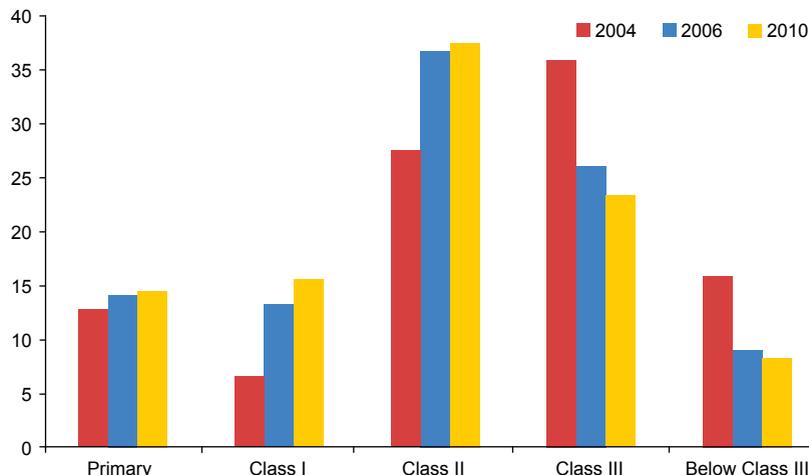
The establishment of minimum standards under the Intergovernmental Agreement on the Asian Highway Network has helped countries to raise progressively the quality of their major international highways (see figure 5.1). However, there is still scope for upgrading the quality of the network, particularly from below class III to class III. With almost two thirds of road sections under class III found in Afghanistan, Mongolia, Myanmar, Pakistan and Tajikistan, efforts to upgrade the Asian Highway Network should focus on these countries.⁸

*Increasing the share of rail
for freight transport would bring
substantial benefits*

Furthermore, all countries should look at ways to better manage and maintain their road networks. While ESCAP estimates that the cost of upgrading the Asian Highway Network is approximately \$36 billion in total, the cost of maintaining the existing network is also expected to become as costly as building new infrastructure.⁹ Although many countries have improved their maintenance regimes over the past decade, national budgets tend to under-allocate for road maintenance, increasing the long-run costs to Governments as well as vehicle operating costs for road users.

Meanwhile, there is an urgent need for countries in the region to increase the modal share of other modes of transport, particularly for freight. As figure 5.2 shows, the Trans-Asian Railway network connects most countries of continental Asia to Europe and

Figure 5.1. Progress in upgrading routes of the Asian Highway Network, 2004-2010



Source: United Nations Economic and Social Commission for Asia and the Pacific, *Review of Developments in Transport in Asia and the Pacific*. ST/ESCAP/2627.

the Middle East, with plans proceeding for the construction of some of the remaining 11,000 km of “missing links”. Despite progress, however, the region’s extensive railway network is still underutilized for international freight movements.

Increasing the share of railways in the region would bring substantial benefits in many respects. Freight railways have an operating cost advantage over road transport for long distances (typically greater than 500 km), while often being competitive for medium distances (300-500 km). This is particularly true for heavy industry and where annual transport volumes are high. It is also well documented that railways offer a more environmentally sustainable mode of transport for long distances – one estimate found that carbon dioxide emissions by rail are almost eight times less than they are for trucks and four times less than for inland waterways (barges).¹⁰

To realize the advantages of railways, countries in the region need to improve intermodal connectivity between the various networks. The lack of efficient and properly equipped facilities for transferring goods between the region’s road and railway networks is a major hindrance to promoting a modal shift to rail. Trucks can pick up a container at a factory warehouse and deliver it to the port, but if railways

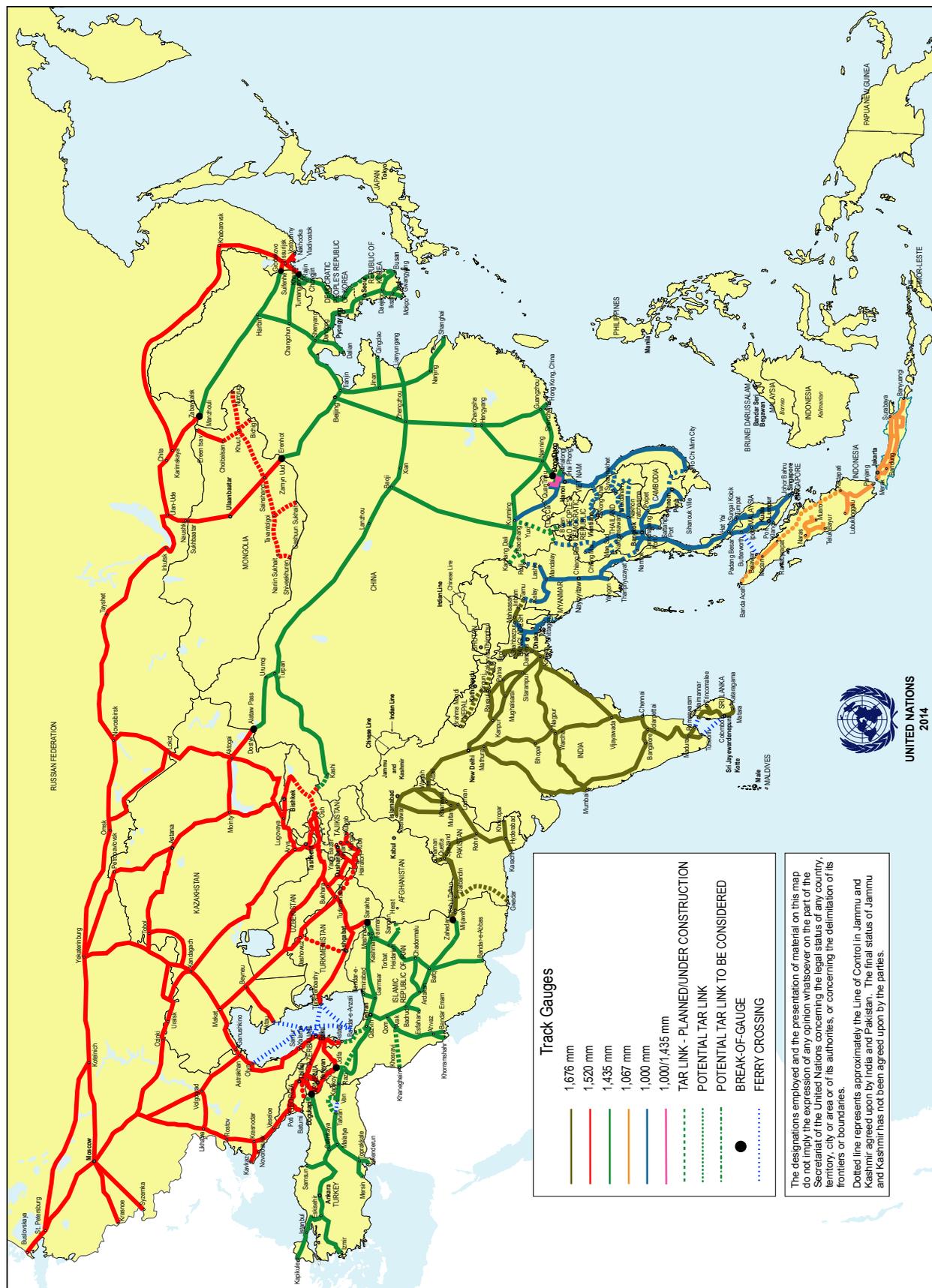
are to participate in container haulage, they must have physical access to an intermodal transfer terminal.

Thus, there is an urgent need for greater investment in intermodal facilities, such as dry ports or inland container depots – at strategic locations where freight can be switched from one form of transport to another without delay or damage.¹¹ With the appropriate control authorities present, dry ports can also act as “extended gates” for seaports, since they are better able to control and adjust transport flows.¹² In this regard, the Intergovernmental Agreement on Dry Ports, adopted in 2013, offers a useful framework for countries to develop dry ports in the region.¹³

Enhancing cooperation at border crossings

Another major impediment to trade and transport connectivity is the presence of multiple “choke points,” particularly at borders. Border agencies are required to maintain a fine balance: on one hand, they have to facilitate trade and transport; on the other, they have to assert regulatory controls. They have to combat, for example, the smuggling of illicit, counterfeit and environmentally sensitive goods, money laundering and human trafficking, and more recently, they have had to control

Figure 5.2. Current status of the Trans-Asian Railway network, 2014



Source: ESCAP secretariat.

health pandemics, such as that caused by avian influenza. This requires a large and diverse number of government authorities and agencies, including immigration, police, customs, quarantine, sanitary and phytosanitary inspection, and transport.

These controls are important, but they add to the cost, time and risk involved in moving freight by land. For example, the International Road Transport Union, through its New Eurasian Land Transport Initiative, found that border waiting times account for about 40% of time lost during transport, and that such a situation encourages corrupt practices that can account for 30% of transport costs.¹⁴ Such costs inhibit the expansion of trade in the region and undermine other important initiatives, such as tariff reductions.

Many countries in the region are already taking steps to enhance cooperation between their border

agencies, mostly on a bilateral basis. Kazakhstan and Kyrgyzstan, for example, began joint customs control and a single-stop inspection of vehicles, goods and passengers at border crossings in August 2012,¹⁵ while Georgia and Turkey also established joint customs control. In November 2011, China and Mongolia introduced the pilot implementation of a unified customs manifest. Within one year, the customs authorities processed 180,000 unified customs manifests, and the pilot was extended to other major border crossings between the two countries.¹⁶

The next step is to integrate check post facilities at all international border crossings, starting with those along the Asian Highway and Trans-Asian Railway networks. For example, India has begun implementing integrated check post (ICP) facilities with its neighbours starting with the Attari border check post with Pakistan (see box 5.1). Early reports

Box 5.1. Integrated check post at Attari, India-Pakistan border

In order to facilitate trade with neighbouring countries, the Government of India has launched an integrated check post (ICP) initiative. ICPs are expected to serve as single window facilities covering customs, immigration security and warehousing services. One ICP has been operational since 2012 at Attari on the India-Pakistan border.

Previously, cargo from Delhi to Lahore, Pakistan, was sent in four hops via the Nhava Sheva port in Maharashtra, India, by sea to Dubai, United Arab Emirates, where cargo was trans-shipped and transported to Karachi, Pakistan, and then from Karachi to Lahore over land. The shipment would thus take about 30 days to reach its destination. With the Attari-Wagah land route, the journey has been reduced to three days.

During 2012/13, the first year of operation of the ICP at Attari, imports grew by 81%, and exports registered an increase of 122% in value terms. Meanwhile, the number of trucks carrying export cargo from India through Attari increased from 3,882 to 41,248, while the number carrying import cargo increased from 19,087 to 33,599. This led to a 166% increase in customs revenue. In addition, it is reported that the incremental revenue during the post-project period recovered almost one third of the investment in one year, as taxes were also collected from services provided commercially. Land prices in the area have gone up substantially and a variety of organized commercial activities have sprung up on both sides of the border.

India is planning to open another 12 ICPs with various neighbours: 4 on the India-Nepal border, 1 on the India-Myanmar border and 7 on the India-Bangladesh border. Notably, the opening of the ICP at the border of Raxaul (India) and Birgunj (Nepal), which are linked by both road and rail, means that the ICP is integrated with both networks.

Source: ESCAP secretariat.

show that this has led to a significant increase in the number of vehicles and goods crossing the border and a corresponding increase in customs revenues. India's ICPs also demonstrate another opportunity for enhancing connectivity in the region – the use of ICT to facilitate trade and transport.

Harnessing ICT connectivity for trade and transport facilitation

The greater use of automated equipment and data collection systems is transforming the way border

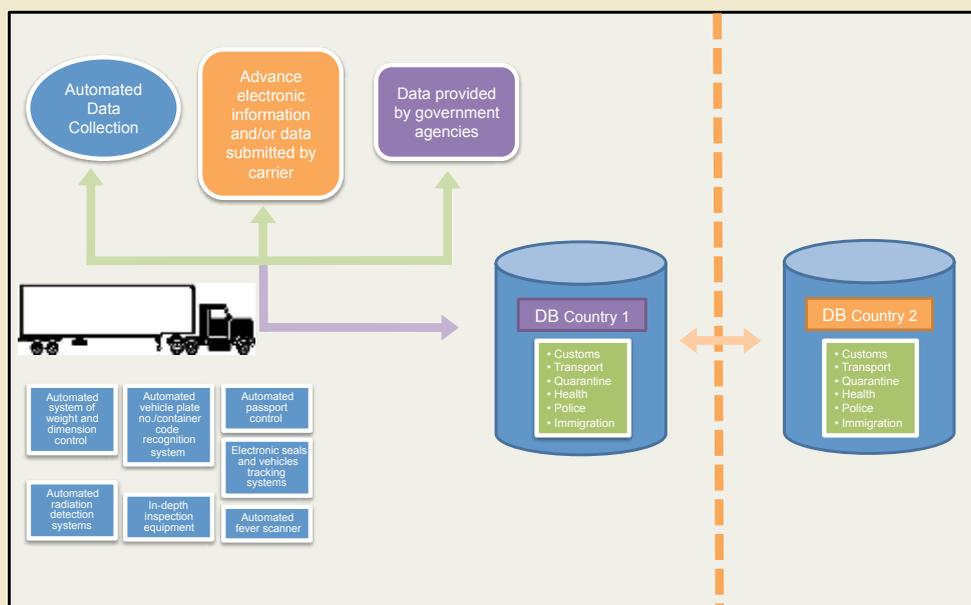
agencies operate. Automated data collection systems reduce overlaps when the same information is collected by more than one agency – and on both sides of the border. ESCAP has developed several models to demonstrate how automated equipment and new technologies such as radio frequency identification and global positioning system can help in managing cross-border movements of trade and transport more efficiently (see box 5.2).

However, the real breakthrough in Asia's overland trade and transport connectivity will come from

Box 5.2. ICT applications for smooth cross-border transport

As part of its efforts to promote efficient cross-border transport, ESCAP has developed several models demonstrating how ICT applications can be adapted and applied by countries to meet their specific requirements. For example, the Border Crossing Management Information System shows how information from automated equipment, advanced information from carriers and data provided by government agencies can be connected to the central border crossing database of a country, and how this information could then be fed to the various border agencies. Such a system could be used in conjunction with various automated equipment and integrated into single window initiatives. Importantly, as volumes of trade and traffic grow, the system could also be scaled up without large additional investments.

Model on integrated controls at border crossings

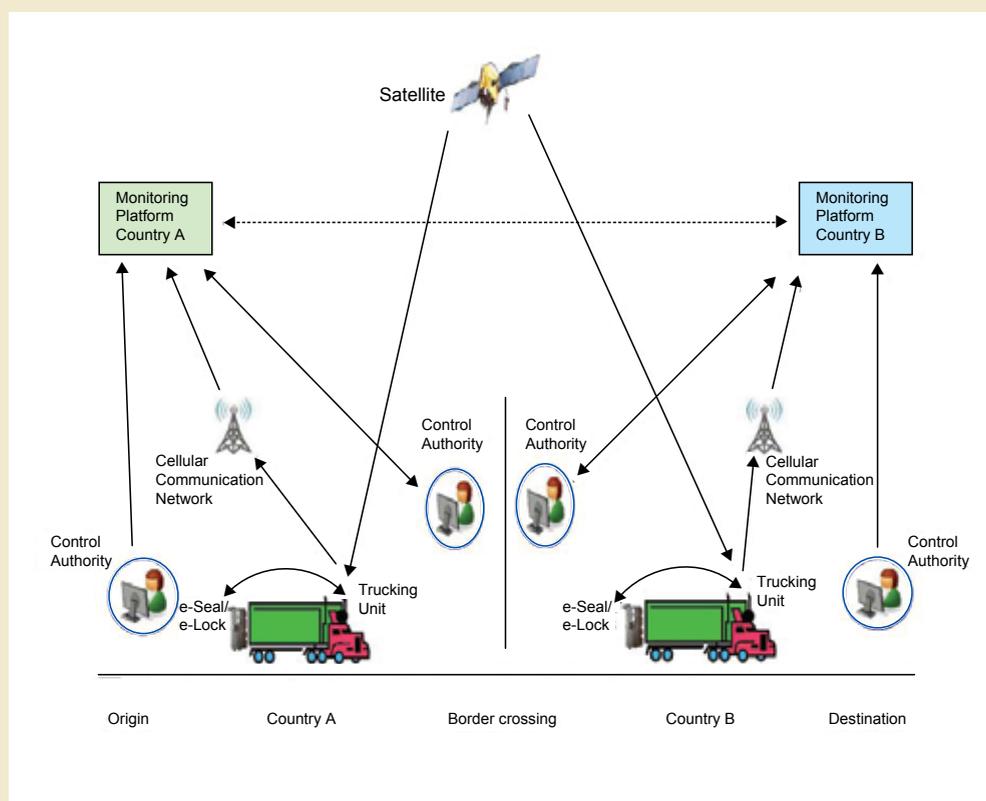


Source: Adapted from United Nations Economic and Social Commission for Asia and the Pacific, "Model on Integrated Controls at Border Crossings" (2012). Available from <http://www.unescap.org/resources/model-integrated-controls-border-crossings>.

Box 5.2. (continued)

Another type of model is the Secure Cross-border Transport Model, which provides a conceptual and standard basis for the design of a cross-border vehicle monitoring system using new technologies such as ICT, satellite positioning and electronic seals. The model prescribes standardized components, and their interaction and institutional requirements.

Secure Cross-border Transport Model



Source: ESCAP, Secure Cross Border Transport Model (2012). Available from www.unescap.org/resources/secure-cross-border-transport-model.

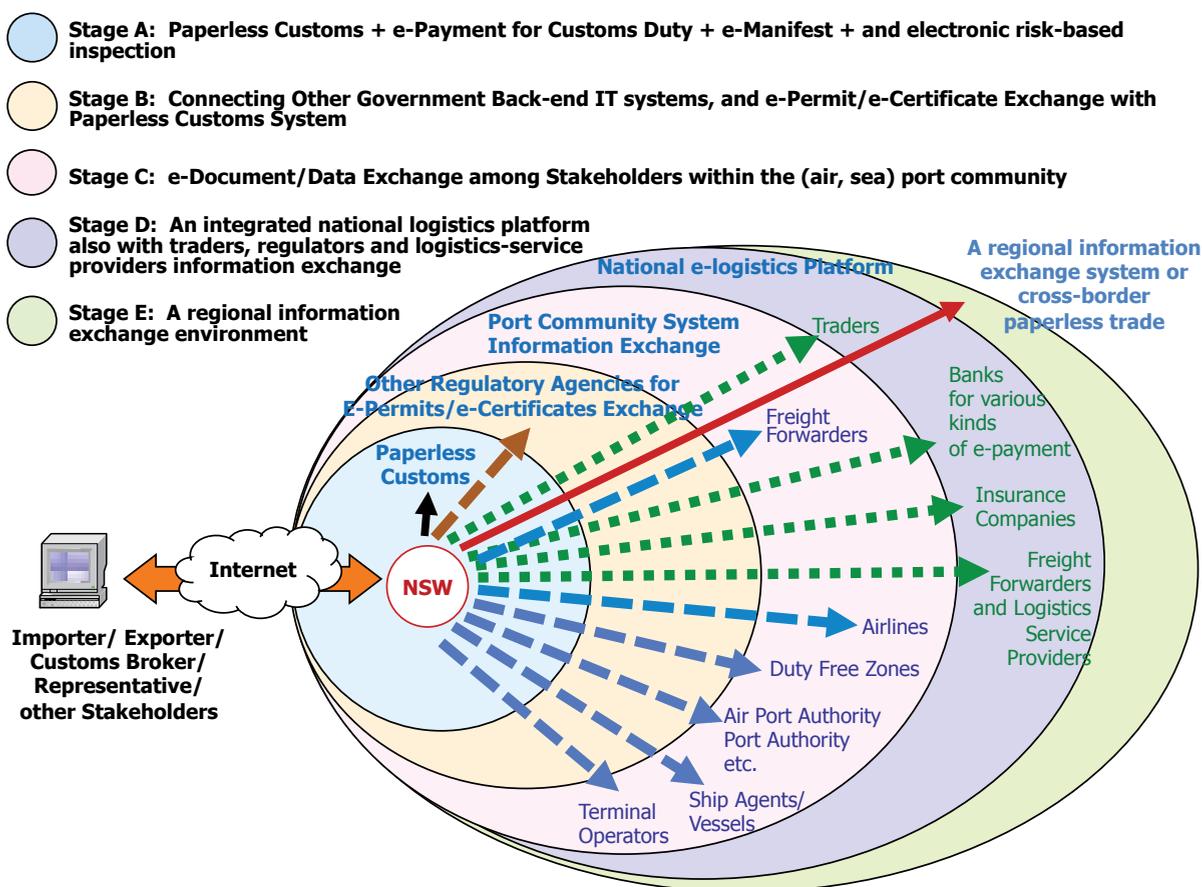
This model demonstrates that the integrated use of ICT can secure and facilitate trade and transport, while taking care of the concerns of control authorities. A vehicle tracking system based on this model can give control authorities the confidence they need to open up more land routes for international trade and transport, while enabling transport operators to manage their operations efficiently.

