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ECONOMIC GROWTH OUTLOOK AND KEY CHALLENGES

The pursuit of inclusive growth and sustainable development has gained global momentum with unprecedented efforts across institutions and societies. The United Nations Summit, to be held in September this year, will discuss the post-2015 development agenda and adopt a set of sustainable development goals as mandated by the United Nations Conference on Sustainable Development held in Rio de Janeiro, Brazil, in 2012. Supporting this endeavor, global leaders will meet in Addis Ababa in July 2015 for the Third Conference on Financing for Development to lay out a framework for financing for development to meet the requirements of the new agenda.

Global leaders have been further engaged in discussing the challenges of human-induced climate change. In the twenty-first session of the Conference of the Parties (COP 21) to the United Nations Conference on Climate Change, to be held in Paris in December this year, expectations are high regarding new arrangements for climate change with supportive climate finance. Within the

Asia-Pacific region, the Association of Southeast Asian Nations (ASEAN) is set to form the ASEAN Economic Community (AEC) by the end of the year which, among others, is working closely with the United Nations to galvanize support for the emerging post-2015 development agenda.

Against this backdrop, the *Economic and Social Survey of Asia and the Pacific 2015* provides an analysis of the prospects for economic growth in the region, while highlighting major risks and challenges as well as discussing some key policy options. A central issue explored in the *Survey* is that, while the policy focus on economic growth is necessary, it is definitely not sufficient, to achieve “development”. Policymakers in the region will have to internalize the aspects of inclusive growth and sustainable development within their policy frameworks in order to surmount the emerging challenges articulated in the proposed sustainable development goals.¹

Economic growth in the developing economies of the region is expected to increase slightly in

2015. Growth will be driven more by domestic and intraregional factors than external factors as the prospects for a global economic recovery are likely to remain fragile. Economic growth in the region currently is being supported by accommodative monetary and fiscal policies in many economies and ongoing efforts in structural reform programmes. The recent oil price decline has offered relief to oil import-dependent economies, while straining structural imbalances of oil exporting economies. Besides creating fiscal space, the oil price decline has lowered inflation across the board except in economies struggling to cope with revenue losses related to oil. Release of resources in oil importing countries following decline in oil prices and the opportunity to dismantle or scale down fuel subsidies offer a one-time opportunity to invest in infrastructure and support inclusive growth measures.

Despite the modest improvement in the economic outlook for the region, growth is below pre-crisis level and below the potential of the region, and lacks inclusiveness and sustainability. The growth potential of economies is being held back by structural weaknesses including infrastructure shortages and the excessive commodity-dependence of some economies. The fragile global economic recovery is not helping growth prospects either. Unless reforms are vigorously pursued, downside risks to the growth trajectory could increase.

Domestic problems at this stage far outweigh external dynamics. However, two key external risks remain on the horizon. First, the growth in trade continues to be below pre-crisis levels and the cushion of intraregional trade is likely to be impacted if the slowdown in the large export oriented economic bloc of the Asia-Pacific region persists or magnifies. Second, the evolving global monetary policy conditions are creating complications for emerging markets by offering alternate investment opportunities in asset markets. For instance, there remains a near term certainty of Japan and the eurozone continuing with monetary easing. On the other hand, while signaling the direction towards monetary tightening, the actions and timing of the United States Federal Reserve are likely to be driven by emergence of robust signs of pick up in the United States economy.

Deceleration in economic activity in the Asia-Pacific region and complexity and delays in the

full unwinding of deleveraging in the private sector will impact the global growth momentum. Timing and sequencing of policies pursued will matter since markets in the region remain vulnerable to capital outflows and asset market volatility, strongly driven by investor sentiments regarding monetary tightening in the United States. This could create macroeconomic and financial instability, particularly for economies with weak fundamentals and political difficulties. A comforting factor this time round is improvement in current account balances of oil importing countries due to declining oil prices, though recovery in exports is modest despite appreciation of the United States dollar. Developing economies in the region have strengthened their capacities to implement macroprudential policies, such as caps on loan-to-value ratios, limits on certain segments of credit growth and capital and reserve requirements, which offer approaches to manage the implications of capital flow volatility. Unlike interest rate adjustments and interventions in the foreign exchange market, macroprudential measures directly target the source of instability of capital flow volatility, namely the domestic asset markets in which capital flows are invested, and thus help in containing market disruptions and enhancing stability.

Growth has not been fully inclusive as gains from it have not been widely shared. Most worrisome is the high and growing inequalities in the region both in terms of incomes and opportunities as well as in terms of disparities between the different geographic locations and sections of society, such as rural and urban areas and women and men. The lack of sustainability of economic growth is further validated by trends in environmental damage, resource use and the resource intensity of growth, lack of progress on accelerating action on climate issues and persistent gender inequalities, among other concerns.²

In view of these challenges, a number of policy considerations emerge. One such consideration is the need to establish an enabling policy and institutional environment to support the flow of innovative and equitable finance for implementation of an ambitious sustainable development agenda, as discussed in the theme study for the seventy-first session of the Commission (ESCAP, forthcoming, a). A second consideration is the need for well-thought-out macroprudential measures to manage capital volatility, thus supporting economic stability and providing a resilient platform for

inclusive growth. The imperative for commodity-dependent economies to diversify their economies into other sectors is the third area that requires investigation. Similarly, policies aimed at increasing the inclusiveness of growth are also highlighted. Finally, some innovative actions that could be taken by economies in the region to better address climate change, particularly topical in the run-up to the previously mentioned conference on climate change in Paris, are also discussed.

The first section contains a discussion of the macroeconomic outlook for the region in 2015 and 2016. The section contains: (a) the latest forecasts for economic growth and inflation; (b) an analysis of recent domestic macroeconomic and reform policies of Governments; and (c) an update on trade, foreign investment and financial market developments. The second section contains consideration of some of the risks and challenges to the economic outlook, stemming from both domestic and external sources. In the domestic sphere, structural concerns are highlighted in terms of infrastructure deficiencies and lack of diversification of commodity-dependent economies; in the external sphere, risks from global monetary policy developments and the domestic implications of oil price developments are discussed. The final section contains a number of policy considerations and suggestions on: (a) dealing with obstacles holding back the inclusive aspects of growth; (b) mobilizing financing for the sustainable development agenda; (c) use of effective macroprudential measures as part of a toolkit to manage capital volatility; (d) policies to encourage diversification of commodity-dependent economies; and (e) addressing climate change concerns and issues of sustainable energy.

1. MACROECONOMIC OUTLOOK AND PERFORMANCE

1.1. Growth and inflation

Economic growth in the developing economies in Asia and the Pacific is expected to increase only slightly in 2015 – to 5.9%, up from 5.8% in 2014 (see table 1.1).³ This outlook is based on relatively improved economic performance in a number of major developing economies, including Bangladesh, India, Indonesia, Papua New Guinea, the Republic of Korea and Thailand. Some of these economies are undertaking reform programmes under new administrations, which are expected to

generate positive results in 2015. Meanwhile, the outlook for some exporting economies remains less upbeat due to slow growth in the eurozone and Japan, as well as in China which is the major source of intraregional final demand. Despite only a moderate increase in economic growth in developing economies, excluding those in North and Central Asia, the region will continue to lead the global economic recovery, with growth in 2015 expected to be nearly two and a half times greater than in the major global developed economies (see figure 1.1). Nevertheless, it is also the case that the growth differential between the region and the developed world is becoming smaller compared with the pre-crisis period when growth in the region was more than three times faster. The narrowing differential is due to a slowdown in the region and to the fact that the developed economies have returned to growth that is close to their pre-crisis levels. Thus, unless comprehensive and concerted reforms are vigorously pursued, downside risks to the growth trajectory of developing economies of the region could increase.

At the subregional level, growth performance is forecast to vary depending on the relative importance of domestic and external demand for particular subregions. **South and South-West Asia**, where domestic demand plays an important role, is expected to enjoy an economic growth rate of 5.9% in 2015 – a four-year high – up from 5.5% in 2014 (see figure 1.2).⁴ This rise in the growth rate is due to an expected higher level of growth in the larger economies in the region, with improved performance in all economies, except the Islamic Republic of Iran and Nepal. On the other hand, East and North-East Asian and South-East Asian economies, for which exports play an important role, are forecast to record a much more modest growth performance. Growth in **East and North-East Asia** is expected to increase only slightly to 3.4% in 2015, up from 3.3% in 2014, largely due to relatively better growth in Japan as a result of domestic macroeconomic stimulus. This will help to overcome lower growth in China as the economy rebalances from an investment and export-led growth model towards a domestic consumption oriented approach to economic growth. For **South-East Asia**, the forecast is for growth to increase to 4.9% in 2015, up from 4.3% in 2014, although growth in many export-led economies may only rise modestly. Improved growth performance in the subregion is mostly due to the performance of the more domestic demand-led economy of Indonesia. Thailand's economy is also expected to witness a pickup in 2015 after

Table 1.1. Rates of economic growth and inflation in selected economies of the ESCAP region, 2013-2016

(Percentage)	Average pre-crisis growth 2005-2007	Real GDP growth				Inflation ^a			
		2013	2014 ^b	2015 ^c	2016 ^c	2013	2014 ^b	2015 ^c	2016 ^c
East and North-East Asia^d	6.7	4.2	3.3	3.4	3.5	1.5	2.3	1.4	2.4
East and North-East Asia (excluding Japan)^d	10.9	6.6	6.3	6.0	6.0	2.4	2.0	1.8	2.6
China	12.7	7.7	7.4	7.0	6.8	2.6	2.0	1.7	2.5
Demographic People's Republic of Korea	0.5
Hong Kong, China	6.8	2.9	2.3	2.5	2.8	4.3	4.4	3.5	3.2
Japan	2.1	1.6	-0.1	0.6	0.8	0.4	2.7	1.0	2.2
Macao, China	16.5	10.7	-0.4	-4.0	8.0	5.5	6.0	4.3	5.0
Mongolia	8.7	11.7	7.8	3.5	5.0	8.6	12.8	8.5	7.7
Republic of Korea	4.8	3.0	3.3	3.4	3.7	1.3	1.3	1.9	2.6
North and Central Asia^d	8.5	2.1	1.3	-2.9	-0.8	6.7	7.6	12.2	9.6
North and Central Asia (excluding Russian Federation)^d	13.0	6.5	5.1	3.2	4.0	5.9	6.5	7.5	7.3
Armenia	13.6	3.5	3.4	0.9	2.3	5.8	3.0	4.7	4.0
Azerbaijan	28.6	5.8	2.8	2.3	2.5	2.4	1.5	7.3	5.7
Georgia	10.4	3.3	4.7	4.5	4.8	-0.5	3.1	5.0	5.0
Kazakhstan	9.8	6.0	4.3	1.5	2.9	5.8	6.7	5.7	6.2
Kyrgyzstan	3.8	10.5	3.6	2.0	2.5	6.6	7.5	10.7	9.0
Russian Federation	7.7	1.3	0.6	-4.0	-1.6	6.8	7.8	13.0	10.0
Tajikistan	7.2	7.4	6.7	4.0	4.8	5.0	6.1	10.1	8.0
Turkmenistan	12.0	10.2	10.3	9.5	9.2	9.0	11.0	12.0	11.3
Uzbekistan	7.9	8.0	8.1	7.1	7.2	11.2	11.7	12.0	12.2
Pacific^d	3.4	2.4	2.6	2.5	3.1	2.3	2.4	1.8	2.4
Pacific island developing economies^d	3.2	4.0	6.0	9.7	4.4	3.9	4.2	4.5	4.5
Cook Islands	1.2	-1.7	-1.2	2.1	-0.3	2.6	1.6	1.3	1.4
Fiji	-0.1	4.6	4.2	4.0	4.0	2.9	0.5	2.5	2.5
Kiribati	2.1	2.4	3.0	1.5	1.5	-1.5	2.6	1.0	1.5
Marshall Islands	2.0	3.0	0.5	3.5	1.5	1.9	1.3	1.4	1.3
Micronesia (Federated State of)	0.2	-4.0	-3.4	2.3	5.1	2.1	0.7	2.4	2.6
Nauru	-11.8	4.5	10.0	8.0	5.0	1.4	5.0	8.0	3.0
Palau	3.4	-1.7	6.9	8.0	6.0	2.8	4.0	3.4	3.4
Papua New Guinea	4.5	5.1	8.4	15.0	5.0	5.0	6.6	6.0	6.0
Samoa	3.7	-1.1	1.9	2.5	2.2	0.6	-0.4	2.5	2.0
Solomon Islands	6.4	2.9	-0.2	3.0	3.5	5.4	6.0	5.0	5.5
Tonga	-1.3	-2.7	2.1	2.4	2.6	0.8	2.5	0.4	1.0
Tuvalu	2.7	1.3	2.0	2.0	2.0	2.0	3.3	1.0	1.0
Vanuata	6.3	2.0	3.6	-0.5	4.0	1.4	0.3	4.0	2.0
Developed countries (Australia and New Zealand)^d	3.4	2.4	2.6	2.4	3.1	2.2	2.3	1.8	2.3
Australia	3.4	2.4	2.5	2.3	3.0	2.4	2.5	2.0	2.5
New Zealand	3.0	2.5	3.0	3.0	3.5	1.1	1.2	0.1	1.3
South and South-West Asia^{d,e}	8.1	5.1	5.5	5.9	6.1	11.2	8.3	6.9	6.8
Afghanistan	10.2	3.6	3.2	4.5	5.0	7.4	5.0	5.0	5.0
Bangladesh	6.3	6.0	6.1	6.3	6.5	7.7	7.4	6.5	6.2
Bhutan	10.6	4.2	6.0	6.8	7.0	8.8	8.3	7.0	7.0
India	..	6.9	7.4	8.1	8.2	9.5	6.6	5.5	5.8
Iran (Islamic Republic of)	6.1	-1.9	1.9	0.9	1.3	34.7	17.2	16.0	14.1
Maldives	7.2	8.8	8.5	10.5	7.1	3.8	2.4	3.1	3.0
Nepal	3.3	3.9	5.5	5.0	4.7	9.9	9.0	7.8	6.9
Pakistan	7.2	3.7	4.1	5.1	4.8	7.4	8.6	5.5	5.8
Sri Lanka	6.9	7.2	7.4	7.5	7.6	6.9	3.3	3.0	5.0
Turkey	6.7	4.2	2.9	3.3	3.7	7.5	8.9	7.0	6.5
South-East Asia^d	6.1	5.0	4.3	4.9	5.1	4.0	3.8	2.9	3.3
Brunei Darussalam	1.7	-1.8	1.1	1.5	2.0	0.4	-0.8	0.2	0.5
Cambodia	11.4	7.4	7.2	7.3	7.4	3.0	3.9	2.0	3.0
Indonesia	5.8	5.8	5.0	5.6	5.8	6.4	6.4	5.5	5.0
Lao People's Democratic Republic	7.7	8.5	7.5	7.2	7.2	6.4	4.2	3.5	4.0
Malaysia	5.9	4.7	6.0	4.9	5.2	2.1	3.1	3.0	2.9
Myanmar	12.9	8.3	7.8	8.3	8.2	5.7	5.9	8.0	6.5
Philippines	5.8	7.2	6.1	6.5	6.4	3.0	4.1	3.0	3.2
Singapore	7.8	4.4	2.9	3.1	3.5	2.4	1.0	0.3	1.5
Thailand	4.9	2.9	0.7	3.9	4.0	2.2	1.9	0.3	2.0
Timor-Leste ^f	5.0	5.4	7.1	6.5	6.5	9.5	1.0	2.5	3.5
Viet Nam	8.4	5.4	6.0	6.1	6.2	6.6	4.1	2.5	4.0
Memorandum items:									
Developing ESCAP economies (excluding North and Central Asia)	9.5	6.0	5.8	5.9	5.9	5.0	3.9	3.3	3.8
Developing ESCAP economies (including North and Central Asia)	9.4	5.5	5.3	4.9	5.2	5.2	4.3	4.3	4.4
Least developed countries^g	6.0	5.4	5.6	5.7	5.8	6.8	6.4	5.5	5.4
Landlocked developing countries	11.7	6.2	4.9	3.2	3.9	6.1	6.5	7.1	6.9
Small island developing States	3.7	4.6	6.3	9.6	4.8	4.2	3.8	4.3	4.3
Developed ESCAP economies	2.3	1.7	0.3	0.9	1.2	0.7	2.6	1.1	2.2
Total ESCAP	6.8	4.1	3.5	3.4	3.7	3.6	3.7	3.1	3.6

Sources: ESCAP, based on national sources; United Nations, Department of Economic and Social Affairs, *World Economic Situation and Prospects 2015*, (Sales No. E.15.II.C.2). Available from www.un.org/en/development/desa/policy/wesp/wesp_current/wesp2015.pdf; IMF, International Financial Statistics databases. Available from <http://elibrary-data.imf.org>; ADB, *Asian Development Outlook 2015* (Manila, 2015); CEIC Data. Available from www.ceicdata.com; and web site of the Interstate Statistical Committee of the Commonwealth of Independent States. Available from www.cisstat.com.

^a Changes in the consumer price index.

^b Estimates.

^c Forecasts (as of 31 March 2015).