Source: ESCAP secretariat. Further details of these and other models are available on the ESCAP website at www.unescap.org/our-work/transport/transport-facilitation-and-connecting-subregional-transport-networks/resources.

combining trade, transport and ICT applications along the whole trade process. As shown in the “single window roadmap,” developed by ESCAP and the Economic Commission for Europe in collaboration with UNNEXt (see figure 5.3), most countries have

begun developing their single windows by introducing electronic customs declaration systems. The next step is to integrate other government agencies and their associated document requirements into a national single window environment.¹⁷

Figure 5.3. A single window road map in five evolutionary stages



Source: ESCAP and United Nations Economic Commission for Europe, *Single Window Planning and Implementation Guide*. ECE/TRADE/404.

Today, nearly all countries in the region have some form of automated customs system in place at key border checkpoints, and more than half are developing single windows to enable traders to submit all required information to government agencies at one time and place in electronic form. Notably, the Association of Southeast Asian Nations (ASEAN) has taken steps to develop a regional ASEAN Single Window. The initiative, signed in December 2005, has made some progress: as of March 2013, the exchange of the intra-ASEAN certificate of origin and customs declaration document was tested in a scaled-down ASEAN Single-Window Pilot Project.

Because most ICT applications require some degree of standardization for data transfer, the introduction of

electronic platforms for trade and transport facilitation also brings with it new opportunities for countries to simplify and standardize trade documents, as well as processes. These measures will greatly boost connectivity by reducing the time for border clearance and enabling automatic risk analysis, which helps to prevent fraud and non-compliance, as well as to boost revenues for customs authorities.

The development of paperless trade also sets the stage for the transition to electronic logistics, or “e-logistics.” E-logistics comprises a set of communications, computing and collaborative technologies that enables the electronic exchange of data, knowledge and information between supply chain partners. The system eventually enables

traders and domestic logistics service providers to interact and to track the progress of applications and registrations with government agencies.¹⁸ The further integration of paperless trade and transport systems, such as regulatory single windows, port community systems, e-payment or banking systems and national e-logistics systems, can ultimately give rise to national integrated paperless supply-chain platforms – and eventually to integrated systems along an entire chain of import-export operations.¹⁹

This is the ultimate target for regional cross-border paperless trade initiatives, such as the regional arrangements for cross-border paperless trade facilitation of ESCAP (see box 5.3) and the ASEAN Single Window. Initiatives led by the private sector, such as the Pan Asian E-commerce Alliance, which bring together single window operators from several countries, also show promise.²⁰

Developing competitive regional transport and logistics services

The cost and quality of transport services are affected by the level of competition in the transport

sector. Research conducted in landlocked developing countries suggests that government regulations that protect domestic road-transport operators can contribute to rent-seeking monopolistic or oligopolistic behaviour, adding to the already high transport costs for traders in these countries.²¹

Experiences from the maritime and aviation sectors show that deregulating transport services can increase competition and reduce prices paid by customers. For example, the liberalization of the aviation sector in South-East Asia and the Pacific helped to lower airfares and provided a boost to tourism, a critical sector for many countries (see box 5.4).

The issue of deregulation is difficult to tackle, especially if it involves the opening of domestic markets to foreign operators. Currently, almost all countries in the ESCAP region restrict the entry of foreign transport service providers in their domestic markets. These barriers are partly responsible for the high transport costs in the region and they contribute to delays at land border crossings due to the time spent stuffing and unstuffing cargo between vehicles.

Box 5.3. Towards cross-border paperless trade in Asia and the Pacific

Recognizing the potential benefits from conducting trade transactions using electronic rather than paper-based data and documentation, a number of countries in the Asian and Pacific region began implementing paperless trade systems in the late 1990s and early 2000s. However, most of these initiatives focused on information exchange between stakeholders domestically, while facilitating international trade inherently requires trade information to flow across borders along international supply chains. As a result, the flow of electronic trade information generated domestically faces both technical and legal barriers beyond the border, turning traders to conventional paper-based trade practices and reducing the overall benefits from paperless trade systems.

To overcome these barriers, the Commission adopted resolution 68/3 on enabling paperless trade and the cross-border recognition of electronic data and documents for inclusive and sustainable intraregional trade facilitation. A study conducted by the secretariat in consultation with national focal points and experts from UNNExT recommended that an intergovernmental agreement be developed to provide willing countries with an effective and long-term framework to jointly develop and implement cross-border paperless trade facilitation. The draft text of this arrangement is under negotiation and will be further revised over the course of 2014.

Source: United Nations Economic and Social Commission for Asia and the Pacific, *Enhancing Regional Connectivity: Towards a Regional Arrangement for the Facilitation of Cross-border Paperless Trade*. ST/ESCAP/2684. Available from www.unescap.org/sites/default/files/0%20-%20Full%20Report_35.pdf

Box 5.4. Impact of deregulation on aviation in the Pacific

In Vanuatu and Samoa in the Pacific, the deregulation of the aviation sector has helped to improve regional transportation connectivity and to increase flows of tourists. In Vanuatu, Air Vanuatu was the national carrier, and in the late 1990s and early 2000s it suffered losses. Once the aviation sector in Vanuatu was deregulated in 2004, and low-budget carriers such as Pacific Blue were permitted to enter Vanuatu's skies, passenger traffic between Australia and Vanuatu grew by 19%. Deregulation has allowed fares to drop, increased visitor arrivals and increased airline choices for passengers. Vanuatu is now served by five international airlines.

In Samoa, the nationally controlled carrier – Polynesian Airlines – suffered heavy losses during 2001-2004, and was not financially viable. In response, the Government reformed the aviation sector. It restructured Polynesian Airlines for domestic routes and ventured into a partnership with Virgin Australia. Gains in the tourism sector in Samoa have been attributed to this joint venture.

In both countries, the reforms resulted in more flights to regional hubs such as Australia, Fiji and New Zealand, and more competitive fares. In addition, the restructured national airlines are in better financial positions, reducing the burden on public finances.

Source: Taumoepeau and Kissling, *Economic sustainability of airlines in the Pacific*. Presented at the 31st Australasian Transport Research Forum (2008). Available from www.atrf.info/papers/2008/2008_Taumoepeau_Kissling.pdf

However, countries have begun to take steps towards the development of a regional market for transport services and logistics by allowing foreign transport operators to enter or to transit their territories along selected routes. Several countries have established bilateral or trilateral arrangements to allow cross-border movements by road without the need for transport permits. There are such arrangements between Armenia, the Islamic Republic of Iran and the Russian Federation, and between the Lao People's Democratic Republic, Thailand and Viet Nam. China has also taken significant steps to open transport routes through major border crossings with Mongolia and Viet Nam.²²

Progress can also be seen among member States of the Shanghai Cooperation Organization, which are finalizing a draft agreement on facilitating international road transport.²³ Initially, about 15,500 km of roads are to be opened under this agreement, including a road from Lianyungang, China, to Saint Petersburg, Russian Federation. Also under the agreement, two seaports in China and the Russian Federation

will eventually be accessible for transit traffic from Central Asia.

In the case of railways, cross-border movements are often hampered by institutional differences in operating rules, tariff structures and licensing requirements for train drivers and crew. However, there are also examples of how countries can cooperate to provide regular and competitive international railway services. These include the long-running Trans-Siberian Railway linking the Russian Federation, Mongolia and China to the Far East and Europe; the Economic Cooperation Organization container block train between Istanbul (Turkey), Tehran and Islamabad; and the Chongqing-Xinjiang-Europe railway service between China and Germany via Kazakhstan, the Russian Federation, Belarus and Poland.²⁴ ESCAP is now developing a draft regional strategic framework for the facilitation of rail in the region, which will identify and address the current obstacles to cross-border rail freight movements.

INFORMATION AND COMMUNICATIONS TECHNOLOGY CONNECTIVITY

The evolution of the “digital divide” in Asia and the Pacific

Economies across the world have become increasingly reliant on ICT, including the Internet and mobile telecommunications. These inputs can increase the productivity of both labour and capital, and have become integral parts of international trade and logistics services – linking producers to consumers across borders and providing instant market information.

The ability to take advantage of this technology depends on bandwidth, which affects the speed of transmission – akin to the width of highways in road transport. This depends to a certain extent on physical infrastructure, particularly on cable and sometimes satellite services. Although the infrastructure has been expanding rapidly in Asia and the Pacific, bandwidth is still far lower than it is in North America or in Europe (see figure 5.4).

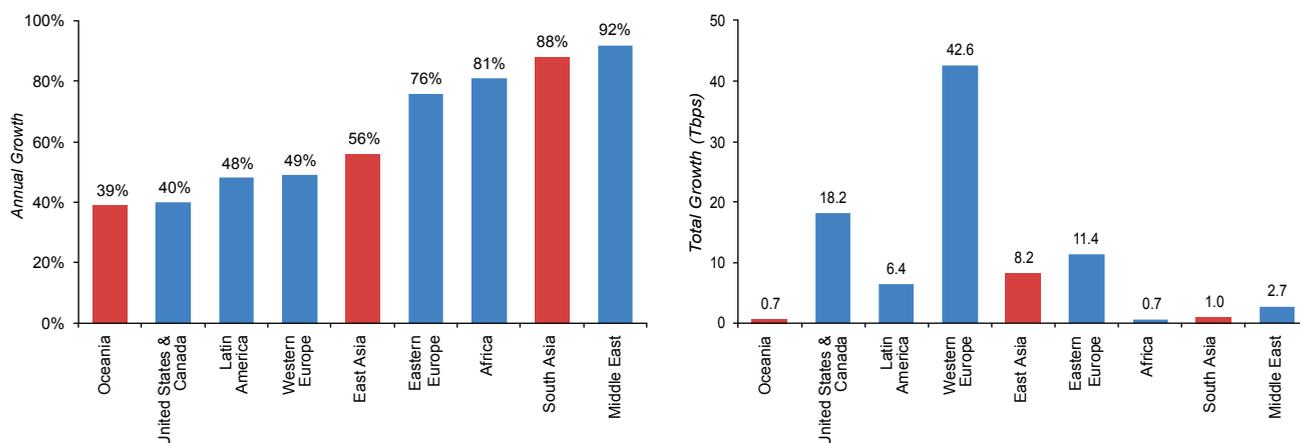
The majority of the region’s people who have little or no access to broadband live in lower-middle-income

countries with high income inequality, such as China and India, or in least developed countries or island developing economies. However, poorer communities in urban and rural areas remain underserved even in higher-income economies. This is because legacy telecommunication operators have typically invested primarily in commercially viable areas – mainly in major cities and urban centres. Moreover, incumbent operators often maintain exclusive access to submarine and terrestrial cable networks, limiting potential competition.

There are also significant inequalities between countries – in terms of physical infrastructure and the availability of, and access to, critical Internet exchange points. Moreover, prices tend to be higher where bandwidth is lower. Urban hub areas, such as Singapore and Hong Kong, China, enjoy levels of bandwidth that lead the world, while many developing economies, particularly the least developed countries, landlocked developing countries and Pacific island economies, lag far behind.

Many of these disparities arise from the current configuration of sea- and land-based fibre networks. These have evolved organically over two decades and are not serving to bring affordable ICT connectivity

Figure 5.4. Annual average growth in bandwidth vs. distribution of bandwidth added, by region (2008-2012)



Source: Telegeography, “2013 Telegeography landscape”, presentation at the Pacific Telecommunications Council Annual Conference, Honolulu, Hawaii, 20-23 January, 2013.

Note: The Y-axis shows terabits per second (Tbps). For example, a total of 8.2 Tbps of bandwidth capacity was added in East Asia during the period 2008-2012.

to all. There are, for example, insufficient land-based routes for international Internet traffic in Asia and the Pacific, so the region's traffic is exchanged through submarine cables, and routings that are based on hub-and-spoke configurations. In East Asia, for example, key hubs are Hong Kong, China; Singapore; and Tokyo, or further afield in the United States of America. Thus, international network traffic must pass through multiple Internet exchange points.

Since the Asian and Pacific region relies heavily on submarine cables, it is also vulnerable to natural disasters, marine vessel accidents and even sabotage. For example, in 2009, Typhoon Morakot and a subsequent undersea earthquake damaged at least eight submarine cables and adversely affected voice and data traffic across South-East Asia, as well as in China, India and Japan. The overreliance of the region on submarine cables makes it more vulnerable to extreme weather events and natural disasters, which have been increasing in frequency and potency over the past decade.

Towards an Asia-Pacific information superhighway

In this regard, ESCAP has recently begun promoting the concept of an Asia-Pacific information superhighway: a cohesive “meshed” terrestrial fibre optic network for the region that would provide cost-effective broadband access on both an intraregional and intercontinental basis. A continent-wide terrestrial fibre optic network would complement the existing submarine cable networks.

A meshed network would not only bridge Asia's vast landmass with competitive points of Internet access in Europe, it would also reduce the impact of outages from undersea cable accidents and natural disasters and open up opportunities for value added services. By linking Asia to Europe, the proposed Asia-Pacific information superhighway would enhance the physical ICT connectivity of landlocked countries that are located thousands of kilometres from undersea cables, while competition introduced by the network could lower the cost of

international bandwidth and provide Governments with incentives to liberalize international gateways.

The development of an Asia-Pacific information superhighway is a complex process requiring very close collaboration between member States, as well as with private sector partners and international organizations. While more work needs to be done to develop a concrete road map, ESCAP has identified the following principles that should underpin any regional strategy:

- *The network should be fully integrated and coherent.* It should provide robust cross-border connectivity across the continent, with a particular focus on reaching rural and less commercially profitable areas. A mesh configuration would allow for in-network healing in the event of physical cable outages or political instability that may affect network connectivity in individual countries.
- *The network should be of uniform quality.* Currently, some terrestrial networks are patchworks of domestic telecom networks, which provide variable quality and offer vastly different terms and service guarantees. A single uniform network with standard terms and quality of service would alleviate these problems.
- *The network should leverage existing infrastructure.* In order to remain cost effective, any pan-Asian terrestrial network would need to be based on the streamlined procurement of rights of way, as well as on uniform construction techniques and parameters. This could be realized through a partnership with existing long-distance infrastructure networks, such as the Asian Highway, the Trans-Asian Railway or power transmission networks. The proposed Asia-Pacific information superhighway could also build partnerships with ongoing and planned terrestrial links, such as the Trans-Eurasian Information Superhighway.
- *The network must be cost-effective.* If constructed on a proper scale in terms of both geographical

coverage and transmission capacity, a pan-Asian terrestrial network could effectively compete with submarine infrastructure at both regional and intercontinental levels. In particular, a terrestrial network dimensioned around 100 Gbps transmission technology would benefit from a “last-mover’s advantage” and the recent step changes in 10G and 40G technology.

- *The network should be open access and have non-discriminatory pricing.* For it to achieve development and policy goals, as well as to best serve the region’s consumers, all purchasers of capacity must be able to access the network on equal, non-discriminatory terms. In an effort to overcome the high price of bandwidth in least developed, landlocked and Pacific island markets, the concept of non-discrimination should also be carried over on a geographical basis so that countries can receive bandwidth at equal prices.

Governments and the private sector could combine their resources and expertise to adopt a lower-risk model. This would involve sharing the investment cost among multiple telecom operators and Governments, on condition that the network be operated on an open-access basis.

Harnessing cross-sectoral synergies for infrastructure development

Given the low level of broadband penetration in continental Asia, there is a tremendous opportunity for Governments to look at synergistic approaches to developing an Asia-Pacific information superhighway. In particular, examples from the national ICT infrastructure development strategies of India, the Republic of Korea and the United States suggest that the “cohabitation” of fibre-optic cables with road and railway infrastructure networks can save on high capital costs and facilitate access to the fibre-optic cable for maintenance and repair (see box 5.5).

Box 5.5. Laying broadband cable along highways and railways

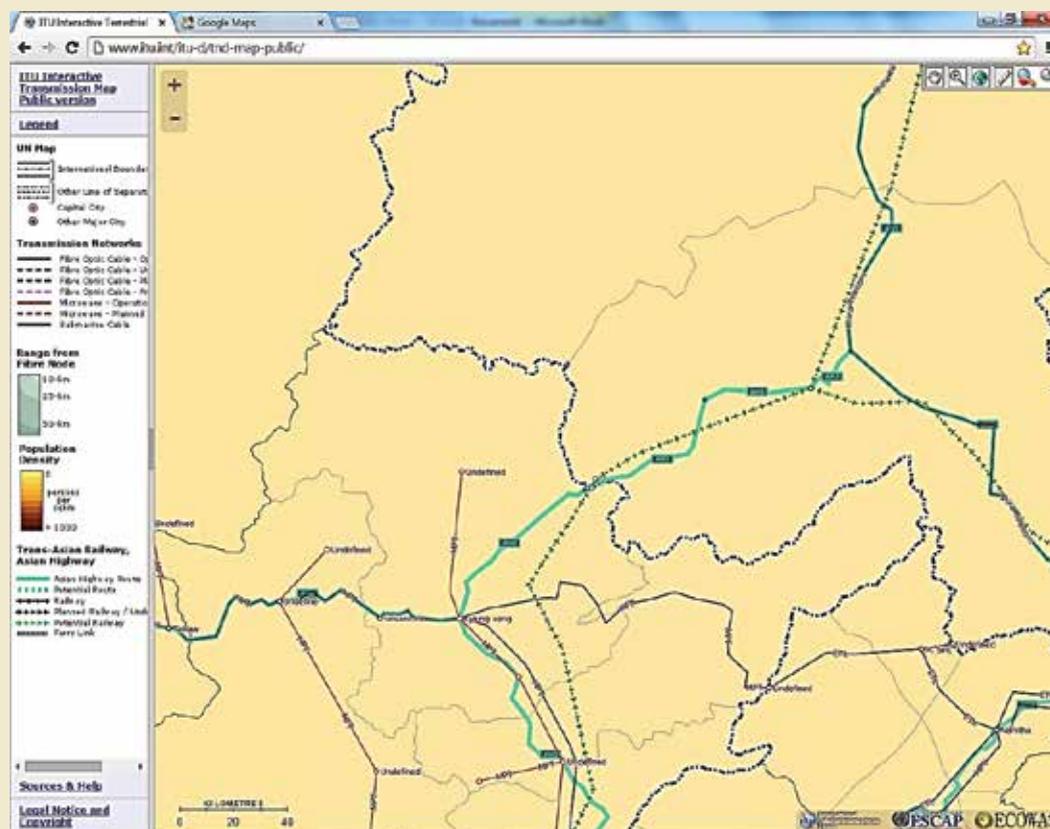
Globally, many countries have started to synchronize the deployment of broadband infrastructure with the new construction or maintenance of roads and railways. In the Republic of Korea, for example, fibre-optic cable infrastructure has been deployed along the highway backbone network. India has also been successful in deploying optical fibre beneath train tracks. As a result, RailTel Corporation of India Ltd. has become one of the region’s largest carrier-neutral telecom infrastructure providers and has deployed 45,000 km of fibre-optic cables, connecting more than 4,500 townships and several rural areas.

Together with the International Telecommunication Union, ESCAP has recently developed Asia-Pacific information superhighway maps, a set of online maps of transmission networks. These interactive maps enable the superimposition of Internet transmission infrastructure, such as fibre-optic cables, on the Asian Highway and the Trans-Asian Railway networks, which thus helps to identify where additional fibre-optic cable segments could be laid along highways and railways.