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

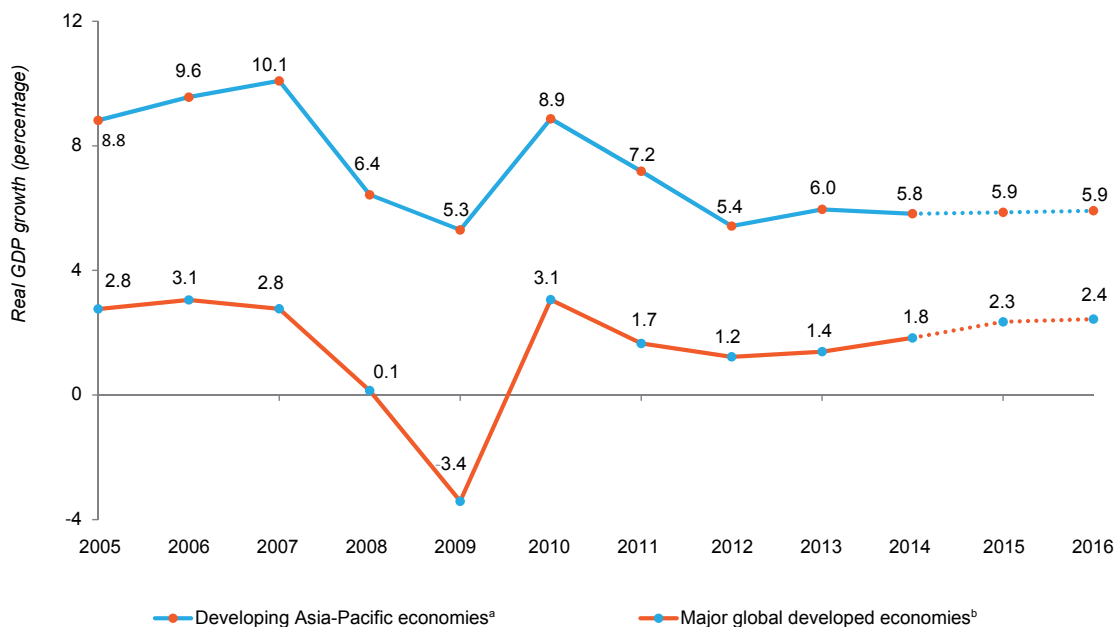
^e The estimates and forecasts for countries relate to fiscal years defined as follows: 2014 refers to the fiscal year spanning the period from 1 April 2014 to 31 March 2015 in India and Myanmar; from 21 March 2014 to 20 March 2015 in Afghanistan and the Islamic Republic of Iran; from 1 July 2013 to 30 June 2014 in Bangladesh, Bhutan and Pakistan; and from

16 July 2013 to 15 July 2014 in Nepal.

^f Non-oil GDP

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

Figure 1.1. Growth in developing Asia-Pacific economies and major global developed economies, 2005-2016

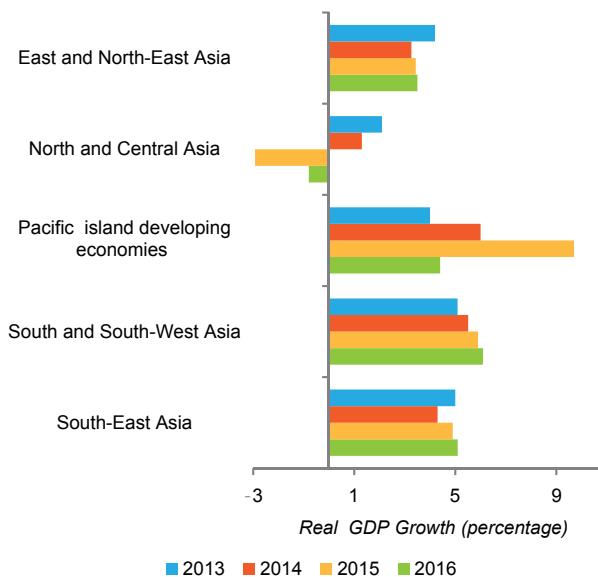


Sources: ESCAP, based on national sources and CEIC Data. Available from www.ceicdata.com (accessed 30 March 2015); forecasts for major developed economies are based on IMF, World Economic Outlook database.

Note: ^a Developing Asia-Pacific economies comprise 37 economies, excluding those in North and Central Asia. The series reflects the revised estimates of GDP growth for India from 2012 onwards. The revised estimates entail shifting of the base year from 2004/05 to 2011/12 and also deploying improved methodologies. The major changes incorporated in the revision include the use of GDP at constant market prices rather than factor price at constant price to comply with international standards; sector-wise estimates of gross value added are now given at basic prices rather than at factor cost; and more comprehensive coverage of the corporate and financial sectors as well as the local bodies and autonomous institutions. Caution should be exercised in comparing growth rates between the earlier series and the revised series.

^b Major developed economies comprise 36 economies, including Japan, the United States and the 18 countries belonging to the eurozone.

Figure 1.2. Growth in ESCAP subregions, 2013-2016



Source: Based on table 1.

near-zero growth in 2014 due to political instability. Unlike other subregions, **North and Central Asia** is forecast to see a substantial contraction of 2.9% in economic activity, which is significant when viewed in the context of a 1.3% rise in real GDP in 2014. This captures the expected contraction of the economy of the Russian Federation and its spillovers into trade and remittance channels to countries with strong economic dependence on the Russian Federation. Finally, economic growth in the **Pacific island developing economies** is expected to increase dramatically to 9.7% in 2015, up from 6% in 2014, led by the strong performance of Papua New Guinea due to the commencement of liquefied natural gas production and export.

In terms of some country examples, economic growth in **India** is forecast to increase to 8.1% in 2015, using rebased national income accounts estimates, up from 7.4% in 2014.⁵ Part of this growth is also driven by the positive impact of lower international oil prices, which has facilitated the removal of fuel subsidies. The fiscal space thus created eased borrowings from the central bank, allowing room for accommodative monetary policy. It must be remembered that short-term stimulus to economic performance can only generate a sustained higher growth trajectory if it is supported by implementation of the Government's promises to deliver a structural reform package. Some measures, such as the lifting of barriers to foreign investment, could be undertaken relatively rapidly; however, other measures involving a considerable number of legislative steps could be implemented on a multi-year basis.

Similarly, growth in **Indonesia** is expected to improve to a rate of 5.6% in 2015, after having decelerated in 2014 to its slowest rate in five years at 5%. Prospects for higher growth will depend on how diligently and swiftly a far-reaching and multi-year reform programme is delivered under the country's new administration. Besides cuts to fuel subsidies, improved tax collection, accelerated infrastructure development and improvements in the investment climate are on the cards. The **Philippines** will be another strong performer in 2015, with growth forecast to expand by 6.5% relative to 6.1% growth in 2014. Domestic consumption will remain the main driver of growth aided further by the fall in global oil prices and continued good performance in the services sector, which is the largest contributor to the economy. The Government is likely to expand fiscal spending in the run-up to elections in 2016.

Weighing on regional aggregate growth is the performance of economies dependent on exporting directly to the developed economies and through the conduit of re-exports from China, which will experience relatively constrained growth. Sustainability considerations have driven a slowdown in economic growth in **China**, expected to be 7% in 2015, which is less than the rate of 7.4% in 2014. The growth in 2014 represented the slowest growth rate since 1990 as the Government continued on its path of rebalancing the economy towards fostering a greater role for domestic consumption. Skillful management of supportive monetary and fiscal policies in 2015 is likely to safeguard growth trends so as not to jeopardize social objectives. Monetary policies will have to be calibrated to manage the risk of an increase in non-performing loans in the banking system and fiscal policy will need to be directed in order to keep investment rates within sustainable and manageable limits. Slow growth in the economy will have spillovers throughout the region — economies most affected will be those that are traditional exporters of commodities and intermediate goods, which have served to satisfy final demand in China, as well as production for re-export from China.

Economies critically dependent on oil production revenue sources will not only struggle to manage their growth and macroeconomic fundamentals but would also act as a drag on their neighbours. These economies include the Russian Federation and North and Central Asian countries that are oil producers or closely linked to the economy of the **Russian Federation**, as well as the Islamic Republic of Iran and Malaysia. The economy of the Russian Federation is expected to contract by 4% in 2015 after experiencing a modest growth rate of 0.6% in 2014. The downturn in oil prices together with geopolitical sanctions has continued to exert a strong negative impact on the economy of the Russian Federation. The fall in oil prices resulted in loss of the country's oil-related tax collection, which in turn adversely affected the Government's budgetary spending. At the same time, fall in export earnings has strained the current account balance. Both macroeconomic and political complications resulted in exchange rate depreciation that in turn led to higher prices for imported goods and lower consumption. Economic sanctions and financial difficulties of oil companies have also exerted a considerable burden on the banking sector's operations and may prove to be a drag on growth performance in 2015. The contraction in the

Russian Federation will exert a significant impact on other economies in the subregion through trade and remittance ties and will contribute to reduced growth in a number of those economies. Growth in **Malaysia** is expected to grow at a slower pace of 4.9% as compared with 6% in 2014, with falling oil prices being an important factor for this oil-exporting country. Other than the negative impacts on growth through the export channel, reduced tax receipts from the oil sector may widen the budget deficit in the country if the Government carries on with its previously announced spending plans.

The outlook for inflation is better than that for economic growth. Inflation in the developing economies of the region is expected to decline noticeably to 3.3% in 2015 from the rate of 3.9% in 2014.⁶ This trend is primarily driven by lower international oil prices and reduced demand pressure in export-led economies. As the majority of the economies in Asia and the Pacific are net oil importers, the decline in oil prices is expected to restrain inflationary pressures in the region as a whole. This, however, will not be the case for the oil-exporting economies, such as the Islamic Republic of Iran and the Russian Federation. Reduced oil exports have already and will continue to put downward pressure on these countries' currencies, which in turn could result in imported inflation. In addition, domestic demand was kept contained by relatively tight monetary policy in economies which had displayed high inflation.

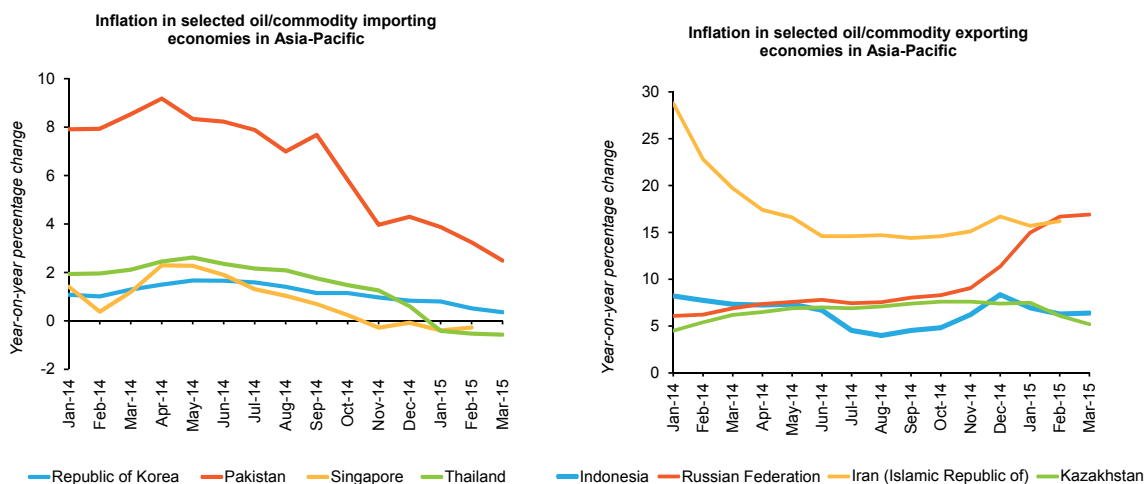
For the subregions, there will be varying performances in terms of inflation. In the **North and Central Asian** subregion, weakening of fundamentals could raise the inflation rate to 12.2% in 2015 compared with the rate of 7.6% in 2014. Economies in **South and South-West Asia** will also continue to experience somewhat high inflation, particularly due to high domestic demand relative to constrained supply. Encouragingly, even though the level of inflation remains relatively high compared with some other subregions, it is expected to decline from 8.3% in 2014 to 6.9% in 2015. This is the lowest rate in four years in the subregion, led by decreases in Bangladesh, India and Pakistan due to both lower oil prices and relatively tight monetary policy. Inflation in **South-East Asia** and **East and North-East Asia**, where exports play an important role in many economies, is forecast to be generally subdued as total demand is constrained in line with relatively weak export demand from major developed economy trading partners.

1.2. Macroeconomic policies and reform initiatives

With inflation trending downwards in many economies, there is scope for reductions in interest rates to help boost domestic demand (see figure 1.3). In fact, in a number of economies in 2015, such considerations have already led to significant adjustments in monetary policy towards a more accommodative stance. Lower inflation together with more accommodative monetary policies may support overall growth by encouraging investment and positively affect exports by encouraging lower exchange rates. Nevertheless, given the concerns regarding capital outflow and high debt levels in some economies, the monetary policy stance will have to be calibrated much more cautiously in going forward.

Following a 100 basis point reduction in the policy rate announced in January 2015, **Pakistan** lowered its policy rate by another 50 basis points to 8.0% in March 2015, the lowest since 2005. **Turkey** also lowered its one-week benchmark rate by another 50 basis points to 7.5% in April 2015. Similarly, **India** lowered its repo rate by 25 basis points to 7.75% and its reverse repo rate by 25 basis points to 6.75% in January 2015, and it lowered its repo rate by an additional 25 basis points to 7.5% in March 2015. **Indonesia** cut its key reference rate by 25 basis points to 7.5% in February 2015. **Singapore** in January 2015 loosened its monetary policy through its main tool of reducing the slope of its currency band, thereby allowing for greater depreciation in its currency. **China** in February 2015 lowered its required reserve ratio for banks by 0.5% to 19.5%, as well as enacted further targeted cuts for so-called city commercial banks, which lend more commonly to small businesses and the agricultural sector in order to spur growth in the economy through these investment channels. China in March 2015 subsequently cut its benchmark one-year lending interest rate by 25 basis points to 5.35% and the benchmark savings rate by 25 basis points to 2.5%, after having previously lowered the two rates by 40 basis points and 25 basis points, respectively, in November 2014. **Thailand** cut its policy rate in March 2015 by 25 basis points to 1.75%. The **Russian Federation** also lowered its interest rate by another 100 basis points, to 14% in March 2015, after reducing it by 200 basis points in January 2015, although as an oil-exporter the move is not linked to falling inflation but to lower perceived risk of previous capital outflow pressure.

Figure 1.3. Consumer price inflation in selected developing Asia-Pacific economies, 2014-2015



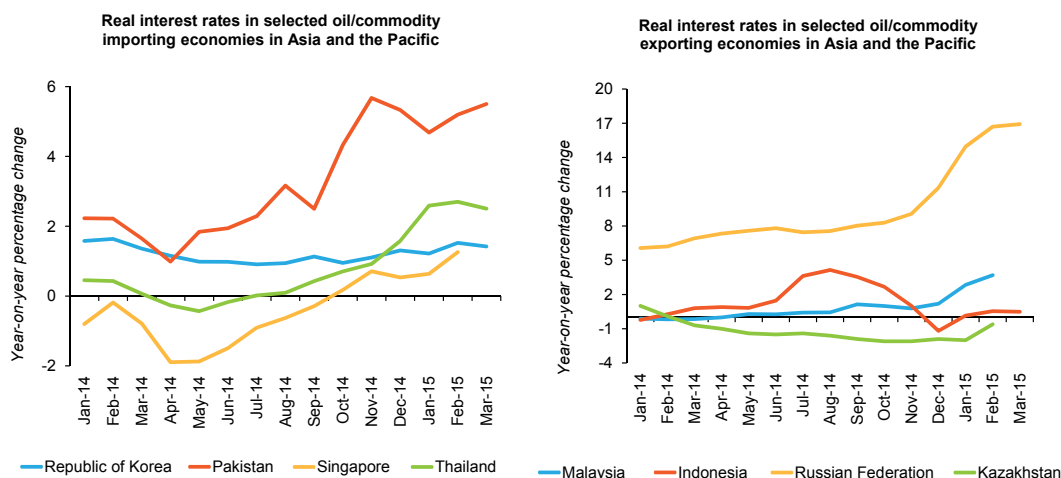
Source: ESCAP, based on data from CEIC Data. Available from www.ceicdata.com (accessed 30 March 2015).

Despite the relatively benign inflation outlook and reductions in nominal interest rates, it nevertheless remains the case that real interest rates in some economies remain fairly high (see figure 1.4) because of concerns regarding capital outflows and domestic debt, especially household debt. The economies particularly affected by the latter scenario are Malaysia, the Republic of Korea and Thailand. Lowering real rates would help borrowers in the short term and thus spur consumption; however, this could encourage exacerbation of debt accumulation in the longer term in the absence of targeted measures to reduce risky borrowing. In the case of China, consideration of lowering real

interest rates runs counter to the ongoing policy of rebalancing away from investment. It could also increase financial market risks by increasing the possibility of overinvestment in areas which already have overcapacity and which may result in an increase in the number of non-performing loans, which could be damaging to financial stability.

In the area of fiscal policy, fuel subsidy savings have been used by some economies to strengthen their fiscal positions as well as improve the quality of their spending. **India** has pledged to cut its budget deficit to 3.9% in FY2014, while Indonesia intends to reduce the fiscal deficit to 1.9% in 2015

Figure 1.4. Real interest rates in selected developing Asia-Pacific economies, 2014-2015



Source: ESCAP, based on data from CEIC Data. Available from www.ceicdata.com (accessed 30 March 2015).

from an estimated 2.3% in 2014. At the same time Governments have improved the quality of their spending by redirecting spending from fuel subsidies to long-term development spending, especially on infrastructure, as well as on social programmes and targeted cash transfers. **Indonesia**, for example, plans to use part of the savings accumulated from virtual elimination of fuel subsidies in January 2015 to fund a doubling of capital expenditure as stated in the budget proposal for 2015. This spending will be particularly directed to finance much-needed infrastructure spending, which will help to increase the long-term potential growth of the economy. Indonesia has also embarked on an ambitious reform of social security supported by three new social security cards backed by a pre-activated mobile SIM card that enables the Government to transfer 200,000 rupiah (\$16.50) to 15.5 million poor and homeless families. The money is to be collected at bank branches and post offices. **India** has also pledged to boost public infrastructure spending by using some of the savings from subsidies. The Government estimates that it may need up to \$800 billion annually in infrastructure spending to reach a growth rate of 7%. For **Malaysia**, it is estimated that the removal of fuel subsidies will save 12 billion ringgit (\$3.4 billion) in the budget.

Commodity-exporting economies, and most notably, oil producers have had to contend with strained fiscal positions in recent months. Those countries affected (in order of impact) include, among others, the Russian Federation and other North and Central Asian producers, the Islamic Republic of Iran, Malaysia and Australia. The impact has been harshest for the **Russian Federation**, with the Government estimating in January 2015 that the budget may have been in deficit in 2014 by 0.7%. This would represent the widest deficit for the Russian Federation since 2010. The Government of Malaysia revised budget projections for 2015 due to lower oil prices in January 2015, increasing the fiscal deficit target to 3.2% from 3%. While **Malaysia** will be significantly affected by lower oil prices, the impact will be less compared with some other oil-producing economies as Malaysia has substantially diversified its economy away from oil over recent decades. Energy exports currently account for 22% of total exports in Malaysia as compared, for example, with 70% for the Russian Federation.

In terms of tax policy reform, some Governments are taking measures to strengthen their public

finances. **India** in December 2014 proposed to its parliament a goods and services tax, which is likely to simplify taxes while broadening the tax base. Some estimates state that this could bring in additional revenues of 2% of GDP stemming from more efficient allocation of resources with the removal of distortions from a multiple tax regime.⁷ **Malaysia** also introduced a goods and service tax in April 2015 with more limited coverage as compared with the services tax and sales tax which it replaces. Such a measure will help the Government to reduce its fiscal deficit and public debt levels. The Government has encouragingly taken measures to reduce the immediate impact of the reform on consumers through a range of offsetting measures, such as exemptions, cash handouts to lower-income groups and reductions in income tax rates. **Indonesia** has pledged to increase tax receipts to 16% of GDP from the current 12% level, partly through improved procedures against tax evasion.