The figure shown is a screenshot from the International Telecommunication Union website, which currently hosts the online maps. The figures show the border areas between China and Myanmar. Given the probable increase in demand for international Internet Protocol by Myanmar, as well as the need to reinforce redundancy within the ASEAN region, a potentially interesting solution could be to lay optical fibre along planned Trans-Asian Railway tracks or Asian Highway route 3, which runs from Kunming, China, via Jinghong (Yunnan Province), into Mong La (Myanmar). From Mong La, the optical fibre could be linked up with the existing Myanmar network in Kengtung, where it meets existing terrestrial connections that run eastwards into the Lao People’s Democratic Republic and southward into Thailand (along Asian Highway route 2 and missing segments of the Trans-Asian Railway network route). This would create a regional crossroads for optical fibre to reinforce north-south and east-west redundancy in South-East Asia.

Box 5.5. (continued)

North-eastern Myanmar: a crossroads for connecting China, the Lao People's Democratic Republic and Thailand



Source: ITU Interactive Terrestrial Transmission/ESCAP Asia-Pacific Information Superhighway Maps, accessible at <http://www.unescap.org/idd/maps/asia-pacific-superhighway/>

Although it is preferable to install fibre-optic cables while roads and railways are being built, even installing just the necessary ducts and conduits without the fibre would provide significant cost benefits by avoiding multiple excavations. Between 70% and 90% of the costs of developing a terrestrial fibre-optic network are related to the excavation and installation of ducts and conduits through which cables are pulled.²⁵

Rail and power networks already have fibre networks for railway signalling and for their supervisory control and data acquisition systems. Allowing for additional fibre would not add significant costs. Furthermore,

as neither railway signalling nor supervisory control and data acquisition systems are bandwidth intensive, the rail and power entities inevitably end up with surplus capacity in their fibre networks. Such captive fibre capacity is attractive to telecom providers who are keen to avoid the costs of trenching fibre in remote locations and of securing new rights of way.

There are also opportunities to integrate power transmission and telecommunications. High-voltage transmission lines are often mounted with optic-fibre ground wire to maintain contacts among substations and dispatch centres. If there is spare capacity, transmission companies can lease out the

Figure 5.5. Fibre-optic ducts and conduits are placed alongside a highway in the Republic of Korea



Source: Korea Telecommunications

lines to telecommunications providers. The Power Grid Corporation of India Limited, for example, has a fibre-optic network covering 206 cities and towns with about 25,000 km of optical fibre. The network covers many remote areas, including the northeastern part of the country and Jammu and Kashmir, and offers a domestic leg for international long-distance carriers that wish to connect through India to Bangladesh, Bhutan or Nepal.

Similar synergies can be achieved when developing cross-country connections. In particular, under the intergovernmental agreements on the Asian Highway and Trans-Asian Railway networks, and on dry ports, countries have already agreed on a set of international border crossings along these regional networks. By linking the development of the proposed Asia-Pacific information superhighway with these existing intergovernmental agreements, countries may avoid lengthy rights-of-way negotiations, which often become a source of contention and delay for major cross-border infrastructure projects. From the perspective of the managers of this infrastructure, income from providing access to the fibre-optic cables along their networks can become a valuable source of revenue, which could be used to finance recurrent maintenance costs.

Given the complexity of these sectors, the benefits and risks of such cross-sectoral approaches require further research. In this regard, the secretariat is

planning to conduct further analytical work through the establishment of an expert working group on “seamless connectivity,” as proposed by the Ministerial Conference on Regional Economic Cooperation and Integration in Asia and the Pacific, which was held in Bangkok from 17 to 20 December 2013. This expert group could also work with United Nations system partners, notably the International Telecommunication Union, as well as tap into the expert analysis provided by research companies and regional institutions with similar objectives.

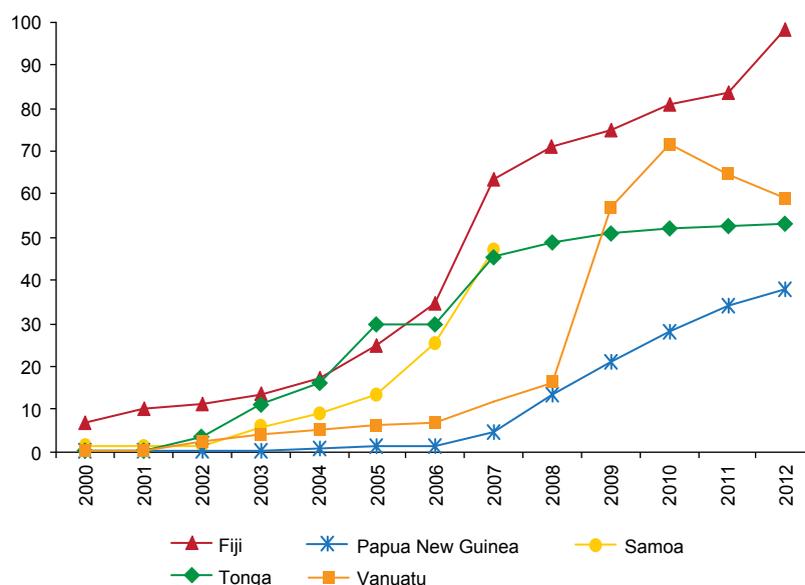
Strengthening the ICT connectivity of Pacific island economies

Pacific island economies offer many examples of how ICT connectivity is transforming economies and societies for the better. These include mobile telephone connectivity, access to financing and banking services and access to educational opportunities through distance learning. The spread of mobile telephones in the Pacific has been spurred by regulatory reforms over the last decade, particularly in Fiji, Papua New Guinea, Samoa, Tonga and Vanuatu. These Pacific island economies undertook specific reforms that led to introducing competition (at least one other private competitor) in domestic markets previously dominated by public enterprises. As a result, subscriptions (per 100 people) increased noticeably in these economies (see figure 5.6).

The benefits from expanding mobile communications to the population while lowering prices has been well documented. Surveys of both rural and urban respondents in Vanuatu, for example, showed that access to mobile telephones reduced business costs, increased sales of goods and services, improved transport and logistics, and enhanced interpersonal contacts.²⁶ Mobile communications are also stimulating innovations in financing services, which had remained out of reach for a large proportion of their populations.

However, broadband penetration in the Pacific remains very limited. Only 5 economies (Cook Islands, Fiji, Palau, Tonga and Tuvalu) have

Figure 5.6. Mobile subscriptions per 100 people in selected Pacific island economies, 2000-2012



Source: International Telecommunication Union, "Mobile cellular subscriptions per 100 people". Available from www.itu.int/en/ITU-D/Statistics/Documents/statistics/2013/Mobile_cellular_2000-2012.xls.

more than 1 fixed broadband subscription per 100 inhabitants. Broadband prices are also still prohibitively expensive: for example in 2012, fixed broadband costs approximately \$19.5 in Fiji and \$185.6 in Papua New Guinea, corresponding to 6.4% and 150.5% of Gross National Income per capita respectively.²⁷

A number of technological solutions can overcome the high costs and the lack of data connectivity and Internet bandwidth. For example, a next-generation medium Earth orbit satellite constellation, O3b Networks, was launched in 2013.²⁸ O3b is aimed at combining the ubiquitous reach of satellites with the speed of fibre to deliver satellite Internet services and mobile backhaul services to emerging markets in the Pacific. Another programme is the Pacific Regional Connectivity Program, financed by the World Bank, the Asian Development Bank, participating member countries and other private and public sector partners.²⁹ This programme is aimed at connecting Tonga, Samoa, Solomon Islands and Vanuatu by submarine fibre-optic cables to a global communications network and is designed to attract

private investment in ICT infrastructure development, based on open-access principles.

Technological solutions, such as the O3b satellite, will to a great extent still be reliant on international bandwidth from land- and sea-based optical fibre, so their success will depend on the wholesale Internet Protocol transit prices in such hubs as Singapore and Hong Kong, China. The proposed Asia-Pacific information superhighway could therefore help to expand competition, even for economies in the Pacific, thereby reinforcing the case for a regional approach to ICT connectivity. In the meantime, efforts should continue on ways to further develop economic opportunities offered by mobile connectivity.

The experiences from the Pacific highlight the importance of a conducive regulatory environment to attract both consumers and private investors. In particular, Governments need to establish credible and transparent rules for the sustainable development of ICT operations. For example, one study found that, at the early stages of reform in Fiji, Papua New Guinea and Samoa, the independence of

regulatory authorities was challenged by pressure from certain interest groups and Governments.³⁰ The study also highlighted the limited financial and technical capacities of these newly established regulatory authorities to handle effectively the full scope of regulation.

ENERGY CONNECTIVITY

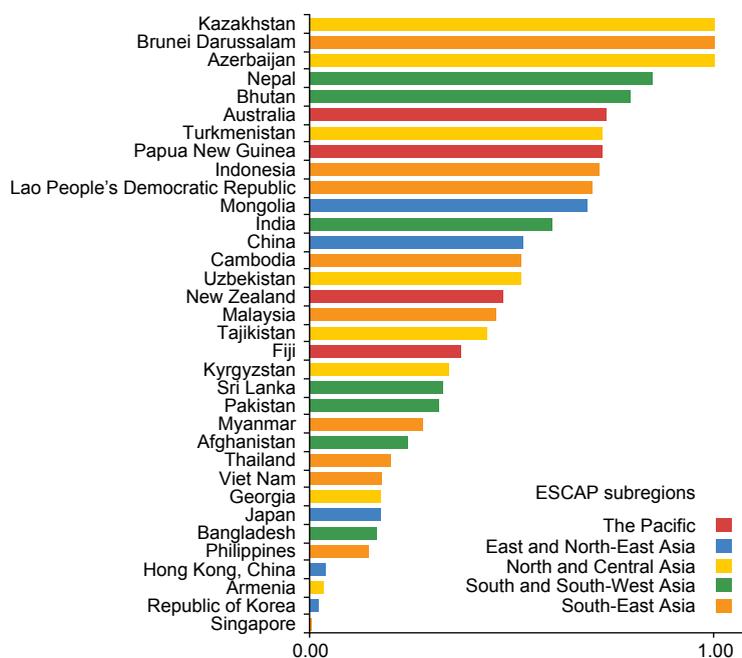
Current status of energy connectivity in the region

Sustainable human development depends on adequate, reliable and affordable supplies of energy – that is, energy security. However, the Asian and Pacific region remains heavily dependent on fossil fuels. In 2011, the region accounted for about 40% of global oil and gas consumption and more than 70% of global coal consumption.³¹

The region also relies heavily on traditional energy sources: despite recent progress, more than 1.8 billion people are still using biomass, and more than 628 million lack access to electricity.³² While several countries in the region are net energy exporters, only a few countries satisfy their energy needs from their own resources (see figure 5.7). The region as a whole is a net importer of primary energy.

There are numerous opportunities for oil, gas and electricity trade in Asia and the Pacific. They can be divided into three main groups – infrastructure projects of regional or subregional significance, infrastructure projects of bilateral significance and maritime energy trade projects. For hydrocarbon infrastructure, the region already has a number of existing and planned pipeline projects.³³ Meanwhile, a number of multi-country initiatives have focused on electricity and power grid integration (see figure 5.8).³⁴ These include the following:

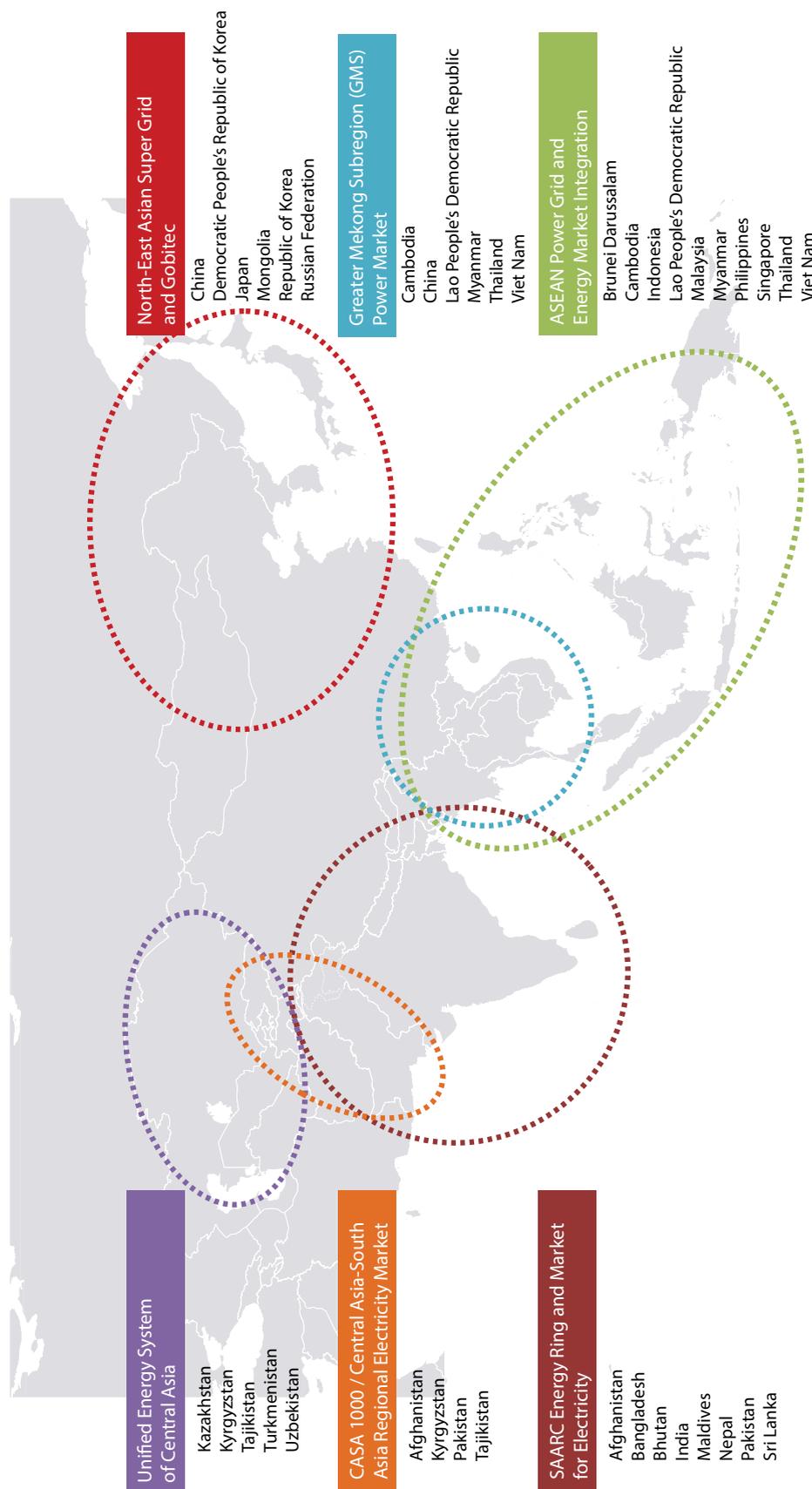
Figure 5.7. Energy self-sufficiency indices for selected ESCAP member States and associate members, as projected for 2035



Source: Adapted from ADB (2013) *Asian Development Outlook 2013: Asia's Energy Challenge*.

Note: The self-sufficiency index (a score of 1.0 equating to self-sufficiency) incorporates projected renewable resources availability with the projected net balance of conventional fuels using forecasted depletion rates.

Figure 5.8. Subregional initiatives on power grids and markets projected for 2035



Source: Adapted from ESCAP *Statistical Perspectives: Focus Areas for Realizing Enhanced Energy Security* (2013). Available from www.unescap.org/resources/statistical-perspectives-focus-areas-realizing-enhanced-energy-security.

- *ASEAN Power Grid* – An intergovernmental programme that has been optimizing energy trading opportunities within the region since the 1990s. Identified power interconnections are at various stages of progression.
- *CASA-1000* – This flagship project for the Central Asia-South Asia Regional Electricity Market will use surplus hydropower from Kyrgyzstan and Tajikistan to meet power deficits in Afghanistan and Pakistan.
- *Greater Mekong Subregion Power Market* – This programme has identified opportunities for an integrated regional electricity market to align available supplies with demand requirements.
- *SAARC Market for Electricity* – This is a main component of the South Asian Association for Regional Cooperation (SAARC) Energy Ring, an intergovernmental programme to reduce power supply disruptions and delivery.
- *Gobitec and an Asian super grid for renewable energies in North-East Asia* – In North-East Asia there are multiple initiatives to utilize super grids to align abundant renewable supplies in the Gobi desert with demand in East Asia (see also box 5.6).
- *Unified Energy System of Central Asia* – Built in the 1970s in the former Union of Soviet Socialist Republics, the Unified Energy System network is a synchronous grid extending across the Russian Federation and Central Asian countries.

Countries in the region are using these initiatives to address energy supply imbalances and to improve the reliability of electricity distribution. However, most are based on unilateral or bilateral trading arrangements. Countries have yet to realize the economies of scale that would come from linking these subregional initiatives through a regional energy cooperation framework.

Towards an Asian Energy Highway

The region's energy security could be enhanced by promoting cooperation between the region's energy importers and energy exporters – by harmonizing policies and by exchanging knowledge, particularly

in the areas of energy efficiency and renewable energy technologies. This would not only lead to better physical connectivity between countries but also promote institutional cooperation, including the development of financial energy markets.

A regional energy arrangement could also explore low-carbon paths that place more emphasis on efficiency and take greater advantage of renewable resources. In addition, it could develop deep, liquid and transparent markets for crude oil, petroleum products and gas – while giving a higher priority to pipeline security and safety.

The region's energy security could be enhanced by promoting energy cooperation like the Asian Energy Highway

To move in this direction, in 2012 ESCAP member States accepted the concept of an integrated regional power grid, which could be termed the “Asian Energy Highway.”³⁵ The highway would involve an integrated electricity grid based on a range of primary energy sources, whether fossil fuels, nuclear sources or renewables. The following encouraging developments are making such an integrated grid more feasible:

- Several mutually beneficial power-trading arrangements are progressing at various levels of subregional integration.
- High-voltage transmission systems, in particular high-voltage direct current (HVDC) systems, are improving the economic range for interconnecting power grids and unlocking access to remote energy resources. HVDC transmission systems are becoming cost competitive with more conventional modes of energy resource transportation – by rail, road and pipelines.
- “Smart grid” communication and management technologies are providing opportunities for improved load balancing and enabling greater optimization of energy flows. These are also more capable of absorbing intermittent renewable energy resources, such as solar and wind.

An Asian Energy Highway would not only connect physical infrastructures but also involve integrated market mechanisms to dynamically and efficiently move power more sustainably and reliably across the region, as well as optimize the allocation between supply and demand centres. Such a regionally integrated market would enhance energy security since greater diversification of national energy supplies would reduce exposure to potentially volatile markets.

An Asian Energy Highway would also provide a platform for energy pooling and spot-market pricing. In a competitive environment, a transparent purchasing framework would limit the exposure of deficit countries to distorted pricing, and thus help to reduce the potential for geopolitical conflict.

From the perspective of sustainable energy production and use, an integrated grid would increase the opportunities for balancing peak loads in previously isolated systems using larger transmission grids across different time zones – with opportunities for reducing net energy investment. Furthermore, a regional grid would boost the opportunities for using energy from renewable resources generated at specific sites – such as geothermal, solar or wind sources – which could then be made available to a wider population.³⁶ This in turn would boost investor confidence in developing large-scale renewable energy projects in more remote areas far from centres of demand, which is the main driver behind Gobitec and the proposed Asian super grid for renewable energies in North-East Asia (see box 5.6).

Box 5.6. Gobitec and the Asian Super Grid

Gobitec refers to the proposal to produce energy in the Gobi desert. In Mongolia alone, wind and solar energy from the Gobi desert could produce about 2,600 GW – more than 7 times the amount of electricity generated globally from nuclear power. This energy could be transmitted through a proposed Asian super grid for renewable energies in North East Asia. By utilizing high-voltage direct current and smart grid technologies, it would form the backbone of the overall North-East Asian power grid and could thus transmit energy from the Gobi desert to electricity demand centres in North-East Asia, including China, Japan and the Republic of Korea.