Some countries are also moving to address land acquisition procedures, which have been one of the key barriers to private sector investment in many cases. The Government of **India** in late-December 2014 issued an ordinance easing land acquisition regulations for infrastructure, industry and housing projects, with permanent confirmation pending by the legislature. **Indonesia** has promised to ease land acquisition to spur infrastructure projects, including buying land and establishing a land bank managed by different ministries. A single map is to be used by all provinces to prevent overlapping land concessions.

Some Governments have also been engaged in the process of reducing the role of State-owned enterprises, as well as increasing foreign business participation. By doing so, they are attempting to reduce the fiscal burden of such enterprises as well as increase their efficiency and thereby increase their contribution to growth and employment. **Viet Nam**, for example is engaged in an ambitious equitization programme, which serves as the first step in increasing the role of the private sector in State-owned enterprises. The programme involves converting such enterprises into public limited companies. In December 2014, the Government increased the number of State-owned enterprises to be equitized from 432 to 532. **India** in January 2015 sold shares worth \$4 billion in its State-owned coal producer, and a number of State-owned banks have announced plans for a significant share sale in 2015. India in 2014 also increased its foreign

direct investment limits from 26% to 49% for the defence and insurance sectors, as well as allowed 100% participation in railway infrastructure and most large construction projects.

1.3. Trade prospects and foreign direct investment trends

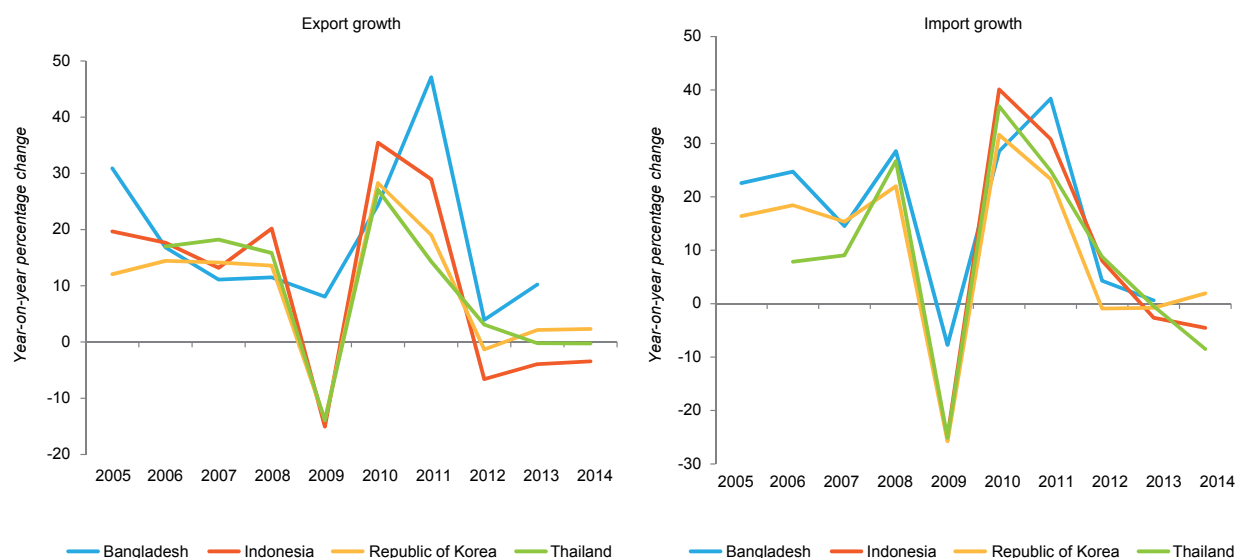
Merchandise trade in Asia and the Pacific in 2015 continues to face significant challenges due to the regional as well as global macroeconomic outlook, as outlined previously in this chapter. Year-on-year export and import growth across developing Asia-Pacific economies has remained weak throughout 2014 (see figure 1.5). ESCAP estimates indicate that the export receipts of Asian and Pacific economies grew sluggishly, at a rate of 2.5% in 2014, while imports declined by 1.2%.

Given that China and eurozone economies are major export destinations for most economies in the Asia-Pacific region, with shares of 16% and 14% of total exports respectively, sluggish import demand in these economies remains a major risk to the export prospects of the region. The steady decline in oil prices since mid-2014 has had two opposing impacts on Asia-Pacific economies, depending upon the nature of their commodity trade position (commodity importing or commodity exporting).⁸ Commodity-importing economies are benefiting from lower consumption and production costs, as the price of energy and

primary inputs has declined. On the other hand, commodity-exporting economies are at risk of lower economic growth, currency depreciation, a decline in export revenues and a deterioration of current account positions. Owing to slower demand and the falling cost of production, the unit value of exports may also decline, which implies that the growth in export volume may recover somewhat. Nevertheless, export receipts of developing economies in Asia and the Pacific are expected to grow in the range of only 0-1% in 2015.

The region's services exports fared slightly better than merchandise exports, though the average growth in services exports declined from 7.4% in 2012 to 5.4% in 2013. The full-year data on trade in services for 2014 are not yet available, however, high-frequency monthly data indicate that the situation in Asia and the Pacific for services exports may have gone from bad to worse. China, in particular, has experienced a sharp decline in the export of services since mid-2014. In value terms, exports of commercial services by Asia-Pacific economies have reached \$1.3 trillion, which accounts for 29% of the global exports of commercial services. These services comprise three broad categories: transportation; travel; and other commercial services,⁹ with the other commercial services subsector accounting for more than 50% of total exports of commercial services by the region.

Figure 1.5. Annual growth of merchandise trade in selected Asia-Pacific economies, 2005-2014



Source: ESCAP, based on data from CEIC Data. Available from www.ceicdata.com (accessed 30 March 2015).

Services exports from Asia and the Pacific are not broad-based and have been driven by only a handful of economies. For instance, 65% of total exports of commercial services come from just six economies: China (15%); India (11%); Japan (11%); Hong Kong, China (10%); Singapore (9%); and the Republic of Korea (8%). Nevertheless, the region remains a net importer of commercial services, with import value of \$1.4 trillion, which accounts for 32% of global imports.¹⁰ Major importing countries are: China (24%); Japan (12%); and India, the Russian Federation, the Republic of Korea and Singapore (9% each).

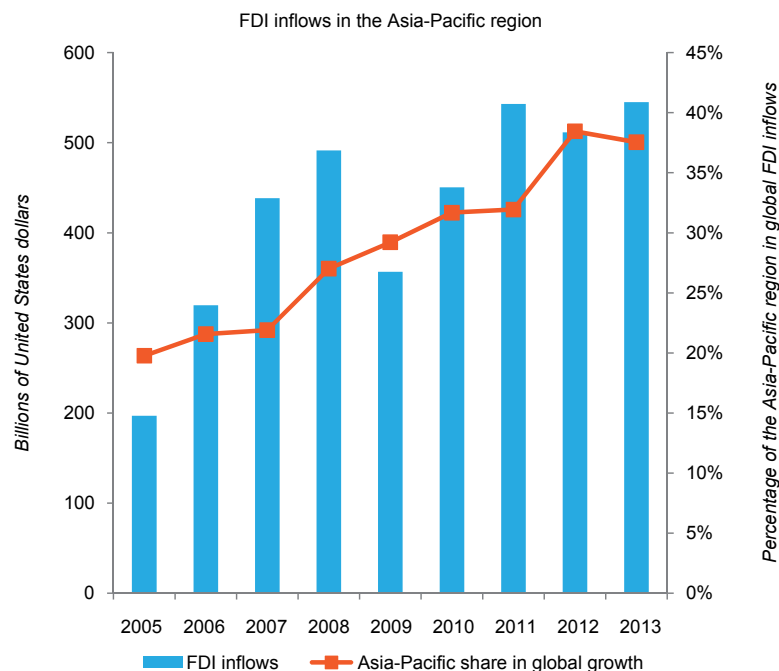
In terms of outlook, the export of services will be challenged by the weak demand within and outside the region as is the case with merchandise exports. In particular, the instability affecting the economy of the Russian Federation and the economic slowdown in China adds significantly to the negative outlook for services exports from the region, especially with regard to tourism.

The overall weak trade performance is despite the apparent progress in the multilateral trade negotiations at the level of the World Trade Organization after the Bali Ministerial Conference of December 2013. Nor did continued talks at the regional level within Asia-Pacific economies seem to have helped much to reinvigorate trade flows in the region (see box 1.1).

A positive development is that the Asia-Pacific region has remained a favourable destination for foreign direct investment (FDI) over the past few years. In 2014, developing Asia experienced a 15% increase in net FDI inflows¹¹ according to UNCTAD estimates.¹² In fact, the share of the Asia-Pacific region in global FDI flows (amounting to \$545 billion) has been on the increase since 2005, reaching 38% of the global total in 2013 (see figure 1.6). The Asia-Pacific region has therefore demonstrated its resilience to challenges in the global economic climate characterized by relatively low and volatile global FDI flows since 2007.

Within Asia and the Pacific, FDI inflows have varied greatly among different subregions and countries as a result of: (a) different FDI policies adopted by countries; (b) the impact of regional economic blocs; (c) macroeconomic uncertainties and structural constraints; and (d) geopolitical tensions. For example, the South-East Asian subregion experienced undisrupted growth in FDI inflows during the period 2009-2013. The resilience of that subregion can be linked to the role that ASEAN is playing as a hub for many preferential trade agreements, which has helped in attracting steady FDI inflows into the region. The expected establishment of AEC at the end of 2015 could further enhance the attraction of

Figure 1.6. Share of Asia and the Pacific in global flows of foreign direct investment, 2005-2013



Box 1.1. Recent developments in multilateral trade negotiations and regional trade agreements

The Trade Facilitation Agreement (TFA), agreed at the ninth Ministerial Conference of the World Trade Organization (WTO) in December 2013, known as the Bali Package, is expected to be ratified by all members in 2015. The agreement is intended to simplify and enhance the transparency of trade procedures among countries. A study by the Organisation for Economic Co-operation and Development (OECD), based on a set of WTO-specific trade facilitation indicators and the ESCAP-World Bank trade cost database, suggested that implementation of the WTO TFA may help developing countries reduce trade costs by about 14% on average (Moisé and Sorescu, 2013).

The Asia-Pacific least developed countries face additional challenges in securing global market access. In a high-level meeting of the WTO Services Council on 5 February 2015, members discussed measures which would support the growth of services trade in least developed countries by providing their services exports with preferential treatment. This would be an important step in implementing a key Bali decision in support of least developed countries, which is aimed at enhancing their participation in the global services trade.

Recent years have seen a proliferation in preferential trade agreements. Currently, regional attention is focused in particular on the ongoing negotiation of two “mega-regional” deals, namely the proposed trans-Pacific partnership (TPP) and regional comprehensive economic partnership (RCEP) (ESCAP, 2014a). TPP now includes 12 Asia-Pacific Economic Cooperation (APEC) economies (including two ASEAN member States, namely Malaysia and Viet Nam), with the possible inclusion of others in the future. In contrast, RCEP is limited to the 10 ASEAN member States and their 6 dialogue partners (known as ASEAN+6) with which the 10 ASEAN members have already signed various free trade agreements. There is greater initial scope for liberalization among the RCEP economies as existing tariffs and restrictions on services trade and investment are higher than among the TPP members. However, TPP is likely to lead to deeper integration and include more substantive agreements on issues beyond and outside current WTO obligations in several areas including: (a) labour and environmental standards; (b) intellectual property rights; (c) government procurement; and (d) investment and competition policy.

In addition, the recent meeting of APEC leaders in Beijing in November 2014 has spurred renewed interest in the idea of a broader free trade area of Asia and the Pacific (FTAAP) building on TPP and RCEP. The declaration issued at the end of the summit reaffirmed the commitment of the leaders to “the eventual FTAAP as a major instrument to further APEC’s regional integration agenda”. Towards this end, leaders launched the Beijing Roadmap for APEC’s Contribution to the Realization of the Free Trade Area of Asia-Pacific, which set out a number of actions to be taken (APEC, 2014). The benefits from an ambitious FTAAP could be substantial in view of the enormous economic size of the group: 58% of the global GDP (see table A). The economic benefit that FTAAP could achieve would, however, depend on the level of liberalization, the final number of members and whether FTAAP could trigger consolidation of complex and overlapping existing regional arrangements responsible for the “noodle bowl” effect, which is having adverse impacts on the business environment for traders.

Table A. Economic size of the proposed trans-Pacific partnership, regional comprehensive economic partnership and free trade area of Asia and the Pacific

	TPP	RCEP	FTAAP
Number of economies involved	12	16	21
Population (millions)	802	3 430	2 783
Aggregate share of world GDP (percentage)	38	29	58
Aggregate share of world exports (percentage)	24	30	46
Number of bilateral agreements among the negotiating parties already in implementation	25	23	51

Source: Schott (2014) and ESCAP calculations based on APEC statistics.

the subregion for FDI flows (see box 1.2). Another example is China where the Government adopted a strategy of “going global”.¹³ With continuous efforts, FDI inflows into China have been increasing since 2008 despite temporary small dips, and that country became the largest FDI recipient in the world in 2014 with inflows of \$120 billion.

In contrast, geopolitical tensions and foreign sanctions prevented the Russian Federation from attracting prospective investors, despite the fact that the business environment had apparently improved over the past few years.¹⁴ The country managed to attract an estimated \$19 billion in FDI inflows in 2014, a decline of 70% compared with the exceptional level reached in 2013.¹⁵ In India, FDI inflows have been volatile since 2008; in 2014, FDI inflows increased by 26% to reach \$35 billion, which still remains far below the peak of \$47 billion that it recorded in 2008.

In addition to being recipients of investment, many economies in the Asia-Pacific region have increased their capacity as investors as well. FDI

outflows from the region have increased since 2009, and in 2013, the value of such was \$526 billion, a 15% increase compared with that of the previous year. China has recorded steady growth in FDI outflows since 2004, almost doubling its overseas investments in the past decade; it recorded more than \$100 billion in FDI outflows in 2013. Japan is the largest investor in the region, even as it is recovering from the ongoing crisis; it recorded \$136 billion in overall FDI outflows in 2013. The Republic of Korea and Singapore also have continued to increase their outward investments, reaching \$27 billion and \$29 billion in 2013, respectively. Some smaller economies, such as Cambodia and Viet Nam, are also steadily increasing their outward investments.

In terms of categories of FDI, there has been a shift in the respective roles played by greenfield FDI and mergers and acquisitions (M and A). Traditionally, greenfield FDI has been a significant mode of entry for FDI into the Asia-Pacific region, with more than 3.6 trillion having been invested through this mode

Box 1.2. ASEAN Economic Community in 2015: achievements and remaining challenges

In December 2015, the Association of Southeast Asian Nations (ASEAN) will reach its self-imposed deadline for realizing the ASEAN Economic Community (AEC). However, the deadline is best viewed as one milestone on the longer road towards deeper integration, and many challenges will persist beyond 2015. Thus far, progress has been mixed across the four pillars of the AEC Blueprint, which call for the transformation of ASEAN into:

- A single market and production base;
- A highly competitive economic region;
- A region of equitable economic development;
- A region that is fully integrated into the global economy by the end of 2015.

Although the AEC Scorecard, a self-assessment mechanism, suggested that ASEAN is on track and had reached more than 82% of its final targets by early 2015,^a challenges remain at the implementation level of each pillar.

With respect to the first pillar, a single market and production base, the greatest success has been in the removal of tariffs: zero tariff rates for intra-ASEAN trade have been applied to 99% of tariff lines in six ASEAN countries (namely, Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore and Thailand) since 2010, and to 72.6% of tariff lines in the so-called CLMV countries (Cambodia, the Lao People’s Democratic Republic, Myanmar and Viet Nam) since 2013. However, non-tariff barriers have emerged as a serious trade impediment. Progress towards their elimination (intended by 2010 for most countries) has been slow and the development of a shared ASEAN database has lagged. Investment liberalization has also been limited by the identification of sensitive sectors by ASEAN countries, especially Indonesia, Thailand and Viet Nam, which will be exempted from liberalization commitments. Some progress in trade facilitation has been made though the ASEAN single window programme is behind schedule as countries are still struggling to introduce national single windows which are a necessary precursor.

The most highly problematic area in the first pillar is the enforcement of the agreements related to liberalization of trade in services and the mobility of skilled labour. In general, trade in services remains less liberalized than trade in goods. Although ASEAN ministers declared 2015 as the end-date for liberalization of all service sectors, implementation of agreements is still an issue as, in practice, domestic restrictions on equity landholdings and licensing requirements continue to pose significant barriers to intraregional investment in services and mobility of skilled labour.

The second AEC pillar is aimed at establishing a highly competitive economic region and covers: competition policy; consumer protection; intellectual property rights; infrastructure development; taxation; and e-commerce. While various framework agreements in these areas have been adopted the necessary domestic legislation has yet to be enacted.

Box 1.2. (continued)

The Initiative for ASEAN Integration is targeted at narrowing the development gap between six ASEAN members and the CLMV countries, under the third pillar. The CLMV countries have been provided with technical assistance and capacity-building programmes under the Initiative for ASEAN Integration. However, substantial gaps remain, and realizing equitable economic development within and between countries will require strong commitment and long-term efforts in economic restructuring, making policy and regulatory reforms, and building human capital.

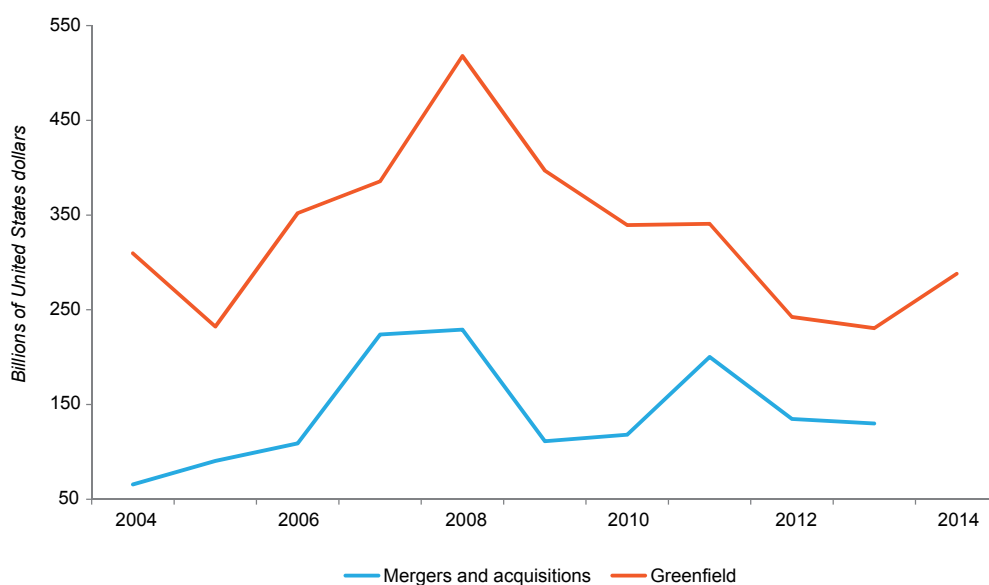
ASEAN has had some success in integrating into the global economy under the AECs fourth pillar; many members are deeply enmeshed in global supply chains. The initiation of negotiations on the Regional Comprehensive Economic Partnership (RCEP) in 2012 with the six partners, namely Australia, China, India, Japan, New Zealand and the Republic of Korea, is a good opportunity to reinforce ASEAN centrality in its external economic relations if it is used to streamline and harmonize provisions in the existing network of ASEAN-plus FTAs.

^a Based on the AEC Scorecard, the region achieved 82.1% of its targets at the end of 2014. See Das (2015).

since 2004. However, the growth of greenfield FDI has declined notably since 2008, and greenfield FDI inflows still have not reached their pre-crisis level of \$518 billion in 2008. In 2014, greenfield FDI inflows into the region amounted to only \$288 billion. In contrast, FDI through M and A has recently gained in importance. M and A activities doubled from \$66 billion in 2004 to \$130 billion in 2013, although they stagnated in 2013 (see figure 1.7). At the global level, cross-border M and As are also on the rise, having recorded a 19% increase in 2014.

As with the total greenfield FDI flows of the region, the growth of intraregional greenfield FDI in Asia and the Pacific has also declined since 2008 when it reached its peak at \$184 billion. It still has not attained the pre-crisis level, despite an increase of 60% in 2014, when it reached \$133 billion. Nevertheless, intraregional greenfield FDI has retained its significance in the Asia-Pacific region. Specifically, the share of intraregional greenfield FDI flows in total greenfield FDI flows in the region has increased to 46% in 2014, up from 35% in 2006.

Figure 1.7. Greenfield foreign direct investment and mergers and acquisitions in the Asia-Pacific region, 2004-2014



Source: ESCAP, based on data from CEIC Data. Available from www.ceicdata.com (accessed 30 March 2015).

It is also noteworthy that, while intraregional greenfield FDI flows to such destinations as China, Indonesia and Viet Nam are still popular, these countries have recently received less investment, whereas smaller economies, such as Myanmar and Pakistan, have received more – resulting in somewhat diversified destinations of intraregional investment.

Moreover, intraregional greenfield FDI has become more diversified in a broader range of industries. During the period 2012-2014, investments in natural resource-heavy industries, such as coal, oil, natural gas and metals, decreased; however, they increased or remained stable in knowledge-based industries and services, such as communications and financial services, compared with the period 2006-2011.

On the other hand, intraregional M and A accounted for 40% of total FDI inflows through M and A in the Asia-Pacific region during the period 2011-2013. Intraregional investors are increasingly replacing investors from Europe and the United States. High-growth economies especially are receiving large shares of intraregional FDI inflows, such as China; Hong Kong, China; and the Republic of Korea, which received 72%, 66%, and 45%, respectively, of FDI inflows through intraregional M and A activities during the period 2011-2013. China was the largest contributor to intraregional M and A activity in the Asia-Pacific region during the period 2011-2013 with the conclusion of deals valued at close to \$35 billion.

1.4. External sector, exchange rates and financial markets

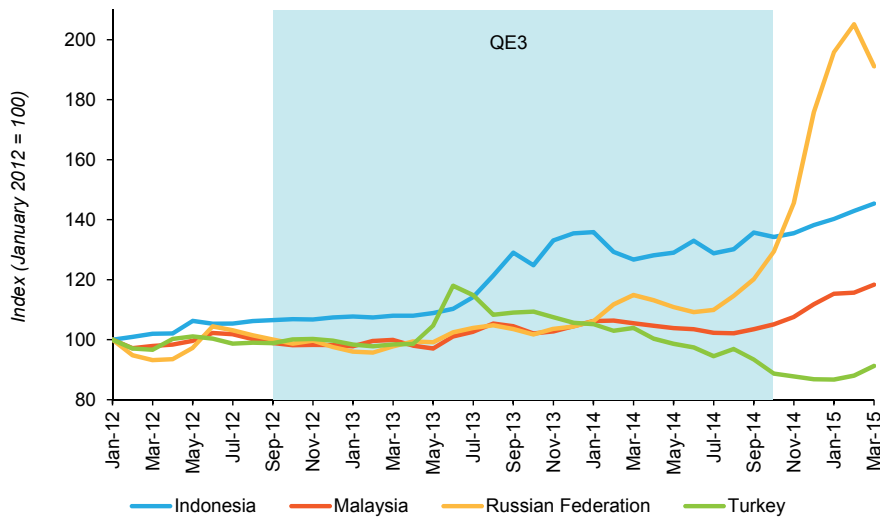
Expectations about monetary policy normalization of the United States of America, a likely increase in interest rates to be specific, have led capital to flow from other countries to the United States of America. As a result, the dollar has increased in value substantially against currencies in the region as well as globally. In global terms, the index of the dollar versus six major currencies reached an 11.5-year high in March 2015. While exchange rates in the Asia-Pacific region have been affected by the strength of the dollar, there has been considerable divergence in performance between economies. Some currencies in the region have declined only slightly against the dollar whereas others have seen more significant decreases (see figure 1.8). The economies in the region which have seen most

significant depreciation have been those with some concerns about macroeconomic fundamentals, such as high current account or budget deficits. For example, in March 2015 Indonesia's currency fell to its lowest level since 1998, while that of Turkey also fell to historic lows. Even many of the currencies of developing economies with the greatest depreciation since June 2014 have declined slightly less than the global trade-weighted average of about 12%. These include such economies as India, Indonesia, Pakistan, the Republic of Korea and Singapore. On the other hand, currencies of some other economies have declined far less compared with the global average, including those of the Philippines, Sri Lanka, Thailand and Viet Nam.

A number of factors explain the relatively small depreciation in some currencies in the region. One is foreign exchange intervention by Governments driven by concerns about: (i) imported inflation stemming from depreciation; and (ii) increased foreign debt repayment costs. While Malaysia and the Russian Federation utilized a large amount of reserves since mid-2014, others such as Thailand and Turkey depleted their reserves to a lesser extent (see figure 1.9). Another reason for the relatively small decline in the value of currencies in some economies in the region is continuing institutional investor interest in financial assets of the region due to better growth prospects in comparative global terms. This partly explains the fairly stable values, for example, of the currencies of China and Sri Lanka.

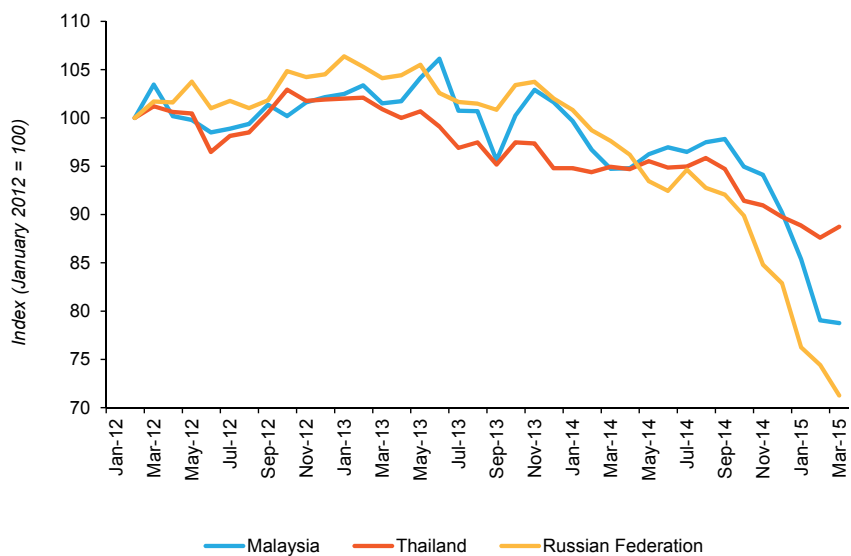
As currencies of the region have generally depreciated less than the global trade-weighted average, they may not obtain the significant trade gains that otherwise would be possible. This is most evident when comparing the steep declines against the dollar of the currencies of major exporting nations, such as Japan and countries in the eurozone, which have experienced depreciations of 20% and 28%, respectively, against the dollar. The increased export competition from these countries means that economies in the Asia-Pacific region are unlikely to experience as substantial an export benefit as might otherwise have been possible due to their depreciating currencies. Particularly important is the relatively small decline in the currency of China compared with those of those developed economies. Since mid-June 2014, the currency of China has remained nearly unchanged in value against the dollar. This decline in relative exchange rate competitiveness could negatively

Figure 1.8. Exchange rate indices in selected Asia-Pacific economies, 2012-2015



Source: ESCAP, based on data from CEIC Data. Available from www.ceicdata.com (accessed 30 March 2015).

Figure 1.9. Foreign reserves in selected Asia-Pacific economies, 2012-2015



Source: ESCAP, based on data from CEIC Data. Available from www.ceicdata.com (accessed 30 March 2015).

affect both the exports of China and the exports of the region through the important channel of Asia-Pacific production networks feeding final exports from China.

Analyzing further, it can be observed that oil-importing countries are experiencing two contrasting impacts on their exchange rates. Owing to the decline in international oil prices and thus the import bill, the current account balance has been positively affected, leading to an appreciation pressure on the exchange rate. However, there is also depreciation pressure in some countries due to capital outflows stemming from global risk aversion. Previous experience indicates that the economies most affected by general risk aversion are those with weaker macroeconomic fundamentals, such as high inflation and large budget and current account deficits.

Oil-exporting economies and economies linked to them, on the other hand, are experiencing a significant double negative impact on their exchange rates – from decreasing oil exports and increasing portfolio capital outflows in response to the economies' worsening macroeconomic fundamentals. The combined impact is already visible, for example, in the case of the Russian ruble, which experienced a 40% depreciation against the dollar in 2014. Furthermore, economies in North and Central Asia, which are tied through trade and remittances to the Russian Federation, have experienced similar pressures on their currencies. Some of these economies have let their currencies depreciate while others have spent large sums of foreign exchange reserves in defending their currencies. There were depreciations of 16%, 10% and 9% in the currencies of Kyrgyzstan, Tajikistan and Uzbekistan, respectively, in 2014.

An important policy consideration is that the increasing financialization of commodities in recent years implies that the financial sector is deeply affected by volatility in the commodity markets. There is potential for significant losses or gains to be made by the banking and investment community depending on whether they have taken the correct positions on commodity price movements. One important area of exposure of investment banks is in commodity credit derivatives. Losses in this segment of the financial markets can become contagious because of the interrelationships between different asset classes and the counterparties that trade in them. Increased volatility in commodity credit

derivatives can cause losses, for example, in interest rate derivatives and foreign exchange assets. The conventional wisdom at the moment is that the risk stemming from commodity-related financial assets is not on par with that of subprime mortgages. However, it is worth highlighting that every financial crisis has risked underestimating the depth of financial market interlinkages with the rest of the economy. The implication for credit markets of any large losses suffered by the banking industry – stemming from commodity-related assets – would be the need to make credit scarcer. If banks were to lose assets through the investment-banking portion of their business, they would have to attempt to recover them through appropriating assets from the commercial and retail side of their business. This would necessarily reduce the availability of credit in the real economy and therefore could have a negative impact on growth. These kinds of dynamics were at play during the 2008 financial crisis as well.

Some economies in the region have attempted to manage the negative impact of capital outflows on their asset markets through macroprudential measures. Apart from the impact on exchange rates, capital outflows have the potential to undermine macroeconomic stability and household wealth by their impact on domestic asset markets. Some of the key asset markets in relatively open economies which have seen significant foreign capital inflows are the equity, bond and property markets. Outflows from these markets can destabilize the banking sector as domestic banks may suffer losses on their investments in these markets, while they also have negative impacts on household wealth and therefore consumption because households will experience declining values for their investments in such markets. Some economies have attempted to manage the scale of capital outflows from such markets by imposing or increasing macroprudential regulations in these areas. A number of economies across the region, such as Hong Kong, China; and Singapore, have adopted measures, such as increased deposit requirements for mortgages and higher stamp duties, to deal with speculative property purchases. For example, in February 2015, Hong Kong, China mandated a 15% mortgage regulatory risk weight for banks, which is intended to lower banks' regulatory capital ratios and temper growth in mortgage lending. A number of countries have also adopted measures to encourage long-term entry of portfolio capital, such as through unremunerated reserve requirements on non-

resident deposits, withholding taxes, or restrictions on non-resident holdings of domestic assets.

2. RISKS AND CHALLENGES

2.1 Domestic structural concerns

2.1.1. Infrastructure deficiencies

Infrastructure needs in the region are phenomenal, with shortages in transportation, energy, water and sanitation. The order of magnitude estimates by ESCAP indicate that the region's total infrastructure investment requirements would be around \$800-900 billion per year. Better infrastructure is required to increase the supply potential of economies by increasing productivity and therefore the growth potential in a region where demand continues to remain substantial as a result of growing populations and rising incomes. Furthermore, the region's significant role in global trade and global production networks means that improved infrastructure will also enable economies to better service global demand. One estimate suggests that every \$1 invested on infrastructure development can yield additional increases in GDP of \$0.05-\$0.25, which implies increasing GDP growth by 5% to 25% (World Economic Forum and PricewaterhouseCoopers, 2012). Improving infrastructure will also enable economic growth to be more inclusive by allowing the fruits of development to reach more people, especially those in rural areas and the poorer sections of the society in urban areas.

Increasing urbanization throughout the region is creating additional demands for infrastructure. One estimate puts the need for infrastructure in Asia and the Pacific resulting purely from urbanization at more than \$11 trillion over 15 years (HSBC, 2013). Urbanization is expected to grow in line with rising wealth in the region, as higher-income economies typically have higher levels of urbanization; high-income economies in the region have urbanization rates of 90% as opposed to 30% in low-income economies. In 2012, 46% of the population of the region lived in urban areas, which under current growth rates is expected to increase to 50% by 2020. This would translate into an additional 500 million people living in urban areas (Fidelity Worldwide Investments, 2014). The region's share of the world's urban population is projected to grow from 42% to 63% between 2010 and 2050 (UN-HABITAT and ESCAP, 2010). Some of the effects will be increased demand for utilities and for

housing. There will also be a greater need for public transport to reduce the burden of congestion due to private vehicles.

In meeting the diverse but related challenges posed by urbanization, it is logical for infrastructure deficits to be tackled in an integrated way, which supports both sustainable and inclusive urban growth, but also ensures that the economic potential of the region's cities is realized. As the Asia-Pacific region and most notably South and South-West Asia will continue to urbanize for decades to come, action must be taken which will result in closing infrastructure gaps in ways that contribute to low-carbon and liveable cities. Low-carbon and inclusive infrastructure can be designed to tackle both local and future challenges of sustainability and equity. Rethinking housing, sanitation and transport infrastructure in such a light would have significant impacts on shaping the cities of the future and moving away from "cities as usual". This includes affordable solutions in which needs are matched with low-technology and low-carbon solutions. Similarly, supporting green industries through fiscal and other policy tools towards innovation across infrastructure sectors will provide a key opportunity in support of these goals.

In considering particular infrastructure requirements of the subregions, the greatest infrastructure need in monetary terms lies in improving electricity generation, especially in **South and South-West Asian** economies. One measure of the requirement in power generation for the subregion is about \$400 billion annually (ADB and ADBI, 2009). Access to electricity in South Asia is significantly lower, at 71% of the population, as compared with, for example, 92% of the population in East and North-East Asia. Other major requirements lie in the area of road construction and, despite the dramatic spread of mobile telephony, telecommunications infrastructure also remains far behind demand.

A recent report puts the total needs for the subregion at \$2.5 trillion over the next 10 years (Andrés, Biller and Dappe, 2014b). Of this total, one third is for energy-related projects and one third for transport projects, with the remainder being for water supply and sanitation, solid waste management, telecommunications and irrigation. While the financial cost of providing water and sanitation is somewhat less than that of energy and transport infrastructure, the situation in the region in these areas is more extreme and akin in some

measures to the situation in sub-Saharan Africa. Currently, 41% of the population does not have access to toilets and 75% do not have access to piped water. Greater investment in infrastructure in South and South-West Asia will require improving the investment climate in terms of simplifying regulatory and tax structures and amending labour and land acquisition laws while ensuring that environmental and social concerns are addressed.

In **South-East Asian** economies, the needs lie most in the transport, energy and communications areas. It has recently been estimated that the cumulative needs for South-East Asia are \$950 billion up to 2020, with the region currently investing only half the resulting yearly requirement.¹⁶ Within energy generation only, it is estimated that South-East Asia would need to increase its power generation by 76% by 2030 to meet growing demand. Urbanization is also a particular challenge for the subregion, with the urban population in the ASEAN economies expected to double by 2020. It is notable that infrastructure investment has been lacking in the region ever since the 1997 Asian financial crisis, having fallen for five major South-East Asian economies, namely Indonesia, Malaysia, the Philippines, Thailand and Viet Nam, to \$25 billion in 2010 compared with \$38 billion in 1997.

It has been posited that low investment rates can be explained to some degree by Governments' attempts to maintain current account surpluses and build up foreign exchange reserves in order to prevent suffering from a rerun of the 1997 Asian financial crisis. The outcome has been that government reserves have been invested in short-term developed economy bonds as a safety measure to counter any capital outflows rather than being directed to domestic investment projects, such as in infrastructure development. Capitalizing on the ASEAN Economic Community, which is being established at the end of 2015, crucially will require significant investment in infrastructure. Without this, ASEAN runs the risk of falling into a middle-income trap, with growth on a declining trend as economies are not equipped with the resources to take advantage of higher value-added industries linked through global and regional production networks.