To realize the Gobitec and Asian super grid concept, investments are needed for the full range of generation, transmission and distribution systems. A study conducted by a group of partners has estimated the total costs for solar and wind projects totalling 100 GW, over the period 2015-2030, at \$293 billion, with yearly maintenance costs of \$7.3 billion. The estimated benefits include 880,000 new jobs in Mongolia and 560,000 new jobs outside Mongolia. In addition, there would be \$17 billion per year in economic benefits from the cost advantages of electricity production – and a reduction in carbon dioxide emissions of 187 Gt per year.

Currently, there is no clear lead institution or intergovernmental framework for this promising concept. However, there is a strong foundation of partners that could work together with a common vision and bring in more key stakeholders. In addition to ESCAP, currently active stakeholders include:

- *Intergovernmental organizations* – Energy Charter Secretariat, International Renewable Energy Agency.
- *Civil society organizations, especially research institutions* – China Renewable Energy Society, DESERTEC Foundation (Grenatec also affiliate), Energy Systems Institute (Russian Federation), Japan Council for Renewable Energy, Japan Renewable Energy Foundation, Korea Energy Economics Institute (Republic of Korea) Korea Photovoltaic Society (Republic of Korea), Mongolia Energy Development Association.
- *Private companies* – Newcom Group (Mongolia), SoftBank Corp (Japan).
- *Government* – Ministry of Energy (Mongolia).

Source: ESCAP Secretariat; Energy Charter secretariat and others, *Gobitec and Asian Super Grid for Renewable Energies in North-East Asia* (2014).

The need for a strong institutional framework

An Asian Energy Highway is now more technically feasible as a result of advances in energy generation and transmission technologies.³⁷ However, its success will depend upon institutional and technical harmonization among electricity industries. One concern is that member States may wish to maintain energy independence. Therefore, it would be important to overcome such hesitations by developing an institutional framework for intergovernmental cooperation in a progressive manner.

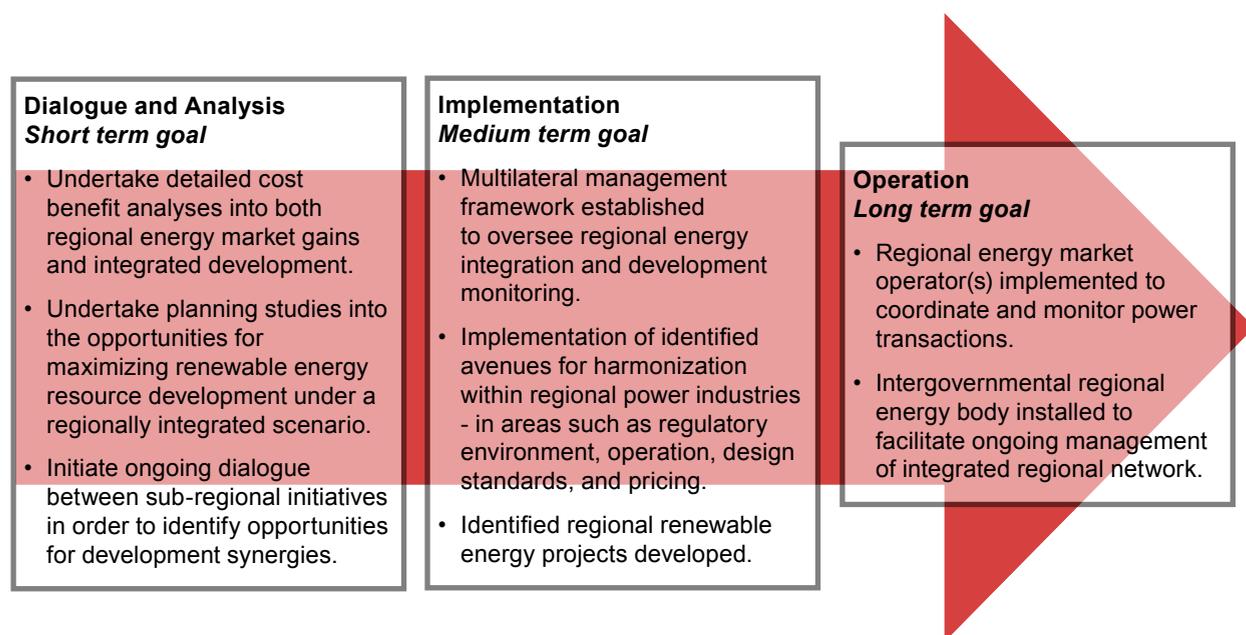
Furthermore, the most immediate benefits of regional energy connectivity are likely to be captured by those industries that have greater access to stable and inexpensive electricity. It is therefore necessary to ensure that the benefits from enhanced energy connectivity are equally shared. Participating countries should agree from the outset on mechanisms to levy user charges on the grid, with the possibility of ring-fencing some revenues to finance community development, particularly rural electrification projects. For example, the CASA-1000 project, which is aimed at building the Central Asia-South Asia

Regional Electricity Market by exporting power from Kyrgyzstan and Tajikistan to Afghanistan and Pakistan, incorporates benefit-sharing by imposing a surcharge on energy generation to finance priority development projects identified by local communities along the route of the transmission line.

There are also concerns about capacity. National and subregional capacities are limited and there are incompatibilities between countries. A number of countries have weak systems for national power generation and management and face chronic power shortages. If existing national power generation and distribution systems are chronically loss-making with unrealistically low tariffs, there is little prospect for participating in regional schemes.

For these reasons, the vision of a regional energy network should be tempered with realism. The pragmatic solution is to consider this not as a regional super-infrastructure proposal but rather as an ongoing and phased process of capacity-building and development. The Asian Energy Highway may thus be achieved through a twin-track approach of supporting reforms at the national level, in conjunction with improvements in regional power connectivity (see figure 5.9).

Figure 5.9. Road map for an Asian Energy Highway



Nevertheless, it is important to ensure that near-term investments are compatible with a longer-term agenda of integration. Countries can reduce development costs and improve environmental performance by identifying at an early stage the opportunities for harmonization – in areas such as the regulatory environment, operation and design standards, energy pricing and ultimately development planning.

PEOPLE-TO-PEOPLE CONNECTIVITY

Increasing mobility in the ESCAP region

One of the most evident signs of connectivity in the ESCAP region is the movement of people across national borders. Whether it be for work, study, business or other purposes, international migration is an issue of concern for both countries of origin and countries of destination because it involves people's lives and welfare. In many countries in the ESCAP region, migrants are not officially recognized. Existing national governance structures do not have well-defined spaces that delineate the relationship between government responsibilities and the rights and obligations of public citizenship.

*International labour migration
brings many benefits
but also new risks*

However, with increasing regional connectivity, it can be expected that the movement of people across national borders will increase. Furthermore, the region is undergoing a dramatic demographic transition, with some countries ageing so rapidly that their populations are expected to shrink, while others have a large youth population concentrated in prime employment ages.

Given that inclusive and sustainable human development is ultimately about widening people's capabilities and opportunities, increased and better-managed international migration is an opportunity for the people of the ESCAP region to take advantage

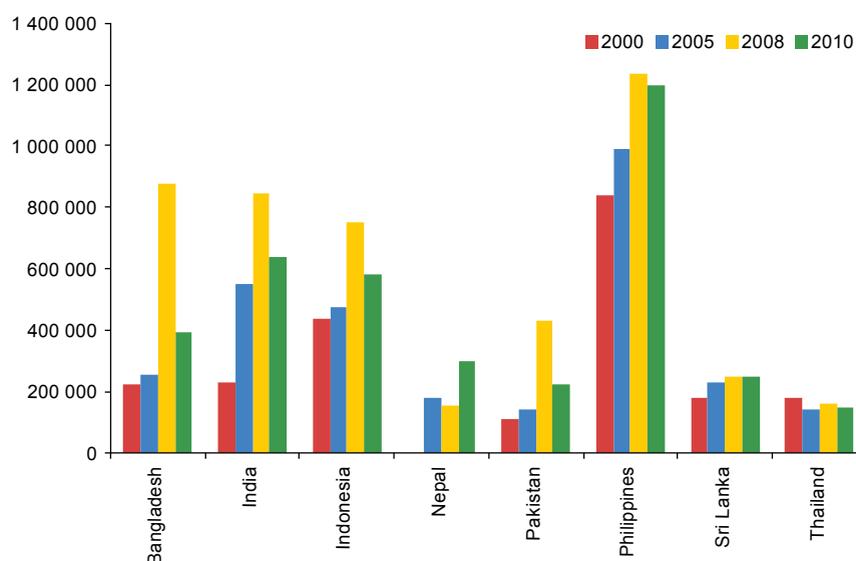
of the region's economic growth and to enhance their skills, training and knowledge. In this regard, it is necessary to consider a broad range of policy options for facilitating the movement of people, while also minimizing the potential negative impacts. Some frameworks for facilitating and managing the flow of people already exist. For example, under the ASEAN people-to-people connectivity framework, member States are planning ways to enhance tourism, education and cultural exchanges.³⁸

Benefits and challenges of international labour migration

Increased regional mobility through managed, and sometimes temporary, labour migration can lead to shared prosperity in the region by addressing labour market needs, improving skills acquisition and serving as a risk mitigation strategy for households. A large part of the quantitative evidence on the benefits of shared prosperity that both countries of origin and countries of destination gain through migration is focused squarely on labour migration. This section therefore centres on international migration for the purpose of employment, as migration flows primarily driven by other factors may lie outside the scope of the present publication.

In Asia and the Pacific, international migration flows in recent years have predominately comprised temporary labour migrants. Figure 5.10 shows the number of temporary migrant workers deployed from the region's main countries of origin, namely Bangladesh, India, Indonesia, Nepal, Pakistan, the Philippines, Sri Lanka and Thailand. If maritime workers are included, the Philippines deployed 1.2 million migrant workers in 2010. India and Indonesia have regularly deployed more than half a million workers annually in recent years. Large proportions of these deployments are directed to countries of the Gulf Cooperation Council, Jordan and Lebanon. However, many countries in the region, such as Thailand, are simultaneously origin, destination and transit countries for migrants. The volume of temporary labour migration flows indicates that the recruitment and placement of Asian and Pacific migrant workers is a large industry in itself.

Figure 5.10. Migrant workers deployed from selected Asian countries (2000, 2005, 2008 and 2010)



Sources: Organisation for Economic Co-operation and Development, *International Migration Outlook 2012* (OECD, 2012), p. 169; and ESCAP Labour Migration Database (accessed 14 February 2014)

Note: 2008 data for Nepal and Thailand are from 2007; 2010 data for Nepal, the Philippines and Thailand are from 2009; 2000 data for Nepal are not available.

One of the principal benefits of labour migration for both households and the countries of origin is the flow of remittances. In 2013, India, China, the Philippines, Bangladesh, Pakistan and Viet Nam were in the world's top 10 remittance-receiving countries in value terms, with India ranking first. Meanwhile, as a proportion of GDP, 5 Asian and Pacific countries were among the world's top 10 remittance-receiving countries in 2012: Tajikistan (48% of GDP – the highest percentage in the world); Kyrgyzstan (31% of GDP); Nepal (25% of GDP); Armenia (21% of GDP); and Samoa (21% of GDP).³⁹

Remittances generate a number of benefits for the receiving households. Recent analysis confirms that, in several countries in the region, remittances from migrants are associated with better economic performance and a reduction in poverty.⁴⁰ For example, many Pacific island economies send workers to New Zealand through its Recognised Seasonal Employer programme.⁴¹ One study found that, over a two-year period from 2007, households with workers hired through the programme saw their per capita incomes increase by between 34%

and 38% in Tonga, and between 35% and 43% in Vanuatu. As a result, households were able to raise standards of living, accumulate more assets, and in Tonga, improve school attendance for older children.⁴²

A country's nationals who have worked overseas can contribute to development in their home country not only by sending remittances but also by investing in or using their expertise to establish businesses. Some countries have engaged their diaspora in community development projects. Experts working overseas can also contribute to their country through academic exchanges and consultancies.

However, migration can have negative impacts on sending countries. For example, countries can suffer from a "brain drain" if they lose workers whose skills would have been valuable at home. There is also the danger of "brain waste" if those skills and qualifications are not recognized by destination countries. Meanwhile, having one or both parents in a family migrate overseas clearly puts many pressures on the family and the roles of individuals

in it. High-quality research on these impacts is limited, however, and has yielded mixed results.⁴³

At the receiving end, destination countries generally benefit significantly from labour migration. At various points in time, high-income countries in the region, such as Australia, Brunei Darussalam, Japan, New Zealand, the Republic of Korea and Singapore, have filled gaps in their labour markets with migrant workers. Several studies document the key role of labour migration in GDP growth in Singapore, suggesting that this growth would not have been possible in the absence of migrants because employment growth outstripped the national labour supply.⁴⁴

*As migrant flows increase,
social protection for migrants
is becoming an urgent issue*

Middle-income countries have also seen an increasing demand for foreign workers. In Malaysia, Maldives and Thailand, for example, the construction, manufacturing, tourism and several other sectors depend heavily on foreign labour. In certain industries, increasing the supply of labour through the employment of migrant workers can also help to keep wages relatively low, thus maintaining a country's competitiveness.

The rapid growth of labour migration flows in the region has raised the issue of social protection, including access to health care and reproductive health services, and income security. Social protection schemes are often limited to the formal sector and the non-migrant population, while those workers who are covered by social protection schemes in their countries of origin may lose their entitlements once they take up residence in a new country. A particular challenge to women migrants is the lack of recognition of domestic work as an occupation. The recent extension of weekly rest to migrant domestic workers in Singapore and Thailand might be an indication of future efforts, stimulated by the Domestic Workers Convention, 2011 (No. 189), to improve legal protection.

Cooperative approaches to managing international labour migrant flows

ESCAP has identified migration as an “emerging opportunity for development,” but one that needs to be managed through both national action and multilateral dialogue and cooperation.⁴⁵ Given that migration entails both benefits and risks for countries of origin and countries of destination, the responsibility for managing migration lies with both parties.

There are currently several examples of bilateral agreements between source and destination countries. Malaysia, the Republic of Korea and Thailand, for example, have bilateral agreements with many migrant-origin countries in the region. These may be formal agreements, which set out each side's commitments and may provide for quotas, or they may be less formal agreements, such as memorandums of understanding, between countries of origin and countries of destination. Most destination countries prefer memorandums of understanding, probably because as non-binding agreements they are easier to negotiate and implement.

As the region's economies become more integrated, there will be pressure on Governments to develop a geographically broader framework for managing migration. Such frameworks can begin at the subregional level and be expanded. For example, ASEAN has adopted the ASEAN Economic Community Blueprint, which is aimed at allowing for managed mobility or facilitated entry for the movement of natural persons engaged in trade in goods, services, and investments. Its member States are pursuing this goal through the progressive relaxation of visa requirements and institutional harmonization of categories of workers, although to date mutual recognition agreements have been negotiated for only a few priority professions – accountants, architects, dentists, doctors, nurses, surveyors and those of the tourism industry.

Furthermore, there is an urgent need for regional cooperation to establish common standards to protect the rights of migrants, as well as to prevent the

trafficking of persons, which is increasingly taking place under the guise of consensual migration. At the global level, the principal instrument is the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families.⁴⁶ That convention, which entered into force in 2003, establishes minimum standards that States parties should apply to migrant workers and members of their families, irrespective of their migratory status. To date, however, the convention has been ratified by only eight countries in the ESCAP region (Azerbaijan, Bangladesh, Indonesia, Kyrgyzstan, the Philippines, Sri Lanka, Tajikistan and Turkey), while Armenia, Cambodia and Palau have signed but not yet ratified it.

There is a growing trend towards regional and subregional efforts to formalize the rights of migrant workers. For example, in 2007 ASEAN member States adopted the ASEAN Socio-Cultural Blueprint, which proposes several detailed actions towards the protection and promotion of the rights of migrant workers.⁴⁷ Additionally, in 2009 ASEAN established the ASEAN Intergovernmental Commission on Human Rights, which includes as one of its mandates the protection of human rights of migrant workers.⁴⁸ Meanwhile, to discuss coherent approaches to migration management, SAARC member States established the South Asia Migration Commission, involving civil society, academics, government officials, policy institutes, non-governmental organizations and human rights organizations.

Strengthening knowledge networks of people and institutions

As noted in the previous chapter, there is growing interest among countries in the region to transition towards knowledge-based economies. It has previously been shown in ESCAP studies that the countries with the highest sustained growth are those that have managed to diversify their exports. While producing a broad spectrum of goods, they have also entered exclusive production segments in which few others produce or export, typically in knowledge-based sectors.⁴⁹

Achieving this transition required increased global and regional connectivity, and with it the smoother flow of knowledge and people. Successful innovation needs skilled workers who are familiar with both local cultural characteristics and international business practices and who are well connected through real-time communications and access to information.

Promoting student and academic exchanges can strengthen regional knowledge networks

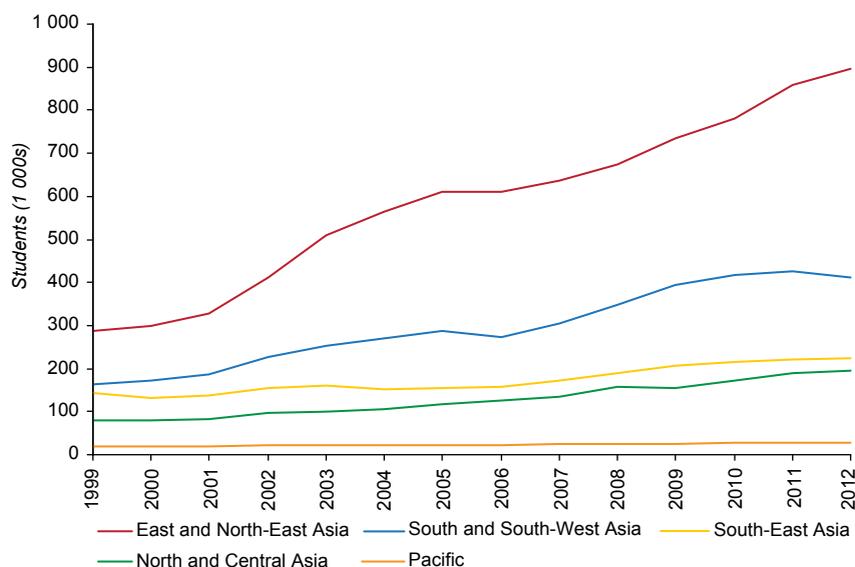
With education becoming more and more globalized, an increasing number of students are seeking tertiary education abroad. Many are going to countries in the Asian and Pacific region, which is home to numerous leading research institutions and universities. In 2012, Australia was the fourth largest host for international students globally, with 6% of mobile students, the Russian Federation was sixth with 4%, Japan seventh also with 4% and China ninth with 2%.⁵⁰

Moreover, the region is a major source of students. As can be seen in figure 5.11, the region's number of outbound international students has been steadily increasing over the last 15 years, and it is currently the source of approximately 50% of internationally mobile students. This has been mostly due to the rapid rise of students from China: with almost 700,000 students going abroad, China supplies more internationally mobile students than the next 7 countries combined.⁵¹

Tertiary education offers significant opportunities for cross-border linkages, knowledge generation and knowledge-sharing. The ESCAP region has numerous associations and organizations that promote such linkages, including the Asia-Pacific Association for International Education, the Association of Pacific Rim Universities and the South Asia Foundation.

ESCAP also actively promotes regional research networks. It contributed to the establishment of

Figure 5.11. Number of outbound internationally mobile students, 1999-2012



Source: UNESCO Institute of Statistics, data on international student mobility in tertiary education downloaded from UIS.stat on 1 April 2014. Available from <http://data.uis.unesco.org/>.

ARTNeT, the Asia-Pacific Research and Training Network on Trade, a network of leading trade research institutions and think tanks from the region that attempts to increase the quality and amount of relevant trade research and to share lessons on knowledge creation and knowledge management.⁵² Another recent initiative launched under the auspices of ESCAP's Centre for Alleviation of Poverty through Sustainable Agriculture is SATNET Asia, or the Network for Knowledge Transfer on Sustainable Agricultural Technologies and Improved Market Linkages in South and South-East Asia.⁵³ With members ranging from national and international research organizations, representatives of the private sector, agricultural foundations, farmers' organizations and non-governmental organizations, SATNET Asia facilitates the transfer of knowledge on sustainable agricultural practices and intraregional trade for the benefit of poor and marginalized farmers.