Furthermore, integration in **North and Central Asia** is being delayed due to the lack of transport infrastructure. In addition, greater integration is also required of transport and logistics networks,

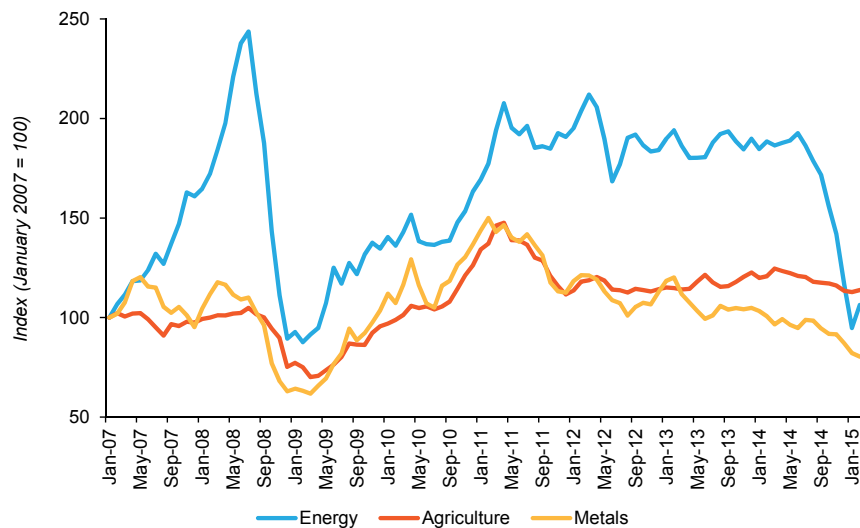
which would save time at border crossings and shorten transportation routes. There would then be scope for the subregion to serve as a land bridge between East Asian producers and consumers in the European Union. There have been various subregional initiatives on these lines, such as the Eurasian Economic Union¹⁷ and the Shanghai Cooperation Organisation,¹⁸ among a number of others, as well as the bilateral "Silk Road" initiative¹⁹ of China involving various North and Central Asian countries. However, the challenge will be to ensure efficiency between the initiatives of the various groupings and avoidance of a "noodle bowl" effect,²⁰ which would increase complexity and the demands on Governments.

2.1.2 Commodity-dependence

Commodity price swings are nothing new, but the recent sharp drop in the Brent crude oil price has caught many economic managers in the region by surprise. Coal prices have also declined in recent quarters, affecting major exporters, such as Australia and Indonesia. Natural gas prices are also likely to fall as they tend to track oil prices with some lag. Industrial metals, such as copper, iron ore and nickel, have also witnessed downward volatility, as is the case with food and agricultural raw materials, such as palm oil and rubber (see figure 1.10). While various demand and supply factors are at play, some commentators believe that the recent decline in commodity prices may signal the end of a "commodity super cycle" after more than a decade of a commodity boom, which was only briefly interrupted by the global financial crisis.²¹ In the near term, however, uncertainty exists about the size and direction of the spillover from oil prices to other commodity prices and about the reallocation of production prompted by price changes.²²

Although the majority of economies in the Asia-Pacific region are net commodity importers, which will benefit from the recent trend, the region is also home to more than a dozen countries for whom commodity exports account for a significant share of their GDP (see table 1.2). This latter group, which includes a wide range of countries with different income levels and population sizes, is expected to feel the impact of lower commodity prices on multiple fronts, including output and employment, external and fiscal balance, and price and financial stability largely via the exchange rate channel.²³ The severity of the impact, however, will

Figure 1.10. Commodity price indices for energy, agriculture and metals, 2007-2015



Source: ESCAP, based on data from CEIC Data. Available from www.ceicdata.com (accessed 30 March 2015).

depend on, among other things, the availability of countercyclical tools and measures in the short term and the diversified structure of the economy in the longer run.

Commodity exporters, such as Azerbaijan, Kazakhstan, Mongolia and the Russian Federation, could see a real GDP growth slowdown of more than four percentage points between 2013 and 2015. Less commodity-intensive economies are also expected to be negatively affected by lower commodity prices. For instance, Malaysia has slashed its official GDP growth forecast for 2015 by a full percentage point. Similarly, Australia also is also expected to experience relatively sluggish growth. As a short-term response, countercyclical measures are being introduced. For instance, Azerbaijan lowered the reserve requirement for banks while Kazakhstan announced a three-year stimulus package with a focus on housing,

utilities and transport infrastructure. The Russian Federation also introduced several measures, such as the establishment of a loan guarantee agency to support SMEs, although most are in direct response to international sanctions rather than the oil price decline. Some of the impact on domestic output will be felt more gradually as investment in the energy exploration and production sector and rural farm incomes are adversely affected.

While the impact on employment is more difficult to assess, the higher employment intensity of certain commodities, such as palm oil and rubber compared with oil and gas, implies that countries specializing in the former commodity group will be more heavily affected. This includes Indonesia, Malaysia and Thailand and cotton producers, such as Tajikistan. Pacific island countries, such as Fiji, may also fall under this category, although their heavy reliance on food and fuel imports suggests some offsetting effects.

Table 1.2. Countries where commodity export-to-GDP ratio exceeded 10% in 2000-2013

30% plus	Azerbaijan (-3.5), Brunei Darussalam (3.3), Islamic Republic of Iran (2.8), Kazakhstan (-4.5), Mongolia (-8.2), Myanmar (0), Papua New Guinea (9.9), Timor-Leste (1.1) and Turkmenistan (-0.7)
10-30%	Australia (-0.1), Bhutan (2.6), Indonesia (-0.2), Malaysia (0.2), the Russian Federation (-5.3) and Viet Nam (0.7)

Source: ESCAP, based on World Development Indicators.

Note: Figures in parentheses show the percentage point difference between real GDP growth in 2013 and the 2015 forecast. Estimated figures are used for the Islamic Republic of Iran and Myanmar. For Timor-Leste, the parentheses show non-oil GDP, as the economy as a whole has been contracting in recent years from declining oil production. Countries, the ratios of which exceeded 10% mainly due to food commodities, are excluded, such as Thailand and several countries in the Pacific.

Moreover, several commodity exporters may see their current account balances deteriorate due to the negative terms of trade shock. This was already spotted last year in such countries as Azerbaijan and Timor-Leste, although the drop in their production volumes was also a prominent factor. Often, the aggregate change in the current account balance will be mitigated by a drop in capital imports as investment slows in these economies, as in the case of Mongolia. There could also be some positive offsetting effect if weak commodity exports result in the depreciation of the local currency thereby making manufacturing exports more competitive. Importantly, as in the case of Indonesia, a deteriorating current account balance may necessitate monetary tightening in the light of the uncertain external financing environment and therefore could further dampen the domestic economy.

Government budgets are also feeling the impact of high commodity-dependence. For instance, the Russian Federation announced a 10% cut across most parts of its budget, even as it draws down its national welfare fund to mitigate some impact. The Government of Malaysia plans to slash spending by some \$1.5 billion in 2015, or about 2% of its proposed outlays; oil and gas royalties and taxes account for some 30% of the country's revenues. A number of countries had to revise their 2015 budgets, which were based on oil prices of \$100 or more per barrel. This could have a severe impact on such economies as Timor-Leste where government spending dominates the non-oil economy and private sector development is at a nascent stage. Some countries may also face a higher public debt-to-GDP ratio, or at least slower pace of reduction compared with the commodity boom period.

Price and financial stability are also being affected, primarily through the exchange rate channel. The Russian Federation is expecting double digit inflation this year, although again, this may be due to international sanctions more than other reasons. In fact, other commodity-export economies in North and Central Asia are not foreseeing significant acceleration in inflation. More countries may be vulnerable to financial instability. Studies show that many commodity exporters tend to experience a banking crisis during sharp declines in commodity prices.²⁴ While this is an extreme case, even countries such as Malaysia are feeling some pressure as the ringgit depreciates; its total external liabilities stand at about 70% of GDP, and

companies are spending less on investment as servicing costs in dollar terms climb higher.

In the longer term, commodity-dependence can affect the process of structural change in economies. Economies develop through structural change, in which labour migrates from low- to high-productivity sectors (McMillan and Rodrik, 2011). Often, the output share of agriculture declines while that of manufacturing and related services rises as economies develop. Employment follows a similar pattern, although agriculture and services tend to retain or absorb more labour compared with manufacturing. Even within sectors, labour could migrate to higher productivity subsectors. Diversification could thus occur in various ways, including moving into new products and services (horizontal diversification), through backward and forward linkages of existing products and services (vertical diversification), quality upgrades and market expansion.

Resource-rich economies tend to undergo less economic diversification even as aggregate output and income rises. The literature on the "Dutch disease" and the international experience in past decades, for instance, of slower productivity gains in resource-rich economies in Africa and Latin America compared with non-resource-rich newly industrialized economies in East Asia point to a number of potential reasons for such developments (Sachs and Warner, 2001). For instance, real appreciation in the currency could shift labour, capital and land from non-commodity traded goods to commodity traded goods and non-traded goods and services. Often the manufacturing sector is crowded out. This is particularly harmful as the manufacturing sector has externalities for long-run growth from learning by doing, the scope for which is far more limited in the agricultural and mining sectors (Gylfason, Herbertsson and Zoega, 1999). Moreover, crowding out of manufacturing could further limit the scope for diversification, given that diversification tends to be "path-dependent", that is, the existing product mix of a country tends to affect the potential new products that could emerge (Freire, 2011). This phenomenon seems to have also happened in the Asia-Pacific region. Between 1995 and 2013, only a few commodity exporters, including Nepal, Samoa, Uzbekistan and Viet Nam, succeeded in diversifying their export base while many others, including Australia, Azerbaijan, Kazakhstan, the Russian Federation and Tuvalu, went in the opposite direction of further concentrating their export profile.

At least in principle, commodity dependence may not pose a problem as long as supplies last and prices remain high. Even economies with abundant reserves, such as Kazakhstan, however, face some uncertainty in supplies, while others, such as Timor-Leste, are expected to deplete all their oil reserves within a decade. As was seen in the recent downward volatility, prices do not always remain high. Decades of a downward trend were reversed in the 2000s, but the recent drop in oil prices may signal the end of a commodity “super cycle”. Of course, the global economy keeps on expanding and energy demand is expected to grow rapidly in developing economies, but it should also be noted that the commodity intensity of the global economy keeps on declining as well. Given numerous possible scenarios, commodity exporters should not consider themselves as an exception to the rule that economic development requires structural change.

Importantly, lack of diversification among commodity exporters is often associated with weak governance and business environment. This is possible because of excessive rent-seeking activities. Human capital also tends to suffer, as primary sectors, such as mining, cannot absorb much labour compared with manufacturing. These deficits could hamper economic development, particularly in the private sector. Nonetheless, it is also a concern because resource-driven economies would require a large public sector in order to distribute the wealth equitably across the population. However, if there is much corruption and weak capacity in the Government, welfare gains would be neither widely nor efficiently realized. Among commodity exporters, such countries as Australia, Chile, Malaysia, Norway and Viet Nam score high or have improved their indicators on governance and doing business. Interestingly, these economies also tend to exhibit more progress in economic diversification.

2.2. External challenges

2.2.1. Capital flow volatility

An important economic challenge for the region in 2015, emanating from outside, will be managing the likely financial market volatility resulting from monetary policies of the major global economies. The region is contending with the ongoing monetary policy normalization of the United States. With steady growth in the economy over recent quarters, the Federal Reserve Bank of the United

States is now expected to raise the interest rate from its current level of close to zero after having first removed quantitative easing over the course of 2014.

A key new development is the announcement of quantitative easing by the eurozone in January 2015. In addition, Japan has been engaged in a quantitative easing programme under what has been called “Abenomics” since late 2011 in an attempt to escape deflationary pressures and spur growth in the economy. When considered in total, new liquidity from the eurozone and Japan exceeds what was produced by the United States at the peak of its programme. Thus, fresh liquidity from Japan and the eurozone has the potential to buffer the financial markets in the region from the absence of fresh liquidity from the United States. The question is whether these sources of fresh funds are likely to come to the region in the same quantity as those from the United States did in the past.

One likely reason why there may be net pressure for capital to flow out from the region is the narrowing differential in potential returns between financial assets in the region and those in the United States. Capital market outflows from the region to the United States would be encouraged by the foreseen likely increase in United States interest rates and better growth in the United States economy. These phenomena would imply that the gap between United States interest rates and growth and Asia-Pacific interest rates and growth would have decreased. This is especially true at a time when growth and therefore the interest rate prospects of the region are less rosy than in the past, at least in relative terms. The argument of growing differentials with the United States along with its implications applies to assets of the eurozone and Japan as well. In those countries, growth and interest rate prospects are worse than for Asia and the Pacific as a whole. Therefore, fresh liquidity from the eurozone and Japan may not flow into the region in as large quantities as had been the case when liquidity was being produced in the United States a few years ago; the liquidity may flow instead to the United States.

Increasing global risk aversion is another reason why funds leaving the eurozone and Japan may not come to Asia and the Pacific, and funds already in the region may exit instead. There is a strong perception among many investors of a global climate of continued weak economic growth and

macroeconomic instability for a number of reasons. Such perceptions tend to lead to a “flight to quality”, which is mainly to the United States dollar as well as the yen. One reason for such preferences is the slow economic growth in the eurozone and Japan, as well as slowing economic growth in China, which is dragging down global economic growth as a whole, given the weight of these markets in global GDP. Another reason is the fear that low oil prices could lead to deflation in major developed economies, which may have a negative impact on economic growth in addition to increasing the likelihood of lower interest rates.

Capital outflows are of concern because they have an impact on macroeconomic stability through a variety of mechanisms. Economies that have high foreign debt commitments, in both government and corporate sectors, tend to be more vulnerable. A number of countries in the region have significant foreign repayment commitments, the value of which would rise in local currency terms if there is currency depreciation as a result of capital outflows. Countries with relatively high external debt commitments in the region include Malaysia at more than 60% of GDP, Turkey at nearly 50% of GDP and the Republic of Korea at nearly 30% of GDP. Household debt is an added concern in some economies, with some banks financing high domestic lending by borrowing from abroad. They are, therefore, prone to the risk of an increase in their borrowing costs, which would then be passed on in terms of higher interest rates

for domestic borrowers. Malaysia and Thailand have the highest household debt in the region, with levels approaching 90% of GDP. Another impact of capital outflows would be directly on domestic asset markets in which capital inflows have been prominent. These include equity, bond and property markets in a range of economies. For example, Hong Kong, China; and Singapore are among the economies with particularly strong property sectors influenced by capital inflows. Any resulting sharp decline in asset values would adversely affect the wealth and spending decisions of domestic citizens who are investing in these assets.

In a climate of generalized capital outflow, previous episodes indicate that those economies most likely to suffer adverse impacts are those with weaker macroeconomic fundamentals (see box 1.3). The fundamentals of concern are inflation rates, current account deficits, budget deficits, foreign sovereign and corporate debt and domestic household debt levels. In the case of the current account deficit, even a low level may be a concern if there are foreign debt payments to service and foreign exchange reserves are not perceived to be sufficient for that purpose. India and Indonesia are among the economies with sizeable amounts of foreign debt maturing in the next few years. India has short-term foreign debt of nearly \$90 billion, or more than 20% of total external debt (Reserve Bank of India, 2014), while Indonesia has short-term debt of nearly \$50 billion, or more than 15% of GDP (Bank

Box 1.3. Enhancing macroeconomic fundamentals to cope with a likely increase in borrowing costs

Monetary policy normalization in the United States is widely expected to occur in the second half of 2015. The Federal Reserve projected in March 2015 that the federal funds rate would rise from virtually 0% at the beginning of the year to 0.625% by year-end, and increase by another 125 basis points each in 2016 and 2017 (Lebovits and Woolrich, 2015). The long-run interest rate is expected to reach 3.75%. Although Asia-Pacific economies may not have to raise their domestic interest rates by as much as that in the United States, in view of the still stronger economic outlook for the region, higher borrowing costs in the coming years would be unavoidable.

A possible global financial panic that could result from a sharper or earlier-than-expected rate hike may be dealt with in part by capital flow management and macroprudential measures. A more medium-term issue is what countries could and should do in order to cope with an upward interest rate adjustment. One clear option is to enhance macroeconomic fundamentals, which would help lower a country’s perceived risks and thus domestic interest rates. This would involve, among other things, achieving sustainable debt levels, fiscal discipline, price stability and a healthy financial sector.

Based on the Oxford Global Economic Model, an attempt is made below to quantify the impact that improved macroeconomic fundamentals could have on domestic interest rates and economic growth in eight selected Asia-Pacific economies during the period 2015-2017. For each economy, stronger fundamentals are assumed to reflect in a 1-notch upgrade in credit rating on foreign-currency debt as well as a 100-basis-points reduction in the risk premium on debt denominated in United States dollars. In the Oxford model, changes in these two variables affect other macroeconomic variables, such as long-term government bond yields and short-term interest rates.

Box 1.3. (continued)

Figure A below depicts the actual interest rates in 2014, the interest rates in 2017 under the baseline as projected by the Oxford model and the estimated interest rates in 2017 under the scenario with stronger macroeconomic fundamentals. The figure shows that the interest rates are generally expected to trend up between 2014 and 2017.^a The key finding is that, compared with the baseline, improved macroeconomic fundamentals would help to lower the estimated interest rates in 2017, by about 1.2 percentage points in the Republic of Korea and Turkey and up to 1.4 percentage points in Indonesia and the Russian Federation. Although monetary policy normalization in the United States will likely require emerging Asia-Pacific economies to raise their interest rates in order to maintain capital inflows, the required increase could be smaller, by 1.2-1.4 percentage points, if these economies secure more favourable macroeconomic fundamentals in the coming few years.

Figure A. Actual and simulated interest rates under the scenario of better macroeconomic fundamentals

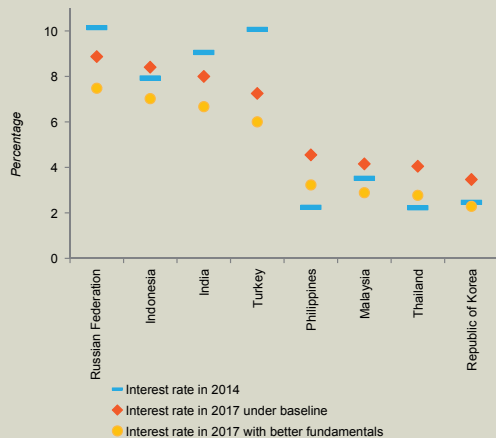
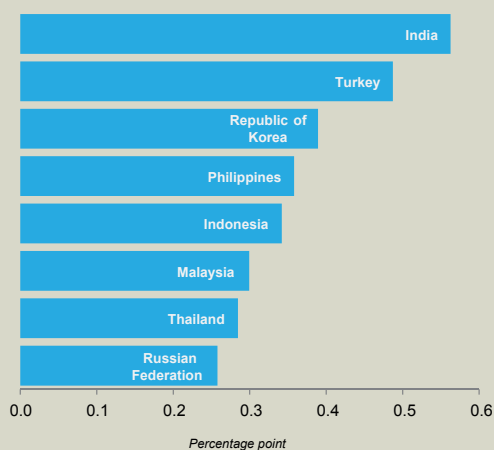


Figure B. Percentage point change in annual GDP growth relative to the baseline during 2015-2017



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

A smaller required increase in the interest rates would help these economies to achieve more rapid economic growth relative to the case where macroeconomic fundamentals remain unchanged. In particular, lower borrowing costs would support economic growth through fixed investment and household spending. Figure B above shows that, relative to the baseline, annual economic growth in India could be up to 0.6 percentage points higher per year during the period 2015-2017. Similarly, in the Philippines, the Republic of Korea and Turkey, the positive impact of stronger macroeconomic fundamentals on economic growth, through lower interest rates, is estimated to be 0.4-0.5 percentage points per year.