In addition, new doors are opening via the Internet for knowledge generation and sharing. This includes distance-learning courses, which have the advantage of scalability and can be accessed by those who previously had limited educational opportunities. The

Pacific subregion has demonstrated what can be achieved. The University of the South Pacific is widely regarded as a success story for delivering higher education through distance education (see box 5.7). In this regard, ICT connectivity is expected to expand the reach and effectiveness of the region's knowledge networks. Universities are increasingly regional in their operations and outlooks and are also important sources of innovation. Taking advantage of the Internet, these networks can contribute to "knowledge clusters" – networks of individuals in academia, the private sector and Governments, for project planning, joint research and the exchange of ideas. Knowledge clusters initially emerged in lower-cost countries with good availability of skills and expertise – serving a growing global demand for standardized, less firm-specific knowledge services, such as software development, engineering support and analytical services. The best-known examples include Bangalore in India and Shanghai in China.

More recently, high-tech industries have also benefited from knowledge clusters. Building on the "Silicon Valley" model, many are linked to renowned universities and research institutes. To encourage

Box 5.7. ICT connectivity enhances educational opportunities in the Pacific

The University of the South Pacific is a multi-country university with a membership of 12 Pacific island economies: Cook Islands, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Samoa, Solomon Islands, Tonga, Tokelau, Tuvalu and Vanuatu. In its early years, some courses were conducted via USPNet, a satellite communications network set up in 1973 as a means of distance education for students who could not study at the main campus in Suva.

In 2006, the Suva hub was upgraded to create an Internet Protocol platform. USPNet is now a stand-alone network with interactive video conferencing between all campuses. It provides an efficient means of delivering academic programmes through seminars, discussion groups, debates, lectures and tutorials. These forms of communication can be delivered simultaneously to students located in the network of campuses. The audio and video lectures are now loaded onto servers at the campuses and can be viewed by students at a time convenient to them. The availability of the Internet has made it possible to deliver online courses using course management software, which provides lecturers and tutors with online access and allows for the sending and receiving of assignments, and for participation in student discussion groups.

Thanks to continuous advances in ICT, the number of students enrolled in distance education increased from 90 students enrolled in 16 courses in 1976, to 5,400 students enrolled in 1996, to more than 10,000 students enrolled in over 200 courses in 2008. To reach an even larger number of students, the University is currently redesigning USPNet and introducing new mobile technologies to facilitate online learning.

Source: R. Duncan and J. McMaster, "The role of USPNet in capacity development in the South Pacific region", Capacity Development Series (Mandaluyong City, Philippines, Asian Development Bank, 2008). Available from http://lencd.com/data/docs/25-USPNet_web.pdf; also University of South Pacific, "2013 Annual Report", available from http://www.usp.ac.fj/fileadmin/scripts/AnnualReport/USPAnnualReport_2013/index.html#/Chapter_1

such clusters, many countries in the region have established science parks and are encouraging the development of networks of researchers and business people living in different countries, sometimes drawing on their diasporas abroad (see box 5.8). Firms in the science parks generally conduct more research and development than firms not located in such parks, perhaps because the close interaction with local universities enables firms to build on their knowledge.

In the future, there will likely be more cross-border collaboration between these types of knowledge clusters. Some countries in the region, including China, Japan, the Republic of Korea and the Russian Federation, are among the world's leaders in terms of expenditure on research and development as a share of GDP, while almost 40% of all researchers in the world are located in Asia and the Pacific.⁵⁴ With such a rich resource base, Governments, academic

institutions and the private sector can work together to develop knowledge industries. Countries in the region may gain from the experiences of Japan, Malaysia and the Republic of Korea, which have actively promoted this type of cooperation.

Strengthening business networks and associations

Business networks and associations constitute another important type of people-to-people network. Business networks and associations are usually composed of private enterprises within an industry or sector, or from various industries and sectors. While originally they were a means of bringing together domestic private enterprises, many international networks and associations have been established over the past few decades. Among the best known are the International Chamber of Commerce, the World Chambers Federation, the ASEAN Chambers

Box 5.8. The “global Argonauts” of Hsinchu, Taiwan Province of China

In the early 1960s, the GDP of Taiwan Province of China was similar to that of Zaire. Despite having a highly educated population, high-skill jobs were scarce, and the economy’s engineers were leaving to work abroad rather than at home. In particular, the number of Taiwanese people living in the United States grew rapidly, with many of them joining companies in Silicon Valley in the early years of the ICT revolution.

Helped by the expansion of the economy’s shipping sector, Taiwan Province of China got a foothold in the production networks of Japanese and United States electronics companies. This started as simple manufacturing activities, based on equipment specifications sent from overseas firms. However, as the traffic of engineers and business representatives between Silicon Valley and Taiwan Province of China built up, manufacturing companies moved into higher value added areas such as design.

This was supplemented by official policies, whereby the companies were supplied with lists of qualified Taiwanese people living in the United States; their flights to return home to the island economy were paid from official sources. These people, dubbed “the new Argonauts,” came with valuable connections and know-how. Their efforts were supplemented by creating institutions for technology transfer, venture capital and a fruitful environment for investment. The combination of these policies helped to create a vibrant cluster of technological innovation in Hsinchu, Taiwan Province of China, which later gave birth to highly successful high-tech companies, such as Acer Inc., and helped the economy to transition into a knowledge-based one.

Source: A. Saxenian, *The New Argonauts: Regional Advantage in a Global Economy* (Cambridge, Massachusetts, Harvard University Press, 2006).

of Commerce and Industry, the Confederation of Asia-Pacific Chambers of Commerce and Industry, and the SAARC Chamber of Commerce and Industry.

Such chambers advocate for and foster private sector development, as well as facilitate trade. The World Chambers Federation, for example, administers the ATA Carnet globally and also works with national chambers of commerce in issuing and attesting certificates of origin, which are required documents for international trade.⁵⁵ Meanwhile, the SAARC Chamber of Commerce and Industry has worked with the SAARC secretariat to promote trade facilitation.

In the context of regional connectivity, business associations and networks help businesses in less developed countries to connect to businesses in other countries. Within the transport and logistics sector there are, for example, the International Road Transport Union, the International Air Transport Association, the International Federation of Freight Forwarders Associations and the International Chamber of Shipping.

In every sector, these associations raise the level of professional standards. In particular, business associations support the development of small and medium-sized enterprises, which by some estimates account for nearly 50% of all value addition within Asia and the Pacific.⁵⁶ Networking among small and medium-sized enterprises in different countries helps them to identify common barriers to participation in regional and global production networks and markets.

Putting individuals at the heart of people-to-people connectivity

The various networks described above require different sets of policy responses, but ultimately they are all linked by the individuals within them. Within people-to-people connectivity there are therefore areas of similar or overlapping concern, where stakeholders can cooperate with each other and with other interested parties to discuss and design appropriate policies.

With regard to international labour migration, a comprehensive regional framework for managing

labour migration for shared prosperity should include: protecting and promoting the rights of all migrants; more legal channels for labour migration; increased skills-recognition schemes; and further regional norm-setting and cooperation on managing migration. At the same time, regional approaches are not a substitute for structural reforms at the national level, or for the ratification of international conventions and instruments to protect the rights of migrants. Countries of origin can protect their workers by regulating recruitment agencies, ensuring that skills are properly assessed, requiring standard contracts, setting minimum wages and deploying more labour attachés abroad. Host countries can also provide migrant workers with greater protection through, inter alia, in-country orientation programmes and more effective labour inspection and by allowing greater flexibility in access to the labour market.

Meanwhile, Governments should support the efforts of the region's universities and research institutions to build new knowledge networks and to promote student exchange programmes. For example, the Network of East Asian Think-tanks Working Group on Enhancing People to People Connectivity – Education, Tourism and Cultural Exchange recommends the systematization of regional quality assurance and credit transfer systems of higher education in ASEAN Plus Three.⁵⁷ Another interesting proposal is the establishment of transnational collaborative higher education and research institutions, such as the ASEAN Cyber University, initiated by the Ministry of Education of the Republic of Korea in 2009, which links universities in Cambodia, Lao People's Democratic Republic, Myanmar and Viet Nam with students in the region through a virtual learning platform.⁵⁸

The future direction of people-to-people connectivity in the ESCAP region will also depend on better information about actual movements of people. At the national level, there is an urgent need for better data and analysis to underpin coherent policies, for example on the numbers of students studying abroad and the impact of labour migration on the development of countries of origin and countries of destination. International organizations, subregional

organizations, business associations and academic networks also need to share information and discuss optimum approaches to promoting the mobility of people while mitigating negative effects, including human trafficking. In this regard, ICT connectivity, with its potential to link networks of different stakeholders, presents tremendous opportunities for strengthening people-to-people connectivity.

Endnotes

- ¹ For a survey of the literature evaluating impacts of infrastructure development, see A. Estache, "A survey of impact evaluation of infrastructure projects, programs and policies", ECORE Discussion Paper No. 2010/16 (Brussels, ECORE, 2010). Available from www.ecore.be/DPs/dp_1270557731.pdf.
- ² Asian Development Bank, *Asian Economic Integration Monitor July 2012*. (Mandaluyong City, Philippines, ADB, 2012). Available from http://aric.adb.org/pdf/aeim/AEIM_2012July_FullReport.pdf.
- ³ United Nations Economic and Social Commission for Asia and the Pacific, *Review of Developments in Transport in Asia and the Pacific*. ST/ESCAP/2627.
- ⁴ The Asian Development Bank Institute has developed a computable general equilibrium model to simulate the quantitative gains to countries from investing in regional transport infrastructure. Available from www.adbi.org/files/2010.06.30.wp223.regional.infrastructure.investment.asia.pdf.
- ⁵ United Nations Economic and Social Commission for Asia and the Pacific, *The Regional Action Programme for Transport Development in Asia and the Pacific, Phase II (2012-2016)*, Ministerial Declaration on Transport Development in Asia and the Pacific (Bangkok, 12-16 March 2012). Available from www.unescap.org/sites/default/files/Booklet_B_RAP2012-2016.pdf.
- ⁶ UNNExT is a regional community of experts that conduct research and provide support on paperless trade and the single window. For further information, see www.unescap.org/tid/unnext/default.asp.
- ⁷ A "missing link" is (a) the absence of physical linkages between the railway networks of neighbouring countries or (b) the absence of continuous railway infrastructure within one country, often due, in this latter case, to local geography, for example Lake Van in eastern Turkey. Such missing links between networks of neighbouring

- countries arise because the link was never there in the first place or because they ceased to exist due to political events. For an update on the status of missing links in the trans Asian railway network, see chapter 1 of United Nations Economic and Social Commission for Asia and the Pacific, *Review of Developments in Transport in Asia and the Pacific*. ST/ESCAP/2627.
- ⁸ The road classes under the Asian Highway classification and design standards define class III as the minimum desired standard, being a narrow two-lane road with double bituminous surface treatment. For full specifications, see annex III of the Intergovernmental Agreement on the Asian Highway Network (United Nations, *Treaty Series*, vol. 2323, No. 41607). Available from https://treaties.un.org/doc/source/RecentTexts/XI_B_34_E.pdf.
- ⁹ According to ESCAP estimates and country reports: upgrading 12,000 km of roads from below class III to class III standards would require \$3.5 billion; strengthening the 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 in mountainous and hilly terrain) of class II roads to four lanes (class I) would require \$25.5 billion.
- ¹⁰ International Union of Railways and Community of European Railway and Infrastructure Companies, *Rail Transport and Environment: Facts and Figures* (Paris and Brussels, UIC and CER, 2008). Available from www.uic.org/homepage/railways&environment_facts&figures.pdf.
- ¹¹ According to the Intergovernmental Agreement on Dry Ports, “a dry port of international importance (‘dry port’) shall refer to an inland location as a logistics centre connected to one or more modes of transport for the handling, storage and regulatory inspection of goods moving in international trade and the execution of applicable customs control and formalities”. It may be distinguished from an inland container depot (ICD) in that it can accommodate all types of cargo, whereas an ICD specializes in the handling of containers and containerized cargo.
- ¹² J. Woxenius, V. Roso and K. Lumsden, “The dry port concept: connecting seaports with their hinterland by rail”, ICLSP Conference Proceedings, Dalian, China (Goteborg, Sweden, Department of Transportation and Logistics, Chalmers University of Technology, 2004), pp. 305-319. Available from www.pol.gu.se/digitalAssets/1344/1344857_2004_iclsp_dalian_woxros-lum.pdf.
- ¹³ ESCAP, together with its member States, worked for several years on the development of the Intergovernmental Agreement on Dry Ports. Under this agreement, countries nominated important nodal points between the Asian Highway and Trans-Asian Railway networks to develop into dry ports.
- ¹⁴ NEA Transport Research Institute and International Road Transport Union, *New Eurasian Land Transport Initiative: Final Report – Analysis of Monitoring Data Collected on NELTI Project Routes in 2008-2009* (2009). Available from www.iru.org/cms-filesystem-action?file=events_2009_almaty/NELTI-report-EN.pdf.
- ¹⁵ The opening of the joint customs control was the result of the Agreement between the Government of the Republic of Kazakhstan and the Government of the Kyrgyz Republic on Joint Control at the Kyrgyz-Kazakhstan Borders, signed in 2006.
- ¹⁶ United Nations Economic and Social Commission for Asia and the Pacific, *Review of Developments in Transport in Asia and the Pacific*. ST/ESCAP/2627. Chapter 2.
- ¹⁷ See United Nations Centre for Trade Facilitation and Electronic Business, *Recommendation and Guidelines on Establishing a Single Window to Enhance the Efficient Exchange of Information between Trade and Government – Recommendation No. 33* (United Nations publication, Sales No. 05.II.E.9).
- ¹⁸ United Nations Economic and Social Commission for Asia and the Pacific and United Nations Economic Commission for Europe, *Single Window Planning and Implementation Guide*. ECE/TRADE/404.
- ¹⁹ The development of integrated systems was the focus of the joint United Nations Regional Commissions’ Global Trade Facilitation Forum, held in Bangkok on 18 and 19 November 2013. See <http://unnex.unescap.org/gtfc13.asp> for details.
- ²⁰ See www.paa.net/.
- ²¹ J.F. Arvis and others, *Connecting Landlocked Developing Countries to Markets: Trade Corridors in the 21st Century* (Washington, D.C., World Bank, 2011). Available from <https://openknowledge.worldbank.org/handle/10986/2286>.
- ²² China and Mongolia renewed their agreement on international road transport, together with its protocol, in June 2011, opening 36 transport routes through 13 border crossings; the agreement also introduced long-term multiple-entry permits for the carriage of goods, in

- addition to short-term, single-entry permits. Meanwhile, China and Viet Nam amended their bilateral agreement on road transport in October 2011 and signed a new protocol for the implementation of the agreement in May 2012, allowing Chinese vehicles to travel to Hanoi and the seaport of Hai Phong in Viet Nam, and allowing Vietnamese vehicles access to important economic centres in China, such as Guangzhou, Shenzhen, Kunming and Nanning.
- ²³ United Nations Economic and Social Commission for Asia and the Pacific, “Creating the silk super-highway in Central Asia”, Press Release, News Number G/73/2013, 29 November 2013. Available from www.unescap.org/news/creating-silk-super-highway-central-asia.
- ²⁴ ESCAP has proposed extending this corridor to other parts of South Asia beginning with Delhi-Kolkata-Dhaka. It has been argued that the Istanbul-Tehran-Islamabad – Delhi-Kolkata-Dhaka container trade corridor could become an important trade route for intraregional trade, as well as help to make the subregion a hub of East-West trade.
- ²⁵ Industry estimate; see for example the website of the United States of America, Office of Science and Technology Policy, which estimated that timing “broadband deployment activities to periods when streets are already under construction...can reduce network deployment costs along Federal roadways by up to 90 percent”. Available from www.whitehouse.gov/blog/2013/09/16/accelerating-broadband-infrastructure-deployment-across-united-states.
- ²⁶ More than 1,000 households, representatives of Government, businesses, non-governmental organizations and youth were surveyed by the Pacific Institute of Public Policy. See S. O'Connor, A. Naemon and B. Sijapati-Basnett, *Net Effects: Social and Economic Impacts of Telecommunications and Internet in Vanuatu – Research Findings Report 2011-2012* (Port Vila, Pacific Institute of Public Policy, 2012). Available from www.pacificpolicy.org/wp-content/uploads/2012/05/PIPP-Net-Effects-2011-Vanuatu-Telecomms-report1.pdf.
- ²⁷ International Telecommunications Union, *Measuring the Information Society 2013*.
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- ³⁰ S. ‘Ofa, *Telecommunications Regulatory Reform in Small Island Developing States: the Impact of the WTO’s Telecommunications Commitment* (Newcastle upon Tyne, United Kingdom, Cambridge Scholars Publishing, 2012).
- ³¹ International Energy Agency, IEA World Energy Statistics and Balances database (2013). Available from www.oecd-ilibrary.org/energy/data/iea-world-energy-statistics-and-balances_enestats-data-en.
- ³² International Energy Agency, *World Energy Outlook 2012* (Paris, OECD/IEA, 2012). Available from www.iea.org/publications/freepublications/publication/WEO2012_free.pdf.
- ³³ These include the East Siberia-Pacific Ocean oil pipeline, the Central Asia-China gas pipeline, the Turkmenistan-Afghanistan-Pakistan-India pipeline, the Islamic Republic of Iran-Pakistan-India pipeline and the Trans-ASEAN gas pipeline. There are also such projects as the Bangladesh-India/India-Bangladesh pipeline; the Indonesia-Philippines gas pipeline trade; Myanmar-India, Myanmar-Bangladesh, Myanmar-China pipeline gas; and the Malaysia-Thailand pipeline gas trade. In addition, there are opportunities for the maritime trading of liquefied natural gas. These include Malaysia to Bangladesh, India and China; Brunei Darussalam to China, India and Hong Kong, China; and maritime liquefied natural gas supplies of Pacific island countries.
- ³⁴ Further examples of subregional energy cooperation initiatives can be found in United Nations Economic and Social Commission for Asia and the Pacific, *Growing Together: Economic Integration for an Inclusive and Sustainable Asia-Pacific Century*. ST/ESCAP/2629.
- ³⁵ In Commission resolution 68/11 on connectivity for energy security, the Executive Secretary was requested to “identify options, in consultation with member States, that member States may choose on regional energy connectivity, including an intergovernmental framework that could be developed for an integrated regional power grid, which could be termed as the “Asian Energy Highway”, to analyse the socioeconomic and environmental benefits of each option as well as the challenges and opportunities towards the realization of each option”. See United Nations Economic and Social Commission for Asia and the Pacific, *Official Records of the Economic and Social Council, Supplement No. 19 (E/2012/39-E/ESCAP/68/24)*.
- ³⁶ World Energy Council, *Regional Energy Integration in Africa* (London, World Energy Council, 2005). Available from www.worldenergy.org/documents/integrationii.pdf.