^aThe key exceptions are the Russian Federation and Turkey, where interest rates have surged recently in response to capital flight, which is likely to be a transitory phenomenon.

Indonesia, 2015). Economies which displayed some of these macroeconomic weaknesses in the past, such as India, Indonesia, Malaysia and Turkey, were those that suffered the most impacts in the previous bout of capital outflows at the start of United States “tapering” of monetary policy during mid-to-late 2013. In the current circumstances, another macroeconomic weakness which will play an important role is excessive dependence on commodity-related revenues, as has been seen in outflows from the Russian Federation.

The threat of capital outflows will play an important role in determining the monetary policy stance for affected economies. From the inflation standpoint, most economies in the region are expected to see

declining inflation expectations primarily due to moderate oil prices. This would support a reduction in interest rates by central banks. However, interest rates may need to be kept higher in order to compensate for relatively weak macroeconomic fundamentals by offering higher potential returns to investors. This, in turn, could depress economic growth through the domestic channel by making investment more costly and reducing the attraction of consumption as compared with saving. Economies are faced with this dilemma as long as they maintain relatively flexible exchange rates and allow uninhibited mobility of capital across borders. Consideration may therefore need to be given to how best to strike a balance between maintaining monetary flexibility to pursue domestic objectives

and using measures necessary to manage capital flows.

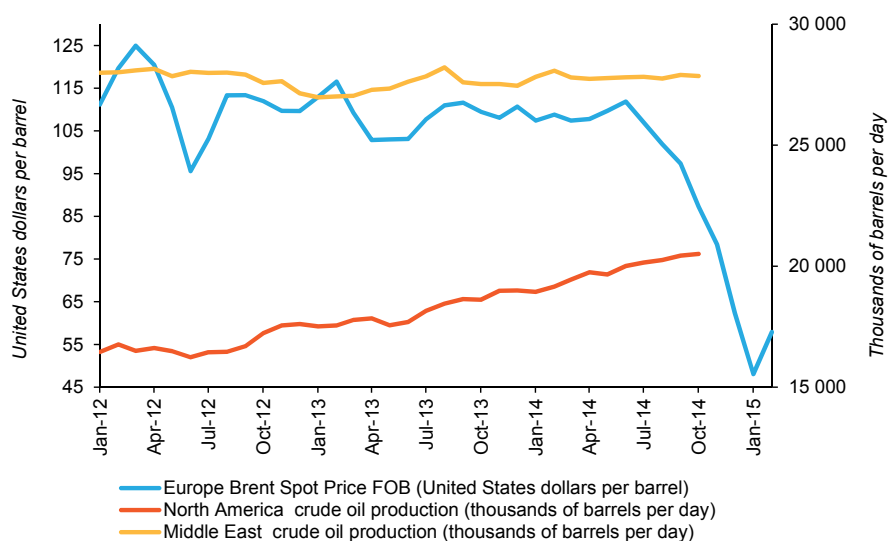
2.2.2. Impact of oil price developments

A major global development has been the sharp drop in oil prices since mid-June 2014, which maybe the start of a longer-term trend (see figure 1.11). The price of Brent crude has dropped by 50% between mid-June 2014 and mid-April 2015. The overall impact of falling oil prices will depend on the nature of oil-dependence (oil-importing or oil-exporting) of economies, the prevailing level of inflation and the fiscal policy stance pertaining to subsidies. For many economies globally, including Asia-Pacific economies, the impact of falling oil prices has been mostly positive as this phenomenon has reduced inflation, mitigated current account pressures, and increased disposable income of households. Lower oil prices also provide an opportunity for some economies to divert spending away from untargeted energy-related subsidies to development spending, which may help the long-term growth prospects of those economies. However, for some major oil-importing economies, the dramatic fall in oil prices has led to deflationary pressures, which could have a negative influence on growth. This scenario has led to conventional (lower interest rates) and unconventional (quantitative easing) policy responses with implications for capital flows and increased volatility in asset prices/exchange rates.

Both demand and supply factors have contributed to the dramatic decline in international oil prices. The demand effect is the result of fragile, low and slowing growth in some of the major economies of the world – China, Japan and eurozone countries. The International Energy Agency in October 2014 lowered its estimate of global oil demand for 2014 by 250,000 barrels a day to 7 million barrels per day, suggesting that global oil demand grew at its slowest pace in 5 years. Further, the oil-intensity of global activity has steadily declined and almost halved since the 1970s as a result of increasing energy efficiency and declining oil-intensity of energy consumption. Global growth in 2015 is expected to remain weak. Thus, conditional on the supply dynamics, it may be expected that relatively low oil prices will persist. Global oil supply has also repeatedly been a source of surprises on the upside, a factor that is contributing to the oil price decline. A major new development has been a considerable increase in shale-oil production in the United States. In February 2015, the country pumped 9 million barrels per day, a 9% increase over the level of the previous year and only slightly less in total than that pumped by Saudi Arabia. At the same time, OPEC, by maintaining its production levels, has clearly indicated that its policy objective has moved from targeting an oil price band to maintaining its market share.

Although the exact relative importance of demand and supply factors for oil prices is difficult to quantify,

Figure 1.11. Oil production in the Middle East and North America, and Brent crude spot price, 2012-2015



Sources: ESCAP, based on data from United States Energy Information Administration. Available from http://tonto.eia.doe.gov/dnav/pet/pet_pri_spt_s1_d.htm; and CEIC Data. Available from ceicdata.com (accessed 30 March 2015).

it appears from various analyses that the main cause of the price fall has been supply conditions (World Bank, 2015). Various estimates put the break-even oil price for the most expensive shale producers at \$60-70 a barrel. Below this price, some production would be taken off-line. This is indeed what has happened with some United States oil producers in recent months. Going forward, it can be reasonably expected that the oil supply may decline somewhat on the margin as new investments in oil production, especially in the United States, become increasingly unprofitable at the current very low prices. On the other hand, some oil producers using traditional extraction methods, most notably Saudi Arabia, can produce oil at far lower prices, estimated to be about \$20 a barrel. This enables such countries to attempt to price shale competition out of the market by ensuring persistence of lower oil prices. However, it should be noted that fiscal spending in such countries is dependent on oil prices remaining at levels higher than those currently prevailing. Therefore, oil prices at such low levels are also not sustainable in the long term. Such a reading of the oil market implies that there would be a floor to the oil price around the \$60-\$70 a barrel range. The moderate rebound of oil prices in early 2015 from their minimum at the start of the year is perhaps an indication that the market may be adjusting itself to such a sustainable floor.

For oil-exporting economies, there would be negative impacts on growth, with the degree depending on the extent of industrial diversification of economies apart from the energy sector. Thus, the most adversely affected economies in the Asia-Pacific region would be highly oil-export-dependent economies, such as the Russian Federation and other Central Asian producers, as well as the Islamic Republic of Iran. Spillover and transmission channels to other economies would occur through trade and remittance ties with oil-producing economies: for example, North and Central Asian economies with the Russian Federation, and the Philippines and South and South-West Asian economies with Middle Eastern producers. As migrant workers generally hold vulnerable jobs, they would be the first to be affected by a potential deterioration of the economic situation in their host country.

For oil-importing economies, some of the macroeconomic implications of oil-price developments are that there would be greater monetary policy space due to lower inflation and improved current account balances. However,

decisions on interest rate reductions will depend on the sustainability of the oil price decline and the strength of overall balance of payments positions. Moreover, if the oil price decline proves to be relatively short-lived, which has been perhaps suggested by the moderate increase in prices during 2015, the interest-rate-reduction-induced increase in inflation could turn out to be excessive, and this may induce excessive capital outflows and currency depreciation. Oil-exporting economies face a dilemma. A tight monetary policy stance is required in the short term to ward off exchange rate depreciation pressures, as is the case in the Russian Federation where the policy interest rate now stands at 14%. Higher interest rates, however, could choke economic activity in these economies just as growth is already suffering impacts from reduced oil exports.

In terms of fiscal policy, oil-importing countries with fuel subsidies have the opportunity to create fiscal space by removing the subsidies and thus release funds for inclusive and sustainable growth. Currently, fiscal space is being created in some countries as the subsidy is not being activated at low oil prices. However, the fiscal space created could be made permanent by removing such subsidies altogether while minimizing the immediate impact on the poor segments of society. Such removal has already been done to a significant extent in the Asia-Pacific region by India, Indonesia and Malaysia. These countries have pledged to use some of the savings to increase development spending, particularly on infrastructure, health and education, and targeted cash transfers to the poor. For oil-exporting economies, fiscal space will be drastically reduced in some cases, increasing government debt and decreasing Governments' ability to fund development spending. For example, according to the Finance Minister of the Russian Federation in January 2015 the break-even oil price for maintaining the budget of the Russian Federation is \$70 a barrel.

3. POLICY CONSIDERATIONS

3.1. Dealing with obstacles to inclusive growth

Income inequality impeding progress

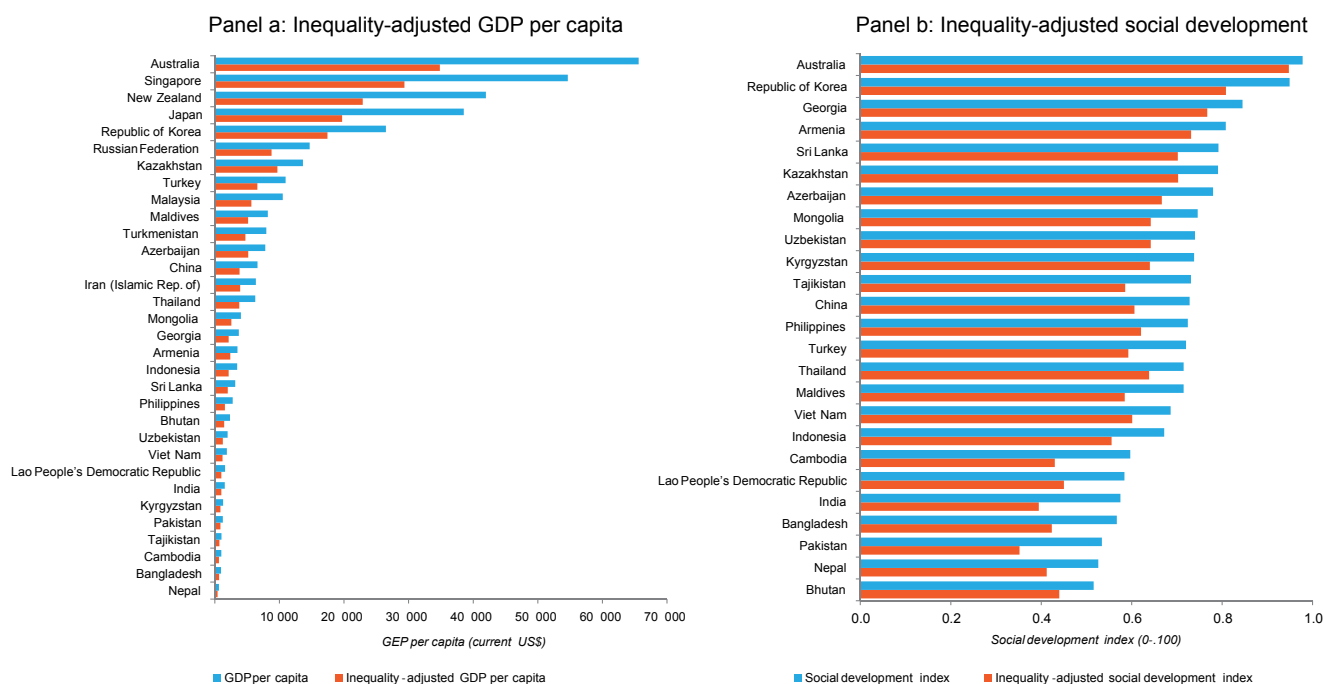
Recently, income inequality has emerged as a significant concern for policymakers across the globe. One reason among many for this concern is the cost it imposes on achieving inclusive

growth and development. The issue of inequality is garnering further attention during the ongoing formulation of the sustainable development agenda for the United Nations development framework beyond 2015. While overall economic growth and poverty reduction have shown steady improvement over the past decade, ESCAP estimates indicate that income inequality, as measured by the Gini coefficient, has widened significantly in the Asia-Pacific region. Specifically, the coefficient has risen from 33.5 in the 1990s to 37.5 in 2000s. In particular, the estimates show that about 84% of the region’s population now lives in countries with a Gini coefficient ranging from 33.9 (India) to 42.1 (China) for the most recently available data. Importantly, the level of income inequality is now high in countries with different levels of development status. For example, the Asia-Pacific least developed countries have experienced an increase in the income inequality level from 30 in the 1990s to 34.5 in the 2000s, while the landlocked developing countries have experienced an increase from 32.7 to 35.7 during the same period.

ESCAP analysis indicates that high levels of inequality are undermining the economic and social achievements of the region. To estimate the negative impact, the analysis discounted levels of

per capita income for 32 countries in the region with available data by a factor proportional to the extent of income inequality. The findings show that GDP per capita declines substantially for many countries with relatively high Gini index levels. For example, GDP per capita (current dollars) for 2013 in Kazakhstan declined from \$13,650 to \$9,686 when adjusted for income inequality. In the case of China and India, the decline was from \$6,626 to \$3,839, and from \$1,548 to \$1,023, respectively (see figure 1.12, panel a). Similarly, the ESCAP analysis also considered discounting of levels of development achievement by a factor proportional to the extent of inequality – in a manner similar to that used for the inequality-adjusted human development index. This analysis used a “social development index” which combines the education and life expectancy components of the human development index. Using data for 25 Asia-Pacific countries, each dimension’s average value can be discounted according to the country’s level of inequality in education and life expectancy. The results show that the discount is particularly high in several developing countries, including least developed countries in the region, such as Bangladesh and Cambodia, where this inequality-adjusted social development index shows a potential loss of more than 25% in 2012 (see figure 1.12, panel b).

Figure 1.12. Inequality-adjusted GDP per capita and index of social development, 2012-2013



Sources: ESCAP, based on data from UNDP, *Human Development Report 2013 -- The Rise of the South: Human Progress in a Diverse World* (New York, 2013); ESCAP, *Statistical Yearbook for Asia and the Pacific 2014* (ST/ESCAP/2704, Bangkok); and United Nations Statistical Division.

Inclusive growth contingent on gender equality

A fundamental obstacle to inclusive growth is patriarchy. Inclusive growth cannot be achieved without addressing the discrimination, oppression and subjugation of women and girls, in both the public and private domains, across the Asia-Pacific region. Moreover, under the prospective development agenda beyond 2015, realization of sustainable development goals – for which people, prosperity and the planet are fundamental – necessitates transformative and substantive changes that address the structural causes of gender inequality and injustice. In this respect and taking two sectors as examples, the partial, and in some instances complete, exclusion of women from the economic realm and that of political governance needs to be addressed. As well as being a matter of human rights, women's economic participation has repeatedly been linked to poverty eradication and to sustainable development with, for example, rises in individual income levels and in a country's productivity rates. Addressing the gender imbalance in leadership and decision-making is also critical for inclusive growth; without equality in representation, men's voices (and their needs and interests) will continue to drown out those of women.

Women's lower rates of labour-force participation than of men have, for instance, been associated with GDP per capita losses (Elborgh-Woytek and others, 2013) and increased participation rates with GDP gains from 5% to 34% (Aguirre and others, 2012). Beyond the quantitative aspects, measures in support of inclusive and equitable growth must tackle occupational segregation wherein – and reflecting traditional and restrictive, gender roles – women predominate in vulnerable employment, characterized by low pay, low productivity, restricted occupational options and little, if any, social protection (Economist Intelligence Unit, 2012). Also related to the economic realm and critical to inclusive growth is the recognition, respect and redistribution of reproductive work, given that reproductive work enables productive work and is disproportionately done by women (and girls).²⁵ Accordingly, policies and legislation need to: (a) prohibit discrimination on the basis of sex (and other characteristics, including age, sexuality and disability); (b) provide maternity protection; and (c) facilitate “return-to-work”, such as through nursing facilities and access to affordable and high-quality childcare. In terms of the gender imbalance in leadership, currently

in the Asia-Pacific region, women constitute approximately 18% of national parliamentarians. In approximately one third of the countries in the ESCAP region today, less than 10% of national parliamentarians in single and lower houses are women.²⁶

Lack of decent jobs

Achieving inclusive growth must be underpinned by the provision of sufficient decent jobs. High-quality employment that is productive and well-remunerated is critical for raising living standards, particularly for workers and households at the bottom of the income ladder. However, the region is still struggling to create adequate jobs in the formal sector and improve overall job quality. Employment has increased by 21.3 million (or 1.2%) in 2014, a slight deceleration from trends in 2013, in developing Asia-Pacific economies.²⁷ However, employment growth varied across the region in 2014, driven by differences in economic and demographic trends. The South Asian subregion alone contributed nearly three fifths of the region's employment growth.

In order to achieve inclusive growth for all women and men, improving employment prospects for young people in Asia and the Pacific is essential. In particular, youth unemployment was about 10% or higher in 7 of 13 economies with recent figures. In Sri Lanka, for example, 19.5% of youth in the labour force were unemployed, with the situation being even more alarming for young women (26.3%). Likewise, in Indonesia and the Philippines youth unemployment was about 14-19%, partly reflecting considerable growth in the youth labour force. These regional trends are driven by a number of age-specific factors, including the mismatch between education, employers' requirements and youth aspirations. In India, for instance, youth unemployment is about 1 in 10 overall, but nearly 1 in 4 among better educated young women from wealthier, middle class families (Huynh and Kapsos, 2013).

While job creation is key for realizing inclusive growth, equally important is ensuring that the quality of employment is high and income from work is stable and sufficient. In terms of enhancing job quality, progress was uneven in developing Asia and the Pacific in 2014. Overall, 611.6 million workers (or 34.2% of the total number employed) were engaged in agriculture, where work is less productive and working conditions are often

poor. A key obstacle in achieving inclusive and sustainable growth is the widespread vulnerable employment in developing Asia and the Pacific. Workers in vulnerable employment are less likely to have decent earnings, formal work arrangements and access to social protection, which are all critical components for boosting living standards. Vulnerable employment, consisting of own-account and contributing family workers, totalled more than 978 million (or 54.7% of the total number employed) in 2014.