- ³⁷ Most notably, related to the high-voltage direct current transmission, such as: (a) improvements in their efficient ranges; (b) reduced footprint through reduced right-of-way requirements; (c) opportunities to interconnect grids by either land or sea (using cables); (d) the development of hybrid high-voltage direct current breakers that can respond to power interruptions and emergency situations, also providing an increased opportunity for network augmentation; (e) opportunity for asynchronous interconnections; and (f) developments in smart grid technology (with high capacity converter feeder transformers) that enhance opportunities for improvements in the geographical scale of grid interconnectivity, including improved renewable energy management through load smoothing. United Nations Economic and Social Commission for Asia and the Pacific, “Meeting report: Expert Group Meeting on Conceptualizing the Asian Energy Highway, 3-5 September 2013, Urumqi, China”. Available from www.unescap.org/sites/default/files/EGM-AEH-meeting-report_0.pdf.
- ³⁸ Association of Southeast Asian Nations, *Master Plan on ASEAN Connectivity*. (Jakarta, Indonesia, 2010) Available from www.asean.org/archive/documents/MPAC.pdf.
- ³⁹ World Bank, *Migration and Remittance Flows: Recent Trends and Outlook, 2013-2016*. Migration and Development Brief No. 21. (Washington D.C., 2013). These data refer to remittances sent through official channels. However, there are also large flows of remittances sent through informal channels. Money can be sent through informal carriers, or carried by travelling friends or the migrants themselves. For instance, 44% of respondents in Afghanistan, Bangladesh, India, Indonesia, Pakistan and Sri Lanka who reported sending international remittances did so through informal channels, while 15% of those respondents receiving international remittances did so through informal channels. See J. Kendall and others, *Remittances, Payments, and Money Transfers: Behaviors of South Asians and Indonesians* (Gallup Inc., 2013). Available from www.gallup.com/file/poll/161675/Remittances%20Payments%20and%20Money%20Transfers%20Behaviors%20of%20South%20Asians%20and%20Indonesians.pdf.
- ⁴⁰ K. Imai and others, “Remittances, growth and poverty: new evidence from Asian countries”, Occasional Paper No. 15 (Rome, International Fund for Agricultural Development, 2012). Available from www.ifad.org/operations/projects/regions/pi/paper/15.pdf.
- ⁴¹ D. McKenzie and J. Gibson, “The development impact of a best practice seasonal worker policy”, Policy Research Working Paper No. 5488 (Washington, DC, World Bank, 2010). Available from <http://elibrary.worldbank.org/doi/book/10.1596/1813-9450-5488>.
- ⁴² J. Gibson and D. McKenzie, “Development through seasonal worker programs: the case of New Zealand’s RSE Program”, Policy Research Working Paper No. 6762 (Washington DC, World Bank, 2012). Available from www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2014/01/28/000158349_20140128160906/Rendered/PDF/WPS6762.pdf.
- ⁴³ B. Yeoh and T. Lam, “The costs of (im)mobility: children left behind and children who migrate with a parent”, in *Perspectives on Gender and Migration* (Bangkok, ESCAP, 2007).
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- ⁴⁶ A/RES/45/158.
- ⁴⁷ Association of Southeast Asian Nations, *ASEAN Socio-Cultural Community Blueprint* (Jakarta, ASEAN, 2009). Available from www.asean.org/archive/5187-19.pdf.
- ⁴⁸ Asia Pacific Forum of National Human Rights Institutions, *Promoting and Protecting the Rights of Migrant Workers: the Role of National Human Rights Institutions* (Sydney, Asia Pacific Forum of National Human Rights Institutions, 2012). Available from nhri.ohchr.org/EN/IHRS/Documents/APF%20publication%20-%20promoting%20and%20protecting%20the%20rights%20of%20migrant%20workers.pdf.
- ⁴⁹ United Nations Economic and Social Commission for Asia and the Pacific, *Economic and Social Survey of Asia and the Pacific 2011: Sustaining Dynamism and Inclusive Development – Connectivity in the Region and Productive Capacity in Least Developed Countries* (United Nations publication, Sales No. E.11.II.F.2).
- ⁵⁰ United Nations Educational, Scientific and Cultural Organization, *Global Flow of Tertiary Students* (2014). Available from www.uis.unesco.org/Education/Pages/international-student-flow-viz.aspx.

⁵¹ Ibid.

⁵² More information on ARTNeT is available from <http://artnet.unescap.org>.

⁵³ More information on SATNET Asia is available from www.uncapsa.org/theme2.asp.

⁵⁴ United Nations Economic and Social Commission for Asia and the Pacific, *Statistical Yearbook for Asia and the Pacific 2013*. (United Nations Publication, Sales No. E.13.II.F.1.)

⁵⁵ ATA Carnet is an international customs document that permits the duty- and tax-free temporary import of goods for up to one year, which is useful for commercial samples, professional equipment, and goods for use at trade fairs, shows and exhibitions. In the ESCAP region, China; Hong Kong, China; India; the Islamic Republic of Iran; Japan; Macao, China; Malaysia; Mongolia; Pakistan; the Republic of Korea; the Russian Federation; Singapore; Sri Lanka; Thailand; and Turkey accept and use ATA Carnets.

⁵⁶ United Nations Economic and Social Commission for Asia and the Pacific, *Policy Guidebook for SME Development in Asia and the Pacific*, (United Nations publication, Sales No. E.12.II.F.2).

⁵⁷ Network of East Asian Think-Tanks, *NEAT Working Group on Enhancing People to People Connectivity: Education, Tourism and Cultural Exchange – Final Report* (NEAT, 2013).

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3
CHINESE

KAZAKHSTAN

JAPAN

MALAYSIA

MACAO, CHINA

IRAN
(ISLAMIC REPUBLIC OF)

NIUE

INDONESIA

MALDIVES

STRENGTHENING INSTITUTIONAL COORDINATION AND REGIONAL COOPERATION

6

To plan and implement joint strategies for regional connectivity, countries need robust institutional frameworks. To strengthen institutional coordination and regional cooperation, intergovernmental organizations and programmes can serve as neutral platforms not only for policy coordination to establish regional norms but also for implementing global statistical standards for joint planning and monitoring, and for exploring new modalities for financing.

There is no single formula for regional integration, with different forces driving the process in different regions. In the case of the European Union, for example, the rationale for integration was that economic interdependence would foster regional peace while at the same time increase the region's productivity and competitiveness. Based on this premise, member States of the European Union worked towards a single common market by harmonizing policies and market rules. These would be enforced by pan-European institutions, backed up by substantial financial resources.

Regional integration in Asia and the Pacific has followed a less uniform trajectory. Integration has progressed at different rates from one subregion to another, and in different ways, depending on the sector. Bilateral and plurilateral agreements have liberalized trade, reduced tariffs and opened markets in almost all countries. However, apart from investing in maritime ports, Governments have concentrated on national rather than regional infrastructure. Indeed, overall integration has been driven less by Governments than by the private sector, led by multinational corporations which, in collaboration with local enterprises, established global and regional production networks.¹

Nowadays, however, national Governments are seeking a more active role, looking beyond national borders and developing transnational strategies for strengthening regional connectivity. They can, for example, shape regional spatial development through their infrastructure investments and policies. They can also link domestic businesses and supranational regulatory bodies by establishing common standards and rules for business. National Governments also control the framework for cross-border flows of capital and labour.

With this in mind, Governments must take the lead in establishing robust institutional frameworks and reaching out to other countries to develop and implement joint strategies. In this regard, many subregional organizations are developing their own programmes or "road maps" for strengthening

connectivity. The present chapter contains a discussion of some of these strategies, and a description of how ESCAP can push forward a regional connectivity agenda which complements and supports those efforts.

STRENGTHENING INSTITUTIONAL RESPONSES TO REGIONAL CONNECTIVITY

The ESCAP region is home to many intergovernmental organizations, operating at different levels and around different interests or themes. In the past, many subregional initiatives were launched in response to issues of common concern, or with specific sectoral objectives, particularly on trade and economic cooperation. Over the past decade, however, there has been a convergence of these different initiatives towards a more comprehensive subregional integration agenda. This appears to be the result of a deepening level of political commitment of the respective member States. For example, the Treaty on the Establishment of the Eurasian Economic Community was signed in Astana in October 2000 and came into effect in June 2001, with Belarus, Kazakhstan, Kyrgyzstan, the Russian Federation and Tajikistan, as the founding members.² The Customs Union of Belarus, Kazakhstan and the Russian Federation came into effect in July 2010, while the Common Economic Space involving the three countries began operating on 1 January 2012. Spurred by the removal of trade barriers and the implementation of various other integration policies, trade between Belarus, Kazakhstan and the Russian Federation grew from \$12.9 billion in 2009 to more than \$24 billion in 2013.³

*Subregional organizations
are currently working
to enhance their connectivity*

Also in 2012, the Eurasian Economic Commission was established to support the functions and development of the Customs Union and the Common Economic Space. In May 2014, Belarus, Kazakhstan and the

Russian Federation signed the Eurasian Economic Integration Agreement, for the purpose of launching the “Eurasian Economic Union” in 2015. That union is expected to further integrate the three countries, for example by giving citizens of all members equal access to education and employment across borders.⁴ The new common market is expected to have further growth-promoting and trade-creating effects, both within the union and with outside partners.

Meanwhile, organizations such as the Association of Southeast Asian Nations (ASEAN) and, more recently, Asia-Pacific Economic Cooperation (APEC), have focused on connectivity as part of their regional integration agendas. Both organizations are addressing physical connectivity – the availability and interconnection of hard infrastructure necessary for the movement of goods, people and information. They are also addressing institutional connectivity – the policies and regulations that enable the efficient movement of goods and services across borders. In addition, they are improving people-to-people connectivity – policies and regulations

facilitating the movement of people and increased understanding between them (table 6.1).⁵ Indeed, the Master Plan on ASEAN Connectivity is one of the first comprehensive intergovernmental strategy documents to address the issue of connectivity.

Moreover, other subregional organizations are also improving connectivity between their members, even if they do not have such explicit connectivity agendas. The South Asian Association for Regional Cooperation (SAARC), for example, has launched several relevant initiatives. These include: the Agreement on the Establishment of the South Asian Regional Standards Organisation, which came into effect in 2011; the SAARC Visa Exemption Scheme; and the SAARC Energy Ring.⁶ The connectivity activities of SAARC are also promoted among non-State actors: the SAARC Chambers of Commerce and Industry, for example, provides practical inputs for facilitating regional trade, while the South Asia Migration Commission involves academics, policy institutes, government officials and a wide range of civil society and non-governmental organizations.⁷

Table 6.1. Key elements of the ASEAN and APEC connectivity frameworks

“Categories” of connectivity	ASEAN Master Plan on Connectivity	APEC Policy Document on Connectivity
Physical connectivity	Transport	Transport (ports, airports, roads, and railways)
	Information and communications technology (ICT)	
	Energy	
Institutional connectivity	Trade liberalisation and facilitation	Free Trade Areas/Regional Trade Areas Behind the border barriers
	Investment and services liberalisation and facilitation	
	Mutual recognition agreements/arrangements	
	Regional transport agreements	
	Cross-border procedures	
	Capacity building programmes	Trade facilitation and non-tariff barriers
People-to-people connectivity		Also includes customs modernization, the single window initiative, structural reforms, transport and logistics facilitation
		International business travel
	Education and culture	Cooperation between regional scholars
	Tourism	Educational linkages
		Tourism promotion
		Increased mobility of professionals

Source: ASEAN (2010). *Master Plan on ASEAN Connectivity: One Vision, One Identity, One Community*; APEC (2013). *Improving Connectivity in the Asia Pacific Region: Perspectives of the APEC Policy Support Unit*.

Many other institutional groupings contribute to the integration and connectivity of their member Governments. These include the Economic Cooperation Organization (ECO), Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), Greater Tumen Initiative, the Pacific Islands Forum, Secretariat of the Pacific Community (SPC) and the Shanghai Cooperation Organization. ECO, for example, has the ECO Transit Transport Framework Agreement and the ECO Transit Trade Agreement, while SPC has the Framework for Action on Transport Services.

In recent years, connectivity programmes have been supported by the multilateral development banks. The Asian Development Bank (ADB), for example, has supported the programmes of Central Asia Regional Economic Cooperation, the Greater Mekong Subregion and South Asia Subregional Economic Cooperation. These programmes have taken corridor approaches to trade and transport connectivity – combining investment in “hard” infrastructure with agreements on “soft” measures, such as trade and transport facilitation.⁸ The World Bank, European Bank for Reconstruction and Development, Eurasian Development Bank, Islamic Development Bank and other international financial institutions also fund projects related to

connectivity, though usually for national infrastructure and industrial development.

As organizations move towards more integrated approaches to connectivity, one of the key institutional challenges is to ensure that different sectoral ministries work together, within Governments as well as across borders. To achieve this, clearly defined strategies or “road maps”, with agreed milestones, are essential. For example, the ASEAN Economic Community Scorecard is a useful monitoring tool to track progress towards the ASEAN Economic Community in 2015 (figure 6.1). Based on country reports, this “tracking” tool is also supported by bilateral donors, highlighting the fact that institutional coordination may require external support, especially for low income countries. The reliability of such tools also depends on the availability of comparable data – as considered later in this chapter.

Coordination at the regional level

Experience gained from implementation of preferential trade agreements and transport facilitation frameworks suggests that, as subregional initiatives multiply, they require greater policy harmonization. To avoid overlapping or conflicting rules which create new obstacles to connectivity, member

Figure 6.1. Example from the ASEAN Economic Scorecard, Competitive Economic Region (Pillar II)

Key areas	Phase I (2008-2009)		Phase II (2010-2011)		Total measures	
	Fully implemented	Not fully implemented	Fully implemented	Not fully implemented	Fully implemented	Not fully implemented
Competition policy	2	0	2	0	4	0
Consumer protection	2	0	5	4	7	4
Intellectual property rights	-	-	4	1	4	1
Transport	15	10	6	8	21	18
Energy	0	0	2	1	2	1
Mineral	1	0	7	0	8	0
ICT	2	0	4	0	6	0
Taxation	-	-	0	1	0	1
E-commerce	-	-	1	0	1	0
Total number of measures	22	10	31	15	53	25
Implementation rate	68.7%		67.4%		67.9%	

Source: ASEAN (2012). “ASEAN Economic Scorecard 2012”.

Note: Implementation rate is calculated as the ratio of measures that are fully implemented to total number of measures targeted. A hyphen (-) indicates no measures targeted for this phase.

States and organizations will need to coordinate their activities. For this purpose, they can turn to regional institutions such as ESCAP which can support and coordinate subregional integration, thus facilitating communications between subregional actors and analysing the impact of those initiatives from a regional perspective. Regional institutions can also link subregional and national connectivity policies with global initiatives and standards. Some examples are described below.

Formal frameworks relating to regional connectivity

In some cases, regional coordination can best be achieved through a formal framework. In the ESCAP region, the prominent examples relating to regional connectivity are the intergovernmental agreements on the Asian Highway and Trans-Asian Railway networks, and on dry ports. Developed under the auspices of ESCAP, these intergovernmental agreements have delineated routes and established basic infrastructure standards. Moreover, some sub-regional organizations, such as ASEAN, BIMSTEC and ECO, have used the Asian Highway as the basis for formulating their own road networks. Another formal framework currently under negotiation among ESCAP members in support of greater regional connectivity is a regional arrangement on the facilitation of cross-border paperless trade (see box 5.3 in the previous chapter).

Infrastructure projects benefit from intergovernmental agreements because they can have significant repercussions on neighbouring countries, which should be analysed and discussed before construction is begun. They also have long gestation periods so need continuing commitment. The annual working groups under the above-mentioned agreements provide regular forums in which relevant national authorities, along with subregional and other international organizations, can exchange information and negotiate amendments.

Other major formal frameworks with implications for regional connectivity are agreed at the global level. International agreements and conventions cover a wide range of subjects, such as the movement of goods, people and vehicles, and flows of capital.

For trade liberalization, the principal forum is the World Trade Organization. Other relevant agreements are overseen by specialized agencies of the United Nations, such as the International Labour Organization, the International Maritime Organization and the International Civil Aviation Organization, and the various secretariats for multilateral environmental agreements, which also oversee specific agreements. These international agreements and conventions can also be promoted by regional and subregional organizations as part of their norm-setting functions.

Global agreements and conventions can favorably be supplemented on the regional level

International agreements may also be formulated or implemented by private sector associations and non-governmental organizations. For example, the International Road Transport Union is involved in the administration of the TIR (*Transports Internationaux Routiers*) Carnet, as mandated by the Customs Convention on the International Transport of Goods under Cover of TIR Carnets (1975).

For certain issues, however, it is easier to build consensus at the regional level. Global agreements and conventions can therefore be supplemented by regional-level agreements. One example is the Asia-Pacific Trade Agreement, which was previously known as the Bangkok Agreement. Serviced by the ESCAP secretariat, this is the oldest preferential trade agreement in the Asia-Pacific region; its scope has been expanded from lowering tariffs to addressing barriers to services, trade and investment among its members.

Further work is needed to promote relevant international agreements and conventions at the regional level, as well as to identify ways to effectively support national Governments in acceding to and implementing these agreements.

Voluntary commitments to regional strategies

Most commitments launched under the auspices

of ESCAP are voluntary. The scope of these frameworks and the benefits that can be accrued from them are best achieved through consensus. This “locks in” the commitment of all participating States and discourages the emergence of discontented minorities. As one study noted, however, such an approach also involves “a steep trade-off between commitment and decisiveness.”⁹ This is because such commitments take longer to negotiate than the decisions taken, for example, by institutions or agencies that have more specific or narrower mandates. To accommodate divergent views among member States, these processes may also result in very general or broad types of commitment.

Cross sectoral strategies for increasing connectivity have great potential ahead

In this regard, the most effective approach is to concentrate on specific objectives or sectors, for which it is possible to lay down some basic principles for achieving progress in particular areas. For example, the Regional Strategic Framework for the Facilitation of International Road Transport contains targets for harmonizing road transport facilitation practices and rules.¹⁰ Nevertheless, these strategies can also be linked to a broader connectivity agenda.

Strengthening cross-sectoral and multifaceted approaches to connectivity

The increasingly complex nature of regional connectivity will require strategies that are cross-sectoral. National Governments and international organizations will therefore need to reach out to other stakeholders, including the private sector, academia and civil society organizations, the networks of which form an integral part of the region’s connectivity.

One of the most important infrastructure developments will be expanding overland broadband cable. This can be done by laying fibre-optic cables along existing regional transport networks so as to generate an “Asia-Pacific information superhighway”.

Further, as energy management systems become increasingly reliant on computers and information and communications technology (ICT), this may, in turn, form the basis of an “Asian energy highway”.

Given the complexity of each sector, the benefits and risks of cross-sectoral approaches require further research. Intergovernmental bodies, such as the annual sessions of the Commission and its legislative committees, offer a forum for different line ministries, as well as for experts from other intergovernmental organizations, civil society, the private sector and other stakeholders. In this way, they can work step-by-step towards developing regional cross-sectoral strategies.

In this regard, many of the strategies described in this study are expected to be refined and developed under the framework of the Bangkok Declaration on Regional Economic Cooperation and Integration in Asia and the Pacific. Through this declaration, ESCAP member and associate member States resolved to cooperate in a number of important areas: the formation of an integrated market; the development of seamless regional connectivity in transport, energy and information and communications technology; financing regional development; and taking initiatives to address shared vulnerabilities and risks.

Meanwhile, Governments can also promote cross-sectoral cooperation through national coordination mechanisms. For example, the main challenge in implementing trade and transport facilitation measures is not cost or complexity, but coordination between the various agencies and stakeholders involved. In this regard, national trade and transport coordination committees offer an effective model for agencies and other stakeholders to discuss optimum solutions to facilitate trade and transport (box 6.1).

Planning and implementing regional connectivity strategies also requires two additional ingredients: one is the availability of comparable, accurate and timely information and data; the other is finance. In the remainder of this chapter, these two issues will be examined in more detail.

Box 6.1. Strengthening national trade and transport coordination committees

Cooperation between the various agencies involved in trade and transport can be fostered through a number of mechanisms. The most stable is a permanent coordination institution with a clear long-term mandate and organizational structure. In accordance with its terms of reference, this can coordinate broad and specific facilitation initiatives and measures. Alternatively, for specific initiatives, temporary and case-based coordination mechanisms may be more appropriate. Such mechanisms may eventually be developed into a permanent body to deal with other similar issues on a recurring basis.

Some permanent institutions have been established under subregional trade and/or transport agreements. Examples are the National Transit Transport Coordinating Committees (NTTCC) that have been set up in Cambodia, Malaysia, Thailand and Viet Nam under the ASEAN Framework Agreement on the Facilitation of Goods in Transit. National trade and/or transport facilitation committees have also been established in other Asia-Pacific countries, but some have found it difficult to sustain activities due to funding constraints and lack of operational capacities.

As cross-border trade is likely to expand, the need for greater coordination and collaboration among various agencies will only get stronger. Governments and international organizations should therefore increase their support for these mechanisms. In particular, the establishment of national trade and transport facilitation monitoring mechanisms to support decision-making by national coordination committees may be promoted, as has been done by the Asian Development Bank and ESCAP in Bangladesh, Bhutan and Nepal.

Source: ESCAP (2011). *Guidelines on Establishing and Strengthening National Coordination Mechanisms for Trade and Transport Facilitation in the ESCAP Region*. Available from www.unescap.org/sites/default/files/0%20-%20Full%20Report_12.pdf. ESCAP (2014). *Towards a National Integrated and Sustainable Trade and Transport Facilitation Monitoring Mechanism: BPA+ (ST/ESCAP/2683)*. Available from www.unescap.org/sites/default/files/0%20-%20Full%20text_0.pdf.

STATISTICAL STANDARDS FOR STRENGTHENED ACCOUNTABILITY AND BETTER POLICYMAKING

Official statistics help Governments track progress and ensure that their decisions are based on evidence. As noted in the report of the High-level Panel of Eminent Persons on the Post-2015 Development Agenda, statistics are more than a tool for monitoring development results; they are also a means to strengthen accountability and are a central component of achieving the development agenda beyond 2015.¹¹ ESCAP member and associate member States reaffirmed this view in their input to the United Nations Statistical Commission session in March 2014.¹²

As noted by the High-level Panel, better data and statistics provide the basis for evidence-based policymaking. They facilitate bilateral, multilateral and international policy dialogue in arriving at a shared understanding of trends, issues and bottlenecks

– enabling them to reach consensus on cross-border issues, such as trade, international migration, education standards, transport and tourism.

Fundamental for this shared understanding is the availability of data that are comparable across countries, over time and across different data sources. For this purpose, statistics need to be produced, disseminated and used according to mutually agreed statistical standards concerning definitions, classifications and methodologies.¹³ Such standards can be either global, such as the System of National Accounts, or agreed at regional or subregional levels. They should also be in line with the Fundamental Principles of Official Statistics, which offer guidance on objectivity, independence and availability, and which also call for the use of international concepts, classifications and methods.¹⁴

Organizations and countries that adopt common statistical standards are in a better position to

analyse the issues. They can also jointly “track” the impact of their connectivity policies at national and subnational levels. Much can be learned from the experience of subregional organizations such as ASEAN, which has established clear frameworks for producing statistics relevant to broader organizational objectives, such as regional integration (box 6.2).

Adherence to common standards and principles for the production of statistics also strengthens the quality, credibility and cross-country comparability of data and fosters mutual trust. One example is the International Comparison Program (ICP),¹⁵ which estimates purchasing power parities, making it possible to compare the output of economies in real terms. Another has been the efforts to

improve statistics for monitoring the achievement of the Millennium Development Goals. This has enabled better cross-country comparisons for holding Governments accountable for achieving maximum results from available resources (box 6.3).

Reliable and comparable statistics can also be used by private businesses and individuals. Private sector companies rely on official statistics, as well as their own information sources, to assess market opportunities and make decisions regarding trade, investment, production and distribution. Individuals too can, for example, use labour market statistics to compare employment opportunities and living costs between countries, and thus weigh the potential benefits of migration.

Box 6.2. Statistical connectivity in ASEAN

The work of the Association of Southeast Asian Nations (ASEAN) in promoting statistics can be traced to October 1997 with the first ASEAN Heads of Statistical Offices Meeting (AHSOM) in an official discussion forum. The annual meetings of AHSOM provided direction and guidance to the ASEAN Secretariat’s work in statistical standardization among its members. By 2001, AHSOM had adopted the ASEAN Framework of Cooperation in Statistics.

Initiatives that followed over the next decade from the AHSOM meetings included implementation of international standards and concepts in the fields of trade statistics, industrial statistics and foreign direct investment statistics. In 2010, the revised Framework for Cooperation in Statistics and the ASEAN Community Statistical System were created. This body, known as ACSS, replaced AHSOM and added a statistical decision-making body to the ASEAN structure with clear responsibility for improving statistical connectivity among member States.

ASEAN has received considerable support from its dialogue partners on the adoption of international standards and statistical harmonization. From 2009 to 2013, ASEAN cooperated with the European Union in the development of ACSS, as well as in the harmonization of foreign direct investment and trade statistics. Through its cooperation with the European Union and with the United Nations, ASEAN has substantially improved the harmonization of merchandise trade statistics and has improved the dissemination of comparable data. ASEAN also maintains its own country-to-country mutual assistance framework, known as ASEAN-help-ASEAN, which has facilitated partnerships between its members to address issues of capacity development and harmonization.

In placing statistics and data standards at the centre of its integration agenda, ASEAN has illustrated the direct role that it can have in advancing shared prosperity. Notably, “ASEANstats”, the ASEAN Secretariat’s regional statistical entity, is institutionally located within the office responsible for monitoring ASEAN integration.

Source: Based on information from ASEANstats. See also 2001 ASEAN Framework of Cooperation in Statistics (2001-2010), available from www.asean.org/archive/stat/AFCS.pdf; ASEAN Framework of Cooperation in Statistics (2010-2015), available from www.asean.org/images/2013/resources/statistics/statistical_publication/ASEAN%20Framework_2010-2015.pdf; and Joint Media Statements of the ASEAN Heads of Statistical Offices Meetings, available from www.asean.org/resources/category/asean-statistics-2.

Box 6.3. Measuring progress towards the Millennium Development Goals

The international statistical community rose to the challenges presented by the Millennium Development Goals by working to increase the availability of necessary data on the relevant indicators. Analysing progress towards the targets under the Millennium Development Goals requires at least two data points for each indicator. *Asia-Pacific Regional MDG Report 2012/13*, which uses 20 indicators to assess data availability, shows that there are only two indicators where every country in the Asia-Pacific region meets the minimum data requirement - the incidence and prevalence of tuberculosis (TB). There are 10 other indicators for which at least 80 per cent of the countries in the region meet the minimum data requirement. For poverty data, less than half meet the minimum requirement.

Number of countries, out of 55, meeting minimum data requirements, by indicator

	"No. of countries (out of a total of 55) meeting minimum data requirements, by indicator"			
	2010 dataset		2013 dataset	
	Number	%	Number	%
\$1.25 per day poverty	25	46	25	45
Underweight children	28	51	30	55
Primary enrolment	32	58	38	69
Reaching last grade	26	47	38	69
Primary completion	40	73	44	80
Gender primary	45	82	47	85
Gender secondary	41	75	45	82
Gender tertiary	29	53	42	76
Under-5 mortality	47	86	48	87
Infant mortality	47	86	48	87
Maternal mortality	0	0	41	75
Skilled birth attendance	43	78	46	84
Antenatal care (≥ 1 visit)	28	51	36	65
HIV prevalence	30	55	28	51
TB incidence	55	100	55	100
TB prevalence	55	100	55	100
Forest cover	51	93	53	96
Protected area	52	95	52	95
Safe drinking water	48	87	52	95
Basic sanitation	48	87	52	95

Source: Asia-Pacific Regional MDG report 2012/13.

The preferred source of data for analysis of progress towards achieving Millennium Development Goal targets is national statistics. In countries where the national statistical system does not generate the relevant data, the responsible agency fills the gaps with data collected by international agencies. A report presented to the United Nations Statistical Commission in 2013 showed that, of the 55 indicator series analysed, 29 were based on data from countries, 6 required minimum adjustment and 15 were estimated by international agencies. For one of the indicator series, most data points were derived through a model.^a This led to questions regarding methodological validity and the reliability of these estimates and has highlighted the need to strengthen the capacity of national statistical systems.^b Thus, the availability of comparable data is at the centre of ongoing discussions on the sustainable development goals, which are expected to form the foundation for the international development agenda beyond 2015.

Source: ADB, ESCAP and UNDP (2013). *Asia-Pacific Aspirations: Perspectives for a Post-2015 Development Agenda*, Asia-Pacific Regional MDGs Report 2012/13. Available from www.unescap.org/sites/default/files/MDG-Report2012-2013%28lowres%29_0.pdf.

^a United Nations Economic and Social Council (2013). *Indicators for monitoring the Millennium Development Goals*. Report of the Secretary-General to the 44th session of the Statistical Commission, 26 February – 1 March 2013. E/CN.3/2013/21.

^b PARIS 21, *Strengthening national statistical systems to monitor global goals*. Discussion paper presented at the Committee for the Coordination of Statistical Activities (SA/2013/10). August 2013.

Strengthening statistical capacity in the Asian and Pacific region

Currently, statistics are often unavailable because many Governments lack the capacity to gather and use them.¹⁶ The ESCAP Committee on Statistics is therefore trying to achieve two goals by 2020: to ensure that all countries in the region can provide a basic range of population, economic, social and environment statistics; and second, to create a more adaptive and cost-effective information management environment for national statistical offices.¹⁷

Established forums can help produce the statistics needed to face future challenges

The production of statistics requires the capacity to collect the required information, such as through surveys and population censuses, as well as to make the best possible use of available information, such as administrative records. The “new data revolution” offers great potential, but serious efforts are needed to bridge the gap between the traditional statistics community and new data producers – to allow “non-official” data to complement and add value to officially recognized statistics.¹⁸ Towards this end, the United Nations has launched the “Global Pulse initiative”, which explores how policymakers can use digital data sources and real-time analysis to better understand human well-being and emerging vulnerabilities and protect people from shocks.¹⁹

To move the regional connectivity agenda forward, national Governments can work closely together through established forums such as the United Nations Statistical Commission and the ESCAP Committee on Statistics. This approach can help define the type of statistics needed by policymakers and develop relevant standards, including innovative data sources. National statistical systems of ESCAP member States can also support line ministries in monitoring regional strategies by coordinating data collection and verification.

REGIONAL SOLUTIONS FOR FINANCING REGIONAL INFRASTRUCTURE NETWORKS

Infrastructure development is progressing unevenly across the region and tends to be directed towards satisfying domestic needs. This is understandable since infrastructure development invariably involves high capital costs, with benefits accruing over the longer run. National infrastructure projects are therefore likely to progress faster than cross-border ones since they have lower risk profiles and shorter gestation times. Furthermore, for regional projects the costs and benefits can be unevenly distributed among the participants – or at least perceived to be so. They also require higher levels of regional and sectoral coordination and a commitment from all parties.

To overcome the obstacles to regional project financing, multilateral funding bodies, such as ADB and the World Bank have promoted “corridor approaches”. ADB, for example, has supported corridor development under the Greater Mekong Subregion programme, Central Asia Regional Economic Cooperation programme and South Asia Subregional Economic Cooperation programme. The ADB rationale is that economic corridors not only afford significant benefits to the major economic centres along the corridors, but also offer secondary infrastructural linkages to provide access to markets from rural areas.²⁰ Nevertheless, countries must still borrow on the basis of sovereign loans, so countries may still have concerns over the distribution of costs and benefits.

Regional projects as “regional public goods”

ESCAP has suggested that regional infrastructure networks should be recognized as “regional public goods”, the collective benefit of which for the region are greater than the cost of the individual projects. On this basis, there is a strong case for regional approaches to financing critical infrastructure networks, in particular transport, energy and ICT.

A “regional public goods” approach is particularly relevant for directing investment to the “weakest links” – improving their efficiency and coherence. This can help the landlocked and least developed countries, for example, to increase the quality of their national transport networks so that they are better connected to regional networks. For example, the recent developments in Myanmar have raised the prospect of better overland links through Myanmar, connecting South-East and South Asia. Such connectivity would not only enhance the mobility of goods and people between these subregions, but also open up new opportunities for access by India’s northeastern States.

*Emerging regional networks
need to be designed for future
shared prosperity*

Fortunately, many countries in the region are in a strong economic position to build the necessary infrastructure and institutions. Some countries, such as China, India, Malaysia and Thailand, are already investing in physical infrastructure in neighbouring and other regional countries.²¹ However, they could enhance the benefits of those initiatives if they considered them within a wider regional framework. This would also assist them in adhering to international standards for project management, construction methods and environmental and social safeguards.

As they are still in the development stage, countries in the Asia-Pacific region have the chance to develop regional networks in an integrated and coordinated manner. This would reduce the costs and spread the benefits to a wider group of countries. To do so, however, countries have to agree on how to apportion costs and risks. A complicating factor is that regional projects are likely to have asymmetric impact on participating countries – whether in terms of the financial burden, or pollution or other adverse impacts in transit countries – while the main benefits accrue to neighbours. In order to better distribute benefits among participating countries, it may be

necessary to adopt additional measures, such as grants or concessional financing, to the countries affected, or allow them to charge toll fees.

Drawing on previous research, as well as the earlier discussion on a regional financial architecture in part I of this year’s *Economic and Social Survey*, the following section offers innovative approaches for financing regional infrastructure.

Regional infrastructure funds

An alternative to national or bilateral financing is to create regional infrastructure funds. By serving as a kind of “intermediary” between project sponsors and investors, such funds could complement existing forms of investment by mobilizing funds beyond governmental resources – from institutional investors, such as pension funds, sovereign wealth funds or foreign exchange reserves.

Two examples of regional infrastructure funds are the ASEAN Infrastructure Fund and the SAARC Development Fund. The ASEAN Infrastructure Fund has already started disbursing funds for projects (box 6.4). The World Bank also plans to establish a Global Infrastructure Facility, with contributions from the World Bank itself, members, sovereign wealth funds and pension funds, in order to try to channel more funding towards infrastructure development in developing countries. In addition, early in 2014, APEC announced progress in the development of its new APEC Multi Year Plan on Infrastructure Development and Investment, which specifically targets the region’s infrastructure through greater private sector investment.²²

Another new actor is also on the steps, as negotiations on the newly proposed “BRICS” development bank are expected to be completed in 2014. The so-called “BRICS” bank was first announced by the five founding members, Brazil, the Russian Federation, India, China and South Africa, in 2012. The bank is likely to focus on infrastructure, with a capital base starting at \$50 billion and eventually increasing to \$100 billion.²³

Box 6.4. ASEAN Infrastructure Fund: a possible “best practice” for future regional infrastructure financing

The idea behind the ASEAN Infrastructure Fund (AIF), which was set up by the Association of Southeast Asian Nations (ASEAN) in 2010, is to promote “infrastructures of development” within ASEAN developing country members. To finance AIF, the Asian Development Bank and ASEAN member States provided core equity amounting to \$150 million and \$335.2 million respectively. In addition, bonds will be issued to attract resources from institutional investors, such as central banks, which represent potentially a huge source of funding given the amount of foreign exchange reserves in the region. So far the Fund lends only to public entities, but the intention is to support public-private partnerships in the near future. As of the end of May 2014, the Fund had financed a power transmission project and a sanitation project in Indonesia worth \$65 million; other projects are at advanced stages of preparation.

The Fund has a clause saying that at least 30 per cent of the financing should go to regional projects, including cross-border projects and national projects with significant regional impact. This arrangement can make financing available to regional infrastructure projects which otherwise would struggle to find financing on their own.

In May 2014, Myanmar announced its intention to contribute equity to the Fund, bringing all 10 member States into the Fund. In this regard, the Fund may serve as a useful example to others looking for multilateral approaches to financing infrastructure. Although the value of contributions varies, the fact that all members of ASEAN are providing funds to AIF signals a strong public commitment by Governments. Meanwhile, the Asian Development Bank continues to play an important role not only in terms of financing but also as the administrator of the Fund, which enables it to bring know-how, a pipeline of potential projects and the technical support needed to see projects to completion.

Source: ADB (2010). *General Capital Increase V*; ADB (2012). *ADB Financial Profile 2012*; ADB (2012). *Proposed Equity Contribution and Administration of ASEAN Infrastructure Fund*; ADB (2014) “Myanmar Set to Join ASEAN Infrastructure Fund in 2014”.

In parallel with its involvement in the proposed BRICS bank, China has announced its intention to start a new “Asian Infrastructure Investment Bank” in 2014. Reports suggest that the bank will have an initial capital base of \$50 billion, provided by China as well as other participating members.²⁴ Such an “Asian Infrastructure Investment Bank” could cooperate with the World Bank, Asian Development Bank and other financial institutions to help bridge the infrastructure financing gaps in the region.

Regional Project Preparatory Facility

To be successful, regional infrastructure funds rely on a viable pipeline of projects with supportive feasibility studies. Unfortunately, many developing countries lack “bankable” projects because they do not have the legal, project financing and technical expertise. The preparation of regional transport

projects is costly and time-consuming, particularly given the lack of data on cross-border traffic flows.

Some analysts have therefore called for the creation of a regional infrastructure project preparatory facility to help Governments prepare bankable regional projects. Such a facility could also be an integral part of an Asian multi-donor platform.

Asian Multi-donor Platform

Another possible instrument would be an Asian multi-donor platform. This could collect grants from different donors and allocate them to national or multilateral development banks. The objective would be to use concessional resources to leverage more public and private funding for regional projects. Grant money could be used to lower the hurdle for financial feasibility or to reduce the risk associated

with a specific project. Grant money could also be used to finance technical assistance aimed at unblocking, accelerating or improving the quality of regional projects.

For the recipient countries, the platform could serve as a single entry point for submitting project proposals. This would facilitate access to finance while decreasing dependence on a single partner. For the contributing countries such a platform could result in faster project implementation, lower administrative costs and greater impact. By facilitating joint operations, the platform could also enhance collaboration among participating institutions, including at the project level, for example by harmonizing their procedures.²⁵

Public-Private Partnerships

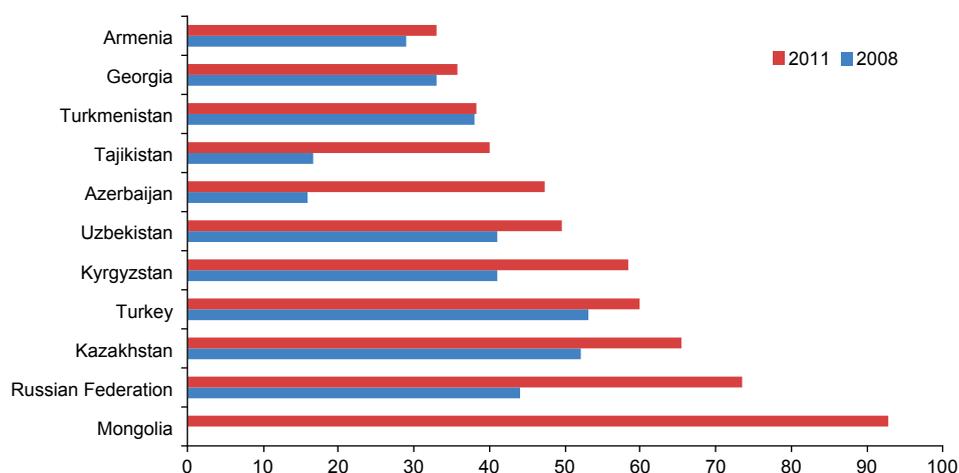
Given the considerable pressure on national budgets, developing countries in the ESCAP region have also been taking measures to promote public-private partnerships (PPPs).²⁶ This has been a particularly promising avenue in revenue-generating sectors, such as energy, ICT and transport, where user charges can be used to repay the investment. However, in the context of a regional project, the issue of how to charge user fees is complex and is one reason why such models have not been widely applied to cross-border projects.

Furthermore, attracting private sector interest requires Governments to take appropriate actions to create enabling environments for PPP development at the macro and sectoral levels, for example, by adopting regulations that will assure private investors that their legitimate rights will be adequately protected.²⁷

Some countries may not yet be able to create an enabling environment, or may lack the capacity to design and manage PPPs. There are many different policy areas which need to be in place for Governments to enter into successful public-private partnerships, not least a sound legal framework. Figure 6.2 shows the change in “percentage of compliance” of legal frameworks for selected countries in the ESCAP region, conducted by the European Bank for Reconstruction and Development.²⁸ Though the pace is slow, the graph suggests that some countries made progress between 2008 and 2011.

These countries can learn from other countries in the region by participating in PPP knowledge networks, such as those promoted by ESCAP. As a regional platform, ESCAP is well suited for supporting these networking activities, and has already organized several meetings at both ministerial and expert levels to facilitate the exchange of experience.