3.2. Mobilizing finance to boost infrastructure for development

While traditional sources of finance to meet government spending needs for infrastructure development will remain critical, it will also be important to use innovative sources of finance, especially of the private sector, to bridge the wide financing gap in many developing economies in the region. Traditional sources of government development finance, primarily tax receipts and overseas development assistance, have proved inadequate in meeting the large development requirements of economies, including those related to infrastructure. On the other hand, it is true that there are large sources of capital available within the region, primarily with the private sector and in the shape of large foreign exchange reserves. These funds, if effectively mobilized, could be used for investment in development projects. Improving the methods of intermediation through national and regional initiatives, thus, can go a long way in achieving this objective.

A basic requirement for increased participation of the private sector in development projects in general, and in infrastructure projects in particular, is a supportive legal and regulatory environment. Many economies in the region are currently deficient in this respect. One example is the restriction in some economies on government subsidies to complement public-private partnership schemes. Such subsidies are sometimes required as the stand-alone revenues of a welfare-enhancing project may not be sufficient to attract the private sector. Legislative changes are thus required to permit such subsidies. Encouragingly, these are being put into place in some countries, including in Indonesia, the Philippines and Thailand, and should serve as a guide to others. Governments can also set up strong institutions to support infrastructure project participation by investors. Some positive examples are the Public-Private Partnership

Center of the Philippines and the Indonesia Infrastructure Guarantee Fund Project. A guiding principle should be that when such institutions are set up they are constituted with sufficient decision-making responsibility to be effective. Another area of regulatory improvement is ensuring the establishment of procurement procedures which ensure transparent bidding.

Effective engagement of regional capital markets can also significantly increase financing sources available to the Government to boost spending in development projects. The development of local currency bond markets will be particularly useful in this regard. Local currency bond markets are attractive for Governments as they reduce currency and maturity mismatches. They are also valuable as a source of long-term investment for savings of the region's ageing population. However, these markets currently lack the depth, liquidity and legal safeguards required to attract investors in sufficient numbers to finance infrastructure needs. Foreign currency issuance continues to be popular in the region, with issuance from East and North-East Asian developing economies reaching a record of almost \$200 billion in 2014 (Ng, 2015). However, the recent rise in the dollar clearly highlights the risks of such issuance in terms of the local currency burden on issuers. Well-structured and well-regulated bond markets would improve investor confidence, reduce market-entry barriers, broaden investor participation and boost regional cooperation.

The entry of new development banks focused on infrastructure, although a welcome development, may not be enough to fill the financing gap. However, they can provide important support to the capital markets and the private sector. The Asian Infrastructure Investment Bank (AIIB)²⁸ created by China and the New Development Bank (NDB)²⁹ created by the BRICS economies (comprising Brazil, the Russian Federation, India, China and South Africa) are useful new initiatives in the quest to meet the region's infrastructure needs, together with the work of existing development banks in the region. However, the quantum of the new banks' planned lending is considerably below the total estimated requirements for infrastructure development in the region — more than \$800 billion a year. The authorized capital of AIIB is \$50 billion while that of NDB is \$100 billion, with the latter devoting its capital to both infrastructure and sustainable development projects. One possibility for achieving larger returns is to leverage the

credit rating of these institutions to guarantee infrastructure bonds issued by domestic entities.³⁰ The issuance of a large pool of infrastructure bonds guaranteed by multilateral institutions would help spur additional investment by increasing the depth and liquidity of local bond markets. More generally, the multilateral development banks and other international organizations can support the private sector by assisting in standardizing regulatory regimes, as well as designing financing structures which can function across countries.

Other than financial markets, the other key approach to increasing private sector involvement in infrastructure projects is through public-private partnerships (PPPs). The potential to increase infrastructure PPPs is clear. Infrastructure PPPs in the region currently account for a small proportion of total global infrastructure PPPs, by one estimate only 8% of the total between 2008 and 2014 (Pregin, 2015). There are a number of key considerations in order to ensure the development of a pipeline of successful PPP projects in countries in the region. These are: (a) creating a strong national legal framework; (b) deciding on appropriate projects by careful economic and financial analysis that considers social, environmental and budgetary implications of projects; (c) selecting projects which can be continued under different political administrations as the timescale will involve several successive Governments; (d) understanding which projects will be appealing to the private sector; (e) creating a standardized and transparent bidding and selection process; (f) choosing reliable revenue streams that will keep paying throughout the projects; and (g) engaging deeply with stakeholders in the community to ensure that there is public buy-in to the projects.

3.3. Macprudential policies to manage capital volatility and support monetary policy

The prevailing economic conditions of declining inflation and volatile capital flows have made the issue of efficacy of monetary policy highly topical. Conceptually, monetary policy is hamstrung if falling inflation is accompanied by capital outflow pressure. This is because interest rates would have to remain relatively higher to protect currency values than what is called for in view of the domestic inflation trends. Central banks in the region overwhelmingly have price stability as one of their explicit objectives. Of the 15 major central banks in the region, 13 have explicit numerical

targets for inflation. However, a number of central banks also have an explicit requirement to maintain exchange rate stability and therefore manage the volatility of capital flows – specifically 5 of 15 major central banks in the region have made exchange rate stability a policy objective. In any case, central banks have to be concerned with capital flow volatility because of its effects on domestic financial stability. While financial stability is not an explicit objective for most central banks, it is clearly an issue of concern given its implications for the real economy and as indicated by the steps that have been taken to reduce financial sector vulnerability since the 1997 Asian financial crisis. For example, short-term external debt-to-foreign currency reserves ratios have been brought down and loan-to-deposit ratios of banks have been lowered.

Current methods to manage capital volatility while preserving monetary policy flexibility raise a number of concerns. Apart from using key monetary policy instruments, many economies currently have accumulated large amounts of foreign exchange reserves to manage the potential impact on exchange rates of any future capital outflow. However, such intervention could entail costs incurred in sterilizing the effect of foreign exchange accumulation on domestic liquidity. The cost to the exchequer is due to the interest rate differential between holding foreign currencies that earn low rates of interest as compared with the higher interest rates paid when issuing domestic bonds for sterilization. Furthermore, the issue of domestic bonds can increase financial market risks. This is because the availability of relatively safe and cheap lending may lead to riskier investments by the domestic banking sector. More fundamentally, the use of exchange rate intervention does not address the impact of capital market volatility on domestic asset markets. Sharp falls in asset markets, such as equities, bonds and property, can have adverse impacts on the wealth of citizens as well as on the financial stability of banks invested in the asset markets.

Macprudential policies offer an important complementary method of managing capital flows. They directly target the source of instability of capital flow volatility, namely the domestic asset markets in which capital flows are invested. Such policies are defined as regulatory policies that are aimed at reducing systemic risks, safeguarding the stability of the financial system as a whole against domestic and external shocks, and ensuring

that it continues to function effectively (Bank for International Settlements, 2010). Rather than changing the cost of borrowing for the entire economy, macroprudential policies are targeted at controlling credit to what central bankers see as specific areas of financial excess.

Macroprudential policies can be grouped into: (a) caps on loan-to-value ratios, such as those in the housing sector; (b) limits on credit growth and other balance sheet restrictions, such as debt service limits on credit cards and personal loans; (c) explicit ceilings on banks' credit growth; and (d) capital and reserve requirements and surcharges, such as countercyclical capital requirements and higher reserve ratio requirements (Claessens, 2014). Typically, macroprudential policies differ from capital flow measures, which are meant to limit capital flows by non-residents. Capital flow measures can be foreign-currency based, such as limits on foreign exchange borrowing, reserve requirements on foreign exchange deposits, and provision requirements on foreign exchange lending; or they can be residency-based, such as unremunerated reserve requirements on non-resident deposits, withholding tax or restrictions on non-resident holdings of domestic assets. However, on occasion macroprudential policies may also include capital flow measures, such as in the case of policies to discourage foreign-currency borrowing. Macroprudential policies are normally enacted by central banks and are complementary to fiscal measures undertaken by Governments, such as increasing taxes and stamp duties on investors in certain sectors.

Macroprudential measures are particularly useful because they target the particular sectors of the economy which are deemed to be most important for maintaining financial stability. Such policies are targeted primarily at the banking sector, which is the main component of the financial industry in the region. Also, macroprudential measures can be targeted at the housing sector, which is known to be fundamental to financial stability, as was seen during the financial crisis in the United States and the eurozone. A significant amount of wealth in the region is contained in the housing sector; therefore, the bursting of any asset bubbles in this sector due to capital outflows would have far-reaching effects for economies. Macroprudential measures related to credit growth and reserve requirements are also important as excessive leverage raises the risk of significant negative impacts on the economy from a credit crunch due to capital outflows.

The region has significantly expanded its use of macroprudential measures and capital flow measures since the start of the 2008 financial crisis. One study found that 391 macroprudential and capital flow measures had been implemented in the region since 2000, of which 294 were implemented since September 2008 (HSBC, 2014). Of these, macroprudential measures accounted for the overwhelming majority, and within these measures, policies were predominantly housing-related. A number of economies used mainly housing-related measures after the start of the crisis, namely Hong Kong, China; Malaysia; and Singapore, whereas some employed them even before the crisis – China, India, the Republic of Korea and Thailand. In Hong Kong, China, the main housing-related macroprudential measure was tightening loan-to-value ratios between 2010 and 2012, which was accompanied by government fiscal measures to increase stamp duties. Similarly, Singapore tightened loan-to-value ratios and increased property-related taxes. Malaysia has progressively raised property taxes since 2010. China has been actively increasing loan-to-value ratios and property taxes since 2005. Thailand introduced the loan-to-value ratio measurement in 2003; it has been gradually implementing it on a range of property classes, and higher risk weights have been placed on mortgages. India has increased the risk weights on mortgages since 2005, although generally the use of housing-related macroprudential measures has been limited.

Apart from housing-related measures, economies have been active in utilizing credit-related measures to manage excessive credit growth. China and India have been prominent in using the reserve ratio requirement for credit management, whereas other economies have mainly used other credit control measures. Since the 2008 crisis, China and India have used the reserve ratio requirement as a key variable to control credit. Other economies have used measures often targeted at household debt. The Republic of Korea tightened loan-to-deposit ratios. A number of South-East Asian economies – Indonesia, Malaysia, the Philippines and Thailand – have controlled growth in the use of credit cards. Similarly, car loan costs have been managed in Indonesia and Singapore.

Despite the enactment of a number of proactive macroprudential measures in recent years, there are significant risks to financial stability across the region, which would benefit from implementation

of further measures. Property prices have continued to rise in a number of economies despite some moderation due to already implemented macroprudential measures. Particular rises can be seen in China; Hong Kong, China; Malaysia; and Thailand. Household debt is a large and growing problem in a number of East and North-East Asian and South-East Asian economies. General credit growth by the banking sector is also a concern for some economies. GDP growth in the region has become more credit-intensive since the 2008 crisis, making economies particularly susceptible to a hike in global interest rates. China is the most prominent example of an economy with concerns about excessive credit growth, with its GDP growth being the most credit-intensive in the region apart from the financial centres of Hong Kong, China; and Singapore. Other economies with private debt ratios-to-GDP of between 150% and 200% include Malaysia, the Republic of Korea and Thailand.

3.4. Diversification of commodity-dependent economies

Fiscal frameworks to address procyclicality

Many commodity exporters have quasi-fixed exchange rate regimes which limit the role of monetary policy under capital mobility. As such, fiscal policy is often the main tool for macroeconomic management against shocks. Fiscal policy, however, suffers from the natural procyclical tendency of Governments to spend more when revenues are strong. Addressing this is a challenge for all countries but especially so for commodity exporters, the revenues of which tend to be more volatile. This is because commodity-related tax and royalties often account for a significant share of the revenue base and also because commodity shocks tend to spill over into the wider economy and thus the general tax base. In the past decade, an increasing number of countries have adopted fiscal rules (Schaechter and others, 2012). There are different types of fiscal rules. One of them involves defining some numerical targets for budget balance, revenues or expenditures which are independent of the business cycle. For instance, member countries in the European Union subscribe to the Stability and Growth Pact ceilings on government deficit (3% of GDP) and debt (60% of GDP). An example from the Asia-Pacific region is the fiscal rule of Kazakhstan, which caps the annual transfer from the oil fund to the national budget at \$8 billion and the interest cost of the public debt to 4.5% of the oil fund's balance.³¹ Although these rules are simple and transparent,

they may lack the flexibility needed in the light of changing economic circumstances.

An alternative is to focus instead on stabilizing the structural balance, or “cyclically adjusted balance”, which is the difference between government spending and the estimate for trend government revenue. This approach is in line with the permanent-income approach and the emphasis is on shielding government spending from large revenue shocks. A number of countries, including Chile, Germany and the United Kingdom of Great Britain and Northern Ireland, fall under this category; in the Asia-Pacific region, only Australia has such a rule. Chile, however, is unique in correcting not only for the cyclical influence of the business cycle but also for the cyclical deviations of the price of copper from trend. The Government sets a cyclically adjusted balance target, using independent forecasts of trend output and trend commodity prices produced by two panels of experts. The country's experience has been successful. Chile has a one-third share in global copper production, and this represents more than half of Chile's total exports. However, the country has managed to lower the standard deviation of output growth from 3.5% in the 1990s to 2.2% in the 2000s, even though copper price volatility exploded from \$0.2 per pound for the metal to \$1.10 per pound during this period (Schmidt-Hebbel, 2012).

Fiscal rules are often, although not always, accompanied by fiscal responsibility laws. Chile enacted such a law in 2006 to strengthen the institutional framework for a fiscal rule adopted five years earlier by a previous administration. The law requires a new administration to define and publish the fiscal policy framework for its four-year term and its implications for the Government's structural balance. It also requires yearly estimation of the structural balance and contingent liabilities. Under the law, two funds were established: the pension reserve fund and the economic and social stabilization fund. The pension reserve fund accumulates funds at a yearly floor rate that is equivalent to 0.2% of GDP and a ceiling of 0.5%. When there is a budget surplus, the windfall revenue first pays for the pension reserve fund, with any remainder being transferred into the economic and social stabilization fund. When there is a deficit, payment for the pension reserve fund and government spending are withdrawn from the economic and social stabilization fund. The law also established a financial advisory committee to advise

the Ministry of Finance on investment regulations and decisions related to the two sovereign wealth funds. In the Asia-Pacific region, India, Pakistan and Sri Lanka have fiscal responsibility laws that contain specific numerical targets, while Australia and New Zealand have fiscal responsibility laws which are focused more on procedural aspects.³² With respect to the management of sovereign wealth funds, several countries, including Azerbaijan, Brunei Darussalam, Kazakhstan, the Russian Federation and Timor-Leste, have relatively well-specified rules and regulations.

Decisions on government spending should be based on careful value-for-money and cost-benefit analysis. This is important as Governments are often pressured or tempted to simply increase spending in periods when commodity prices are high. Studies show that commodity booms often result in increased spending on investment projects and the government wage bill.³³ While investment in well-selected, productivity-enhancing infrastructure is desirable, unviable projects could be stranded without funds for completion or maintenance when commodity prices drop. Higher public sector wages could help to reduce incentives to extract illegal incomes and therefore reduce corruption, but higher wages too are difficult to reverse when commodity prices drop.

In conclusion, fiscal rules could be a useful tool for providing a credible medium-term anchor to fiscal policy and curbing procyclical tendencies. However, in the case of developing countries, where the demand for basic public social services and infrastructure development is high, fiscal rules should be carefully adopted so as to not hinder the developmental role of fiscal policy.³⁴ It should be emphasized that fiscal rules do not necessarily address, and could even constrain addressing, fundamental problems, such as inadequate budget allocation on social spending and infrastructure, which are important for the long-term health of economies and for economic diversification.

Monetary and exchange rate policies for stability and diversification

The conduct of monetary policy in developing countries often requires a strong anchor for inflation expectations, some nominal variable to which the central bank commits and is observable and influenced by the central bank. At the same time, such economies often experience large

supply shocks, especially fluctuations in their terms of trade. Typically, they cannot depend on countercyclical capital flows to smooth out the effects of such shocks. Of the nominal variables that could potentially anchor expectations, fixed exchange rate or target zones were popular until the currency crises of the 1990s, after which inflation targeting has been the dominant trend, at least until the 2008 global crisis, which brought financial stability considerations to the fore. While there are various forms of inflation targeting, such as core, headline, expected and actual, almost all of them focus on the consumer price index. However, CPI may not be the best choice of a price index for a country that is subject to volatile terms of trade. Indices have been suggested which are more production-oriented rather than consumption-oriented so as to automatically accommodate fluctuations in the export price while furnishing a nominal anchor for inflation expectations. The producer price index, for instance, could be modified to weight sectors not according to gross sales but rather value added, as in the national income accounts.³⁵

During a commodity boom, there is often a large real appreciation in the currency, usually in the form of nominal currency appreciation under a floating exchange rate, as in the case of such countries as Australia, Kazakhstan and the Russian Federation during the period 2001-2008. Partial sterilization of foreign exchange inflows could help to alleviate the upward pressure on domestic demand and the exchange rate, albeit not always very effectively. This could be done through external debt reduction, investment of commodity-related revenue abroad, or redirection of government purchases towards imports (Medas and Zakharova, 2009). In situations of extreme pressure on the exchange rate, countries could also consider imposing temporary controls on capital inflows. Beyond stabilization concerns, maintaining a competitive exchange rate is important for economic diversification through the development of tradable sectors, particularly manufacturing.

Industrial and foreign direct investment policies for diversification

As part of industrial policy, the Government, the private sector and civil society could come up, in a participatory manner, with the required supportive policies, incentive structure and institutional arrangement to ensure flows of investment into the strategic sectors. For instance, they could target

the promotion of new products and services that are higher value added and that allow for further diversification of the economy. Such policies differ from those which provide incentives for any new investment regardless of its productivity and diversification-enhancing potential. In this context, certain infant industries could be supported, for instance through tax incentives. At the same time, general supportive infrastructure would be important.

Commodity exporters could recycle their resources revenue to start off the diversification process. Malaysia presents a case of diversifying from an initial condition of strong concentration in the mineral sector. Primary commodities accounted for some 70% of Malaysia's exports in the 1960s. However, manufacturing has since risen from 5% to about 70% of merchandise exports, and its composition has shifted towards higher-technology products, such as machinery. Major infrastructure investments and targeted support were important in developing a competitive manufacturing base. Export promotion through targeted tax incentives and a competitive exchange rate also played their role. Similarly, Indonesia actively encouraged agriculture in the face of a booming oil sector in the 1970s; it also undertook large investments of oil income to develop natural gas resources. In the 1980s, Indonesia moved towards low-wage manufacturing and an export-oriented strategy so that by the mid-2000s manufacturing represented nearly half of merchandise exports.