Figure 6.2. Percentage of compliance of legal frameworks for selected ESCAP countries (2008, 2011)



Endnotes

- ¹ H. Kuroda, Infrastructure and regional cooperation. Paper presented at the Annual Bank Conference on Development Economics, Tokyo, 2006.
- ² Ukraine and Moldova have had observer status since May 2002 and Armenia, since January 2003. On 25 January 2006, a protocol was signed on Uzbekistan's accession to the organization, but in October 2008 it suspended its participation in the work of EURASEC bodies. See *EurAsEC Today 2013*, accessible from www.evrases.com/i/data/item7618-1.pdf.
- ³ Before the commencement of the Customs Union in 2009, it stood at \$12.9 billion, according to the Ministry of Foreign Affairs, Republic of Kazakhstan (2014).
- ⁴ *Washington Post* (2014). *Russia, Kazakhstan, Belarus form Eurasian Economic Union*. Published May 29, 2014. Available from http://www.washingtonpost.com/world/europe/russia-kazakhstan-belarus-form-eurasina-economic-union/2014/05/29/de4a2c15-cb01-4c25-9bd6-7d5ac93466fd_story.html.
- ⁵ Asia-Pacific Economic Cooperation, *Improving Connectivity in the Asia Pacific Region: Perspectives of the APEC Policy Support Unit* (Singapore, APEC, 2013). Available from http://publications.apec.org/publication-detail.php?pub_id=1461.
- ⁶ The Declaration of the 14th SAARC Summit, held in 2007, stated that "The Heads of State or Government recognised the importance of connectivity in fulfilling these objectives. It was vital to first have better connectivity within South Asia and then with the rest of the world. They agreed to improve intra-regional connectivity, particularly physical, economic and people-to-people connectivity. They agreed to the vision of a South Asian community, where there was smooth flow of goods, services, peoples, technologies, knowledge, capital, culture and ideas in the region". See [www.saarc-sec.org/userfiles/Summit Declarations/14](http://www.saarc-sec.org/userfiles/Summit%20Declarations/14.pdf).
- ⁷ Institute of Peace and Conflict Studies, Konrad Adenauer Foundation, and India International Centre, *SAARC towards Greater Connectivity*. Conference report, Colombo, 15-16 January 2008. Available from www.ipcs.org/pdf_file/issue/860963938ConferenceReport-SAARC.pdf.
- ⁸ See for example Asian Development Bank, *Sharing Growth and Prosperity: Strategy and Action Plan for the Greater Mekong Subregion Southern Economic Corridor* (Mandaluyong City, Philippines, ADB, 2010). Available from www.adb.org/sites/default/files/pub/2010/gms-action-plan-east-west.pdf.
- ⁹ Asian Development Bank, *Institutions for Regional Integration – Toward an Asian Economic Community* (Mandaluyong City, Philippines, ADB, 2010). Available from http://aric.adb.org/pdf/Institutions_for_Regionalization_Web.pdf.
- ¹⁰ United Nations, *Economic and Social Commission for Asia and the Pacific, Regional strategic framework for the facilitation of international road transport*. (Bangkok, 2012). Available from www.unescap.org/resources/regional-strategic-framework-facilitation-international-road-transport
- ¹¹ United Nations, *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.un.org/en/development/desa/policy/untaskteam_undf/HLP%20P2015%20Report.pdf.
- ¹² United Nations Economic and Social Council, *Report of the Economic and Social Commission for Asia and the Pacific on Statistics and the Post-2015 Development Agenda, Perspectives from the Asia-Pacific Region*. Statistical Commission, forty-fifth session, 4-7 March 2014 (E/CN.3/2014/15)
- ¹³ In this study, the statistics referred to are "official statistics", which are statistics produced and published by entities of a national statistical system.
- ¹⁴ United Nations Economic and Social Council, *Report on the Statistical Commission Special Session*, New York, 11-15 April 1994 (E/CN.3/1994/18); and United Nations Economic and Social Council (2013). *Official Records of the Economic and Social Council, 2013, Supplement No. 4* (E/2013/24-E/CN.3/2013/33).
- ¹⁵ The success of ICP is based on: (a) detailed, agreed standards; (b) commitment of countries to adhere to those standards; (c) a comprehensive capacity development programme to enable countries to produce statistics in adherence to those standards; and (d) open access to the resulting statistics. See World Bank, International Comparison Program (ICP). Available from www.worldbank.org/data/icp.
- ¹⁶ That the capacity is insufficient has been recognized by the Economic and Social Council in its resolution 2006/6 on strengthening statistical capacity and more recently by the UN System Task Team on the Post-2015 Development Agenda report, entitled "Statistics

- and indicators for the post-2015 development agenda”. See United Nations Economic and Social Council (2006). Resolution 2006/6 on strengthening statistical capacity. Available from <http://unstats.un.org/unsd/statcom/ecosoc/2006-6-ResStrengtheningStatCapacity.pdf>.
- ¹⁷ For example, see United Nations, Economic and Social Commission for Asia and the Pacific (ESCAP), *Make every life count: Regional strategic plan for the improvement of civil registration and vital statistics in Asia and the Pacific (E/ESCAP/CST(3)/6/Add.1)*. Available from www.unescap.org/sites/default/files/CST3RegionalstrategicplanEnglish.pdf; or ESCAP, *Proposed regional programme for the improvement of economic statistics in Asia and the Pacific (E/ESCAP/CST(2)/5)*.
- ¹⁸ For example, the High-level Panel called for a “new data revolution” to enable the recent improvements in information technology to contribute to inclusive and sustainable development.
- ¹⁹ For example, the United Nations Global Pulse initiative is looking at ways to use data gathered from Twitter and Facebook to understand unemployment patterns, and how mobile phone data can be used to understand migration. See www.unglobalpulse.org.
- ²⁰ Asian Development Bank, *Sharing Growth and Prosperity: Strategy and Action Plan for the Greater Mekong Subregion Southern Economic Corridor* (Mandaluyong City, Philippines, ADB, 2010). Available from www.adb.org/sites/default/files/pub/2010/gms-action-plan-east-west.pdf.
- ²¹ For some examples of bilateral transport projects, see United Nations, *Economic and Social Commission for Asia and the Pacific, Review of Developments in Transport in Asia and the Pacific*. ST/ESCAP/2627.
- ²² Asia-Pacific Economic Cooperation, “APEC targets increased infrastructure investment”. APEC Senior Officials’ Meeting, Ningbo, China, 28 February 2014. Available from www.apec.org/Press/News-Releases/2014/0228_investment.aspx.
- ²³ Reuters, *BRICS aim to finish development bank preparations by July summit*. 11 April 2014. Available from <http://in.reuters.com/article/2014/04/10/g20-economy-brics-idINDEEA390GA20140410>.
- ²⁴ “Asian Infrastructure Investment Bank will guide capital”, 3 July 2014, http://news.xinhuanet.com/english/china/2014-07/03/c_126707343.htm.
- ²⁵ This approach has been recently followed by the European Union in its development cooperation policy where different instruments have been created to use grants from the European Union to leverage loans from several European national and multilateral public financial institutions. For further information, see European Commission, “Promoting investment through the Neighbourhood Investment Facility (NIF)”. Available from http://ec.europa.eu/europeaid/where/neighbourhood/regional-cooperation/irc/investment_en.htm.
- ²⁶ In the context of infrastructure projects, a public-private partnership describes a long-term contractual arrangement between the Government and one or more private companies, whereby the private companies provide building or rehabilitation works in exchange for operating rights. At the end of the period, the asset is usually transferred back to the Government.
- ²⁷ More detailed information on the enabling environment is available in the ESCAP publication, entitled *Review of Developments in Transport in Asia and the Pacific, 2013: Transport as a Key to Sustainable Development and Regional Integration* (ST/ESCAP/2667) (see pages 66-77).
- ²⁸ European Bank for Reconstruction and Development. *Concession/PPP laws assessment 2011, final report*. Available from www.ebrd.com/downloads/legal/concessions/pppreport.pdf.



CONCLUSIONS

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The countries in Asia and the Pacific are driving the global economy and have become major forces in manufacturing, trade and services. Most of the dynamism has come from individual countries, but the future will be determined by how closely economies can work in combination – taking advantage of extended and more tightly integrated networks. At the same time, as various networks become more and more integrated, it will become increasingly important to have strong institutional coordination and cooperation at different levels. Intergovernmental organisations such as ESCAP can play a role in bringing together Governments and other stakeholders to discuss and implement actions to strengthen connectivity in the region.

Over the past few decades, countries in Asia and the Pacific have recorded major achievements in boosting economic growth, stimulating technological change and reducing poverty. International trade, foreign direct investment and the emergence of global and regional production networks have driven many of those achievements, supported by the expansion of maritime links and the diffusion of information and communications technology (ICT), including the Internet. Trade and transport will continue to be important, but other drivers of growth, particularly ICT connectivity, energy connectivity and people-to-people connectivity, are expected to shape patterns of economic and social development into the future.

Some of these changes will continue to be driven by the private sector, as individual enterprises seek new ways of boosting productivity and relocate production and distribution to different countries across the region. In taking advantage of the progress in ICT and people-to-people connectivity, other types of networks, such as business associations and civil society groups, are also expected to play a greater role in the region's development.

Ultimately, however, the main driving force behind regional connectivity is the political will of national Governments, which are linking together supra-national regulatory bodies, international standard-setting organizations and their own domestic businesses. They also control the framework for cross-border flows of capital and labour and can shape spatial development patterns through their investments and policies on infrastructure.

As various networks become more and more integrated, it will become increasingly important to have strong institutional coordination and cooperation, both within and between Governments. In the years ahead, Governments will find many more opportunities to work together to strengthen these mechanisms. There is therefore a need to build on the momentum of coordination and cooperation in the ESCAP region, both at the subregional and regional levels.

The key findings of the present study are summarized below.

Institutional coordination is key to strengthening regional connectivity

This report contains an examination of the ways in which better regional connectivity can contribute to the sustainable and inclusive development of the Asian and Pacific region. It was found through the study that regional connectivity is inherently multifaceted, and that the benefits of this connectivity may be enhanced by combining different elements. Moreover, it was suggested in the study that networks are likely to become more integrated and interdependent as they evolve.

Governments therefore have to develop cross-sectoral policies on connectivity, at national, subregional and regional levels. To achieve this, they can make greater use of existing intergovernmental forums, notably the annual sessions of the Commission and the legislative committees of ESCAP which can serve as neutral platforms for discussing and refining joint regional strategies.

Such strategies should be based on sound data and analysis, using global statistical standards, such as those promoted by the United Nations. Governments of countries in the region should also work together: to identify the types of statistics needed for joint planning and decision-making on regional connectivity; to build the capacity of national statistical systems to produce and disseminate internationally comparable statistics; and to make statistics more widely available to all users. Regional collaboration also enables joint engagement by countries in Asia and the Pacific in the development and promotion of global statistical standards, ensuring that regional priorities are better reflected in the global agenda.

In recognizing the importance of connectivity, many subregional and regional organizations have developed their own initiatives, such as the Master Plan on ASEAN Connectivity. To build on each other's strengths and avoid duplication, the various

organizations involved must communicate more frequently to exchange information and knowledge. Given that many of the longer-term objectives of such organizations are similar, it would also be beneficial to develop joint initiatives and, where appropriate, to pool resources.

Countries in the region differ in many respects – in climatic or geographical conditions, as well as in income levels and technical capacities. To overcome these differences, countries should strive to adopt global and regional standards for both technical issues and procedures. Technical standards form the basis for the integration of networks, particularly for infrastructure, while procedural standards can greatly reduce delays and costs and thereby enhance connectivity at border crossings, particularly for the movement of goods, vehicles and people.

This work, however, can be effective only through collaboration with all of the relevant stakeholders. Trade and transport facilitation, for example, is primarily achieved through deeper coordination among the relevant agencies, both within Governments and across borders. Such coordination will be more effective if it has a clear focus or goal, such as establishing integrated border management systems and harmonizing procedures for cross-border trade and transport. As the region moves towards a regime of paperless trade, countries should step up efforts to adopt regional and international standards for both documents and procedures.

Regional connectivity is also being intensified by academic networks, business associations and civil society organizations. Not only do they serve as major conduits of people-to-people connectivity, they also help propagate global standards and act as partners in implementing regional strategies. These disparate groups can also work with national Governments and subregional organizations. This can be achieved through the convening power of ESCAP which can chart out some of the steps needed to implement these strategies.

Development of regional networks as “regional public goods”

One of the most important conditions for economic growth is the availability of extensive and efficient infrastructure, particularly transport, energy and communications systems. At the national level, these infrastructure networks provide domestic enterprises and agricultural producers with access to a greater pool of resources and markets – enabling them to scale up their production and diversify their products.

Countries have also made substantial progress in developing infrastructure networks at the regional level. Thus, most countries in continental Asia are connected through the Asian Highway and Trans-Asian Railway networks, while coastal countries and small island developing States are linked by maritime services. Meanwhile, many capitals and major cities in the region can now connect to broadband Internet. Various cross-border initiatives are also under way in the energy sector, particularly at the subregional level, linking energy-rich and energy-poor countries and enhancing the region’s overall energy security.

There is still much to be done on these networks to improve their reach and quality, and Governments should step up efforts to develop both the “soft” and “hard” infrastructure of these networks. However, this also represents a valuable opportunity. As they are still at relatively early stages, these networks can be developed in an integrated manner, reducing the costs and extending the benefits to a wider group of countries.

Developing and managing regional networks effectively requires cross-country consensus. Governments need to further study and refine the strategies outlined in this study and agree on the most appropriate sequencing of actions. They also need to consider potential negative impacts. These can arise from large infrastructure projects, for example, or from the increased movement of goods and people across borders. These aspects will require the development of appropriate institutions and mechanisms for regulatory oversight, with clear roles and responsibilities appropriately assigned.

Infrastructure development invariably involves high capital costs, with benefits accruing over the longer run. To support investment in cross-border infrastructure, countries can build on the concept of regional public goods to establish regional financing mechanisms. In this way they can identify and target investments in areas that will yield the greatest benefit from a regional perspective, particularly where sections of the networks are weakest. A number of innovative approaches have been proposed in this study, such as the establishment of a regional infrastructure fund, an Asian multi-donor platform and a regional project preparatory facility. These proposals deserve further study and consideration by ESCAP member States.

At the same time, countries should explore the synergies and potential savings which can be accrued from the “cohabitation” of infrastructure networks, particularly the laying of fibre-optic cables along roads, railways and electricity distribution networks. This will require the line ministries in all affected countries to work together and also have detailed discussions with the private sector. In this regard, it is recommended that, when extending terrestrial fibre-optic networks, countries should try to take advantage of the existing intergovernmental frameworks of the Asian Highway and Trans-Asian Railway networks. This would facilitate negotiations over “rights of way”.

Enhancing regional connectivity for disadvantaged countries

Connectivity will certainly increase across countries. However, what forms will those connections take and who will they benefit? The aim should be to ensure that they open new opportunities for all, especially for the region’s disadvantaged countries – the least developed countries, the landlocked developing countries and the small island developing States.

The development options for these countries often depend on their location and their natural resources. Some landlocked developing countries, for example, have large reserves of natural mineral resources, while others have tremendous hydropower potential

which they are already exporting to neighbouring countries. Meanwhile, the small island developing States in the Pacific tend to have small and geographically dispersed populations and are relatively vulnerable to natural and environmental disasters and to the impacts of climate change.

At the same time, these groups of countries have some common characteristics. Typically they have relatively small markets and depend on a few export commodities. Owing to their location, as well as poor infrastructure, they may also be less connected to regional markets. This makes them more reliant on neighbouring countries or, in the case of the Pacific island States, on larger economies in the subregion.

In this regard, these countries may wish to consider how to use their current endowments to build up their capacities in those industries which have the potential to grow. In particular, they should also make greater use of communications technology, particularly the Internet, to develop other commercial services, such as transport, telecommunications and financing, as these sectors in turn can support trade and manufacturing. In this way they can participate more fully in regional production and distribution networks.

By taking advantage of new technologies, disadvantaged countries can become more integrated into the global economy. Most developing countries lack the capacity to create their own new technology. Governments should therefore encourage technology transfer and import – through trade and investment, for example, or via the Internet or through exchanges of human capital. Meanwhile, all countries in the region can support disadvantaged countries by enhancing people-to-people connectivity – for example, by encouraging more interactions between students and workers.

Developing networks of people and knowledge

A country’s greatest asset is its people. Governments can expand the potential of their citizens in many ways. One is to promote greater mobility for both

skilled and unskilled workers. The Asian and Pacific region has almost one quarter of the world's migrants so there would be enormous benefits from developing more coordinated approaches to manage international labour migration. Both source countries and destination countries should gain, while simultaneously protecting migrants and their families from the potential negative effects of migration.

People's potential can also be developed through academic and civil society networks, which help develop and share knowledge. The ESCAP region is home to many excellent research institutes and universities that employ internationally recognized academics and researchers. National Governments can support these regional knowledge networks by encouraging their students and academics to study and work in other countries in the region. Governments can also contribute to the development of "knowledge clusters" by commissioning research and fostering exchange programmes among the various stakeholders.

Governments should also work closely with the private sector and its representatives, which are likely to be the region's foremost ambassadors of connectivity. Business associations and networks of chambers of commerce can also help link small and medium-sized enterprises to the global marketplace. Such networks will enhance mutual understanding about different cultures and value systems. At the regional level, international and regional organizations should work with national Governments to institutionalize and enforce internationally accepted standard business practices and procedures, which would help to create a transparent and non-discriminatory business environment.

Next steps towards regional connectivity

As globalization continues, the region's future will depend on how countries work together. The present study indicates how they have been doing so through regional networks of trade and transport, ICT, energy and people, and how they might intensify these networks in the future. As these networks become

more integrated, strategies to strengthen regional connectivity should be considered not sector by sector but as part of a whole.

In this regard, the regional strategies discussed in this study can serve as a catalyst for regional connectivity. The aim should be to ensure that these networks open new opportunities for all, especially for the region's disadvantaged countries and for the poorest communities. Further, to better respond to the rapid evolution of these networks, national Governments and international organizations alike will have to strengthen institutional coordination. This should extend to people-to-people networks involving academia, the private sector and civil society, which can influence the direction and effectiveness of intergovernmental cooperation.

Ultimately, however, national Governments must take the lead in forging regional connectivity, both by making the necessary changes in their national policies, as well as by actively participating in regional initiatives on connectivity. ESCAP can support their efforts by providing a neutral platform for frank and informed discussions on these strategies among relevant stakeholders. In this regard, multisectoral expert working groups being established in accordance with the 2013 Bangkok Declaration on Regional Economic Cooperation and Integration in Asia and the Pacific¹ can help Governments to identify the best approaches for implementing the regional strategies discussed in this study.

Endnote

¹ See E/ESCAP/MCREI/3.

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Aggregate growth prospects for the developing economies in Asia and the Pacific remain subdued in 2014. More rapid growth in the region is being held back by a number of factors. First, slow growth in advanced economies continues to negatively affect exports and the financial sector. Second, the tapering of “quantitative easing” by the United States of America is putting further pressure on the recovery of several economies by causing significant capital outflows. Third, many economies face a number of domestic challenges, such as infrastructure shortages, large budget deficits, inflationary pressures and rising inequality.

With growth prospects constrained, productive government spending is critical to support inclusive growth and sustainable development, which will be the focus as the global development agenda beyond 2015 is mapped out. Unlocking the fiscal space for such spending poses a challenge that this year’s *Economic and Social Survey of Asia and the Pacific* seeks to examine. It analyses how countries can raise more tax revenues as in most countries in the region tax collection is neither sufficient nor equitable.

The recent economic success of the Asian and Pacific region has been driven largely by international trade, foreign direct investment and the emergence of global and regional production networks and value chains. These drivers, in turn, were supported by trade liberalization, improved transport links and the diffusion of information and communications technologies. However, the region’s growing prosperity has not been shared equitably, and there are clear signs of rising income inequality, both within and between countries.

Looking to the future, the issue for the region is not whether connectivity will improve, but the form it will take and how it can be harnessed to benefit all countries, particularly least developed countries, landlocked developing countries and small island developing States. This year’s Theme Study, comprising Part II of the *Survey*, identifies four types of connectivity shaping social and economic development in the region: trade and transport; information and communications technology; energy; and people-to-people connectivity.

As these networks become increasingly integrated and interdependent, the future of regional connectivity will depend on how closely Asia-Pacific countries work together. Regional strategies presented in the Theme Study can be the basis for this cooperation. However, success will depend on strengthening institutional coordination between Governments, both across sectors and across borders. Greater cooperation is also needed to identify new sources of finance for developing regional networks. To move the region’s connectivity agenda forward, Governments should enlist the support of the private sector, academia and civil society, which are the ambassadors and potential beneficiaries of enhanced regional connectivity.