Another way to facilitate strategic diversification is through attracting foreign investment while ensuring meaningful linkages and spillovers into the local economy and local enterprises. When Viet Nam liberalized FDI in the 1990s, FDI was initially concentrated in the oil sector, but other sectors, including real estate, food processing and heavy and light industry, gradually gained in importance. This helped Viet Nam integrate into emerging global supply chains and gradually diversify its output and exports from textiles to footwear and electronics.

International cooperation

Commodity exporters that fall under the least developed country category may take advantage of certain preferential arrangements. For instance, Bangladesh's initial diversification benefited from the introduction of the Multifibre Arrangement in 1974. This helped Bangladesh shift away from

producing traditional agricultural and jute products towards manufacturing ready-made garments. While the garment industry has helped create more jobs, including for female garment workers, subsequent efforts to move beyond garments have been hindered by a lack of supportive reforms.

Furthermore, the traditional diagnosis to shift labour from agriculture to manufacturing may not be fully appropriate for some countries in view of their small population size, which limits economies of scale, and for some others with high transport costs arising from geographical constraints. In particular, for small island developing States specialization in certain high value-added goods and services may be more appropriate. These economies may also benefit from subregional cooperation. Special arrangements, such as market access or labour migration to nearby major economies, could also help promote positive structural change.

3.5. Addressing climate change concerns and issues of sustainable energy

Emerging approaches to addressing climate change

Climate change poses threats to sustainable development as the adverse impacts of climate change can cut back decades of development gains. In Asia and the Pacific, impacts of climate change have been manifested in various ways, including the melting of Himalayan glaciers in Bhutan and Nepal, sea level rise in Bangladesh and small island developing States in the Pacific, and increased intensity and frequency of extreme weather events, such as heat waves, cyclones/typhoons, tornadoes, intense rainfall, droughts and dust storms in many countries.

The most vulnerable to these impacts are the poor. They are disproportionately affected by the climate change impacts, and they lack the means and capacity to respond to them. Vulnerability of least developed countries to these impacts has been recognized in the various decisions under the United Nations Framework Convention on Climate Change. For the inclusive and sustainable development of the region, it is critical that appropriate measures be taken to address climate change.

While the efforts to adapt to climate change impacts are necessary, especially for vulnerable countries,

all the countries in the region should accelerate their mitigation efforts in their respective national contexts of sustainable development to prevent further rises in global temperature and intensified climate impacts. As mentioned previously, COP 21 will be held in Paris in December 2015. That session is aimed at adopting “a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all parties” beyond 2020 to limit global warming to a rise of no more than 2°C. As part of the process leading up to COP 21, all parties to the Convention are invited to communicate to the UNFCCC secretariat their intended nationally determined contribution towards achieving the objectives of the Convention.

Areas to be covered by the intended nationally determined contribution include mitigation along with adaptation, finance, technology development and transfer, capacity-building and transparency of action and support. Asia and the Pacific accounted for more than half the world’s GHG emissions in 2011.³⁶ The countries in the region that are parties to UNFCCC have been invited to formulate and communicate to the secretariat of UNFCCC their intended nationally determined contributions well in advance of COP 21.

The challenge of mitigation is that it is often seen as a burden to economic growth; however, countries could consider mitigation efforts as an opportunity to transform their current economic systems from being resource-intensive to resource-efficient and low carbon. The region’s rapid economic growth in past decades has been based on intense use of natural resources, which as a result was accompanied by high and rising levels of environmental damage. For the region’s further growth over the long term, the region should shift away from resource-intensive growth to resource-efficient growth. In other words, the key to long-term growth lies in the concept of doing “more with less” – achieving more growth with less resources. Low-carbon growth based on this concept will be an important strategy for the region. Some countries in the region, including Cambodia, Mongolia and the Republic of Korea, have already adopted low-carbon green-growth approaches in their national strategies.

To turn the mitigation of climate change effects into opportunities, the policy instruments for mitigation should be aimed at generating co-benefits or double-dividends while paying attention to inclusiveness. A recent publication proposed specific policy

instruments in this regard (ESCAP, 2012c). For example, properly designed environmental tax reforms and environmental fiscal reforms can be instrumental in lowering environmental impacts and simultaneously generating higher growth and employment thereby creating a double dividend. Environmental tax reforms entail shifting the bases of taxes from conventional levies on labour and income to environmentally damaging activities, such as use of natural resources or environmental pollution, while maintaining the tax revenue as neutral. Evidence from countries that introduced such reforms indicates that they have had positive impacts on competitiveness and income regressiveness. With implementation of such reforms, the Asia-Pacific region alone could reduce global CO₂ emissions by up to almost 7.9% by 2020. Thus, environmental tax reforms can provide an opportunity for developing countries in particular to put their economies onto a different and more resource-efficient development path.

GHG mitigation also presents an opportunity to reduce air pollution, which has adverse impacts on health, environment and economies. Air pollution is a persistent or emerging problem in many cities of the region as it can cause respiratory and other diseases, lead to premature death, environmental damage and reduced agricultural productivity, and ultimately lead to the loss of the productivity of economies. Policies intended to generate co-benefits from the mitigation of GHG and air pollution can range from setting standards for reduction of pollutants to banning certain practices and tools that produce specific air pollutants, such as open burning of agricultural waste and using traditional coke ovens and biomass cook stoves, and subsidizing the purchase of cleaner and more resource-efficient tools (Japan, Ministry of the Environment, 2014).

Developing countries in particular should promote nationally appropriate mitigation actions that can generate environmental, social and economic co-benefits in the context of sustainable development. Such actions refer to “any action that reduces emissions in developing countries and is prepared under the umbrella of a national governmental initiative”.³⁷

Least developed countries are characterized by low contributions to past and projected future GHG emissions until 2050. Global climate action should include (a) supporting least developed countries

so that they can initiate actions towards building low-carbon economies, especially as they intend to graduate from least developed country status on the one hand, and (b) recognizing their limited means to mobilize domestic financing and technology on the other.

Ensuring energy security

Energy security is a pressing concern for regional sustainable development for a number of reasons. First, due to the extraordinary economic growth in recent decades, energy demand in the region has increased significantly and is expected to grow continuously in the foreseeable future. Overall, Asia and the Pacific became a net total primary energy supply (TPES) importer in 2007, and in 5 years, by 2012, net TPES import for this region had increased to 385.5 million tons of oil equivalent (Mtoe). Second, fossil fuels have been and will continue to be the major energy source in the region, accounting for more than 60% of the total final energy consumption (ESCAP, 2014d). Compared with the soaring energy demand, fossil-fuel reserves are unevenly distributed in the region, leading to many developing countries depending on imported fossil fuels and therefore exposing them to energy price volatility in the international market. Third, although there have been improvements in energy use, energy-intensive and carbon-intensive growth have resulted in multiple challenges, such as air pollution, threats to public health and harm to economic competitiveness.

Ensuring long-term energy security and the sustainable use of energy is a critical challenge for continuous economic growth and energy development. Discussions on regional energy security issues led to the establishment of the Asian and Pacific Energy Forum in 2013, the first intergovernmental conference of energy ministers held under United Nations auspices in the region. A five-year plan of action on regional cooperation for enhanced energy security and the sustainable use of energy was adopted by the Forum. The agreed vision was to make sustainable energy for all a reality, ensuring that there will be enhanced energy security from the regional to the household levels; ensuring an energy future of equity, diversification and access to all is secured; and ensuring the share of cleaner energies in the overall energy mix is increased (ESCAP, 2013b). Sustainable development is not possible without sustainable energy. Energy security can be leveraged by

expanding energy access, developing renewable energy and improving energy efficiency – the three objectives of the United Nations Sustainable Energy for All initiative. Together with UNDP and ADB, ESCAP has formed a regional hub to implement that initiative, which is aimed at providing universal access to modern energy services, doubling the global rate of improvement in energy efficiency and doubling the share of renewable energy in the global energy mix.

Advancements in the power generation sector, including falling costs of variable renewable energy-generation sources,³⁸ as well as increasing efficiency in the use of coal and solar energy generation, have positive implications for sustainable growth globally and within Asia and the Pacific. As of 2012, renewable energy accounted for approximately 17% of electricity production in the Asia-Pacific region, up from 15% in 2000.³⁹ Three factors make variable renewable energy a critical theme requiring in-depth examination within the context of energy development in Asia and the Pacific. First, the barriers to capturing variable renewable energy resources are getting lower. Second, Governments, the private sector and the general public are increasingly turning towards variable renewable energy, for power production. The Asia-Pacific region has emerged in the past few years as a leader in the production and adoption of variable renewable energy technologies. Third, the Asia-Pacific region has the opportunity to transition to more flexible, stable, cleaner and cost-effective future energy systems that can better integrate the power resources of both today and tomorrow. Incentives exist to turn to the cheapest and easiest fuel and technology solutions to meet this need. However, not planning for long-term economic, social and environmental costs, or not developing energy systems that can better integrate shifting resources and emerging technologies, may result in inability to meet future demand in an economically cost-effective manner.

The levelized costs of electricity for some renewable energy-generation technologies have become comparable to fossil-fuel power generation, especially when factoring in such externalities as potential health and carbon dioxide-related costs. Policies promoting the use of renewable energy as well increasingly efficient fossil-fuel combustion technologies should be implemented within the region in order to facilitate their more rapid deployment. Key factors to accelerate deployment

include the availability of low-cost public and private financing for new sustainable power projects as part of a stable investment landscape, such incentives as generation-based feed-in tariffs and mandatory power-purchase agreements with utilities for renewable energy power producers to off-take their power, and swift and effective procedures for permitting grid connections. A combination of these factors, among others, can be promoted through effective policy that places importance on the creation and expansion of a secure and sustainable energy grid with a combination of diverse and sustainable generation sources.

Endnotes

- ¹ The proposed goals are 17 in number, and there are 169 associated targets covering a broad range of sustainable development issues. For more details, see two recent reports: United Nations (2014a; 2014b). They are available from, respectively, www.un.org/ga/search/view_doc.asp?symbol=A/69/700&referer=/english/&Lang=E, and www.un.org/ga/search/view_doc.asp?symbol=A/68/L.61&referer=/english/&Lang=E.
- ² For an overview of sustainable development trends and challenges, see ESCAP (2014c). Available from www.un.org/ga/search/view_doc.asp?symbol=E/ESCAP/FSD/1.
- ³ The developing economies referred to here do not include the economies of the North and Central Asian subregion as they are considered transition economies. If those economies were included, then the growth forecast would decrease to 4.9% in 2015 compared with 5.3% in 2014. For the region as a whole, including developed economies, the growth forecast for 2015 is 3.4%, down from 3.5% in 2014. See table 1.1 for more details.
- ⁴ For India, the growth forecast for 2015, the estimated growth for 2014 and the actual growth for 2013 use rebased numbers announced by the country's Central Statistical Office in February 2015. The rebased numbers use FY2012 (fiscal year from March 2011 to March 2012) as the new base. It is worth noting that rebased growth for India in FY2012 was 6.9%, whereas the previous figure for FY2012 was 4.7%. Similarly, aggregate growth for developing ESCAP economies (excluding those in the North and Central Asian subregion) for 2013, using pre-rebased FY2012 data for India, was 5.7% as compared with 6% using the rebased numbers for India.
- ⁵ Expected and forecast growth for India refers to rebased numbers released by the Central Statistical Office in February 2015. See footnote 4 above.
- ⁶ As with growth forecasts, this inflation outlook pertains to developing economies, excluding the North and Central Asian subregion. If that subregion is included, the inflation forecast for 2015 would increase to 4.3% (the same as in 2014) since the economies in that subregion are experiencing the highest rate of inflation in the Asia-Pacific region.
- ⁷ For details, see "To get the economy up and running", *The Hindu Business Line*, 16 December 2014. Available from www.thehindubusinessline.com/opinion/to-get-the-economy-up-and-running/article6698055.ece.
- ⁸ For details, see "Commodity price crash: risks to exports and economic growth in Asia-Pacific LDCs and LLDCs", *ESCAP Trade Insights*, Issue No. 6, March 2015. Available from www.unescap.org/sites/default/files/Trade%20Insights%20No.%206.pdf.
- ⁹ The other commercial services category, in turn, contains eight subcategories, but the data are not readily available for all countries. In addition, the number of years for which data are available is very different across countries, and in most cases they are limited to just a few years. See box 2.3 of the *Asia-Pacific Trade and Investment Report 2012* for a more detailed explanation of this service category (ESCAP, 2012a, pp. 38-39).
- ¹⁰ When intra-European Union imports are excluded, this share comes close to 40% (WTO, 2014).
- ¹¹ All FDI data are from UNCTADStat, except for greenfield FDI data which are from fDi Intelligence, and data on mergers and acquisitions, which are from Thomson Reuters. Estimated FDI data for 2014 are given where available from the UNCTAD Global Investment Trends Monitor, published on 29 January 2015.
- ¹² Although the developing Asian region defined by UNCTAD does not cover the same countries as the Asia-Pacific region defined by ESCAP, the coverage is similar enough to identify similar trends.
- ¹³ The "going global" strategy was adopted by the Government of China in 2001, under which Chinese firms were encouraged to look for overseas opportunities. It was further broadened in 2013 with adjustments in the regulatory framework for outward FDI to assist Chinese firms to be competitive abroad. See Sauvant and Chen (2014).

- ¹⁴ The Russian Federation's advancement in the World Bank "Doing Business" ranking, from 111th place in 2012 to 65th place in 2015, indicates a reduction in the cost of operating a business and an overall upgrading of the country's business environment. For additional information, see www.doingbusiness.org/data/exploreeconomies/russia/.
- ¹⁵ In 2013, the FDI inflows into the Russian Federation were exceptionally high due to a single "mega deal" worth \$55 billion, that is, the Rosneft-British Petroleum transaction in March that year.
- ¹⁶ For details, see "Risk or reward? The trouble with Southeast Asia's infrastructure", *Wall Street Journal*, 29 May 2014. Available from <http://blogs.wsj.com/indonesiarealtime/2014/05/29/risk-or-reward-the-trouble-with-southeast-asias-infrastructure/>.
- ¹⁷ The Eurasian Economic Union is a trade bloc that includes Armenia, Belarus, Kazakhstan and the Russian Federation; it was officially launched on 1 January 2015.
- ¹⁸ The Shanghai Cooperation Organisation is a Eurasian political, economic and military organization which was founded in Shanghai in 2001 by the leaders of China, Kazakhstan, Kyrgyzstan, the Russian Federation, Tajikistan and Uzbekistan.
- ¹⁹ The Silk Road initiative was proposed by China in 2013 to integrate the economies of Asia and Europe along the Eurasian corridor with that of China.
- ²⁰ The "noodle bowl" effect is a phenomenon of international economic policy that refers to the complication which arises from the application of domestic rules of origin in the signing of free trade agreements across nations. The effect leads to discriminatory trade policies because the same commodity is subjected to different tariffs and tariff reduction trajectories for the purpose of domestic preferences.
- ²¹ For instance, see Auer and Vignold-Majal (2014). For an alternative, longer-term view, see Canuto (2014).
- ²² For example, sugar prices may fall as countries such as Brazil increase their production in the light of lower ethanol prices.
- ²³ Countries in this category include Australia, Azerbaijan, Bhutan, Brunei Darussalam, Indonesia, the Islamic Republic of Iran, Kazakhstan, Malaysia, Mongolia, Myanmar, Papua New Guinea, the Russian Federation, Timor-Leste, Turkmenistan and Viet Nam.
- ²⁴ For instance, see IMF (2012), chap. 4.
- ²⁵ It is noted that sustained increases in women's labour-force participation require a multiplicity of actions, inclusive of repealing discriminatory policies and legislation, tackling oppressive sociocultural norms and practices and eliminating horizontal and vertical occupational segregation.
- ²⁶ For global and regional averages of such participation, see www.ipu.org/wmn-e/world.htm.
- ²⁷ Throughout this section, regional and subregional labour market estimates and trends are based on ILO (2014; 2015).
- ²⁸ As founding members, representatives of 21 countries in the Asia-Pacific region signed a memorandum of understanding on establishing the Asian Infrastructure Investment Bank, when they met in Beijing on 24 October 2014. For further information, see http://news.xinhuanet.com/english/business/2014-10/24/c_133740149_2.htm.
- ²⁹ The New Development Bank was agreed by BRICS leaders at the 5th BRICS summit held in Durban, South Africa, on 27 March 2013. See Brazil, Ministry of External Relations (2014). Available from <http://brics6.itamaraty.gov.br/media2/press-releases/219-agreement-on-the-new-development-bank-fortaleza-july-15>.
- ³⁰ For further information, see Gordon French, "How Asia should pay for \$11tn in infrastructure needs", *Financial Times*, 26 November 2014. Available from <http://blogs.ft.com/beyond-brics/2014/11/26/guest-post-how-asia-should-pay-for-11tn-in-infrastructure-needs/>.

- ³¹ In 2012, Kazakhstan modified the rule on annual transfer of funds to the budget from the fixed amount to the flexible amount of \$8 billion plus or minus 15%, depending on the cyclical position of the economy.
- ³² Examples from the region are: Australia's Charter of Budget Honesty Act 1998; India's Fiscal Responsibility and Budget Management Act, 2003; New Zealand's Public Finance Act 1989 as amended in 2004; Pakistan's Fiscal Responsibility and Debt Limitation Act, 2005; and Sri Lanka's Fiscal Management (Responsibility) Act No. 3 of 2003.
- ³³ For instance, see Medas and Zakharova (2009).
- ³⁴ For further information on this matter, see a discussion by Anis Chowdhury and Iyanatul Islam, entitled "Fiscal rules – help or hindrance?", published on Vox CEPR's Policy Portal. Available from <http://voxeu.org/debates/commentaries/fiscal-rules-help-or-hindrance>.
- ³⁵ This paragraph draws on Frankel (2012).
- ³⁶ Details of the magnitude of those emissions are provided by the World Resource Institute. Available from [http://cait2.wri.org/wri/Country%20GHG%20Emissions?indicator\[\]=Total%20GHG%20Emissions%20Excluding%20Land-Use%20Change%20and%20Forestry&indicator\[\]=Total%20GHG%20Emissions%20Including%20Land-Use%20Change%20and%20Forestry&year\[\]=2011&chartType=geo](http://cait2.wri.org/wri/Country%20GHG%20Emissions?indicator[]=Total%20GHG%20Emissions%20Excluding%20Land-Use%20Change%20and%20Forestry&indicator[]=Total%20GHG%20Emissions%20Including%20Land-Use%20Change%20and%20Forestry&year[]=2011&chartType=geo).
- ³⁷ For additional details, see <http://unfccc.int/focus/mitigation/items/7172txt.php>.
- ³⁸ Variable renewable energy sources include wind, solar, wave and tidal sources.
- ³⁹ Further information is available through the APEF Energy Data Policy Information Portal of ESCAP. This sentence also contains data obtained from IEA.